

Gareth Ffoulkes
Cardiff City Council
Waste Mngement
Lamby Way
Rumney
Cardiff
CF3 2HP

Decus Research Limited
ExCAL House
Capel Hendre Industrial Estate
Ammanford
Carmarthenshire
SA18 3SJ

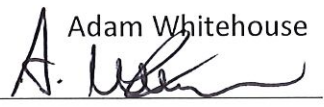
Tel: 01269 844558
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Certificate of Analysis Number: 2559

Project/Site name:	Lamby Way	Samples Taken:	17-08-2018
Job Number:	-	Samples Received:	28-08-2018
Order Number:	-	Date Instructed:	28-08-2018
Quotation Number:	DS170403	Analysis Complete:	21-09-2018
Sample Matrix:	Groundwater, Surface Water, Leachate Water.	Report Issued:	21-09-2018
		Sampled By:	Client

Disposal Times:

All water samples will be retained for a period of two weeks and all soil samples retained for a period of one month following the date of the issued certificate.

Approved by: Adam Whitehouse
Signature: 
Title: Quality Manager



Client: Cardiff City Council
FAO: Gareth Ffoulkes

CERTIFICATE OF ANALYSIS 2559

Results of analysis of 29 samples received
on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818205	280818206	280818207	280818208
Client Sample Reference:				L2	L4	L7	SL4
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	1,320	1,300	200	190
INORG-L13	Chloride	mg.l ⁻¹	A	284	283	262	301
1450	Cadmium	µg.l ⁻¹	S - N	0.12	<0.080	<0.080	<0.080
METALS-L	Nickel	µg.l ⁻¹	A	138	187	36.3	2.5
ORL-L17	Mecoprop	µg.l ⁻¹	A	<0.1	<0.1	<0.1	<0.1
ORG-L02	Phenol	µg.l ⁻¹	A	75.7	<2.5	<2.5	2.9
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	16.4	7.4	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	66.2	19.0	0.7	2.1
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	2.3	3.0	0.7	<0.5
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	15.8	14.9	0.5	2.0
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	27.3	<0.5	4.0	21.2
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	70.3	107	10.9	234
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	1.5	1.5	1.4	1.4
ORG-L02	Fluorene	µg.l ⁻¹	A	0.08	0.2	<0.05	1.2
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	2.5	<0.05	<0.05	2.4
ORG-L02	Phenanthrene	µg.l ⁻¹	A	0.6	0.6	<0.05	0.6
ORG-L02	Anthracene	µg.l ⁻¹	A	0.7	<0.05	<0.05	0.7
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	1.6	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	1.2	<0.05	0.2	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	1.7	1.7	0.7	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	1.8	<0.05	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	2.2	2.1	0.5	<0.05

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Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	1.5	0.4	0.3	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	1.6	0.4	0.4	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				L2	L4	L7	SL4
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0

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Laboratory Sample Number:				280818205	280818206	280818207	280818208
Client Sample Reference:				L2	L4	L7	SL4
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	1.4	1.6	<1.0	<1.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	1.4	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	3.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	3.8	2.6	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	4.0	3.0	<1.0	<1.0

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1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	2.8	1.8	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	1.5	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
ORG-L02	Naphthalene	µg.l ⁻¹	A	3.8	7.7	0.3	0.3
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818209	280818210	280818211	280818212
Client Sample Reference:				SL5	SL6	SL7	SL8
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	150	340	940	1,360
INORG-L13	Chloride	mg.l ⁻¹	A	323	298	221	219
1450	Cadmium	µg.l ⁻¹	S - N	<0.080	<0.080	<0.080	<0.080
METALS-L	Nickel	µg.l ⁻¹	A	7.5	20.9	14.8	79.7
ORL-L17	Mecoprop	µg.l ⁻¹	A	<0.1	<0.1	<0.1	<0.1
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	<2.5	<2.5	<2.5
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	0.4	<0.5	1.2
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	0.9	0.7	4.7	5.4
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	4.1
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	3.8	<0.5	98.0	19.2
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	130	8.7	468	184
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	1.3	1.4	<0.5	<0.5
ORG-L02	Fluorene	µg.l ⁻¹	A	0.5	<0.05	2.9	0.6
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Phenanthrene	µg.l ⁻¹	A	0.5	<0.05	2.0	1.3
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	<0.05	3.5	1.0
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	0.2	<0.05
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	1.4	<0.05	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	1.6	<0.05	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	0.6	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	1.0	<0.05	<0.05

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Client: Cardiff City Council
FAO: Gareth Ffoulkes

CERTIFICATE OF ANALYSIS 2559
Results of analysis of 29 samples received
on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818209	280818210	280818211	280818212
Client Sample Reference:				SL5	SL6	SL7	SL8
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	1.0	<0.05	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	0.8	<0.05	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818209	280818210	280818211	280818212
Client Sample Reference:				SL5	SL6	SL7	SL8
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0

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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818209	280818210	280818211	280818212
Client Sample Reference:				SL5	SL6	SL7	SL8
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0

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CERTIFICATE OF ANALYSIS 2559
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Laboratory Sample Number:				280818209	280818210	280818211	280818212
Client Sample Reference:				SL5	SL6	SL7	SL8
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Leachate Water	Leachate Water	Leachate Water	Leachate Water
1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
ORG-L02	Naphthalene	µg.l ⁻¹	A	0.4	<0.05	11.5	2.4
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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CERTIFICATE OF ANALYSIS 2559
Results of analysis of 29 samples received
on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818213	280818214	280818215	280818216
Client Sample Reference:				C20	C21	C22	SW7/C25
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	0.6	0.3	2.0	0.24
INORG-L01	pH	pH units	A	7.5	7.4	7.3	7.1
INORG-L13	Chloride	mg.l ⁻¹	A	2.9	4.1	3.2	27.2
INORG-L02	Conductivity	µS.cm ⁻¹	A	23,500	16,160	22,000	1,650
1450	Cadmium	µg.l ⁻¹	S - N	<0.080	0.16	<0.080	0.24
METALS-L	Nickel	µg.l ⁻¹	A	<1.5	<1.5	<1.5	<1.5
METALS-L	Chromium	µg.l ⁻¹	A	8.9	7.9	10.8	3.2
METALS-L	Copper	µg.l ⁻¹	A	16.0	11.8	2.3	16.0
METALS-L	Lead	µg.l ⁻¹	A	<4.1	<4.1	10.0	<4.1
METALS-L	Zinc	µg.l ⁻¹	A	1.4	<1.1	<1.1	14.7
ORL-L17	Mecoprop	µg.l ⁻¹	A	<0.1	0.4	<0.1	<0.1
INORG-L06.1	BOD	mg.l ⁻¹ as O ₂	A	3.9	2.5	8.4	5.2
INORG-L09	Alkalinity	mg.l ⁻¹ as HCO ₃	A	500	1,290	927	336
INORG-L11	Nitrate	mg.l ⁻¹ as NO ₃	A	0.7	1.1	0.8	0.6
INORG-L14	Nitrite	mg.l ⁻¹ as NO ₂	A	0.06	0.3	10.2	0.02
METALS-L	Iron	µg.l ⁻¹	A	141	849	1,467	2,762
METALS-L	Manganese	µg.l ⁻¹	A	1,010	113	5,916	600
METALS-L	Calcium	mg.l ⁻¹	A	345	337	340	128
METALS-L	Magnesium	mg.l ⁻¹	A	408	339	410	29.2
METALS-L	Sodium	mg.l ⁻¹	A	3,594	2,645	3,483	236
METALS-L	Potassium	mg.l ⁻¹	A	173	130	137	21.2
METALS-L	Sulphate	mg.l ⁻¹ as SO ₄	A	788	583	1,180	198
INORG-L37	Sulphide	mg.l ⁻¹ as H ₂ S	N	<0.1	<0.1	<0.1	<0.1
INORG-L05	COD	mg.l ⁻¹ as O ₂	A	64	63	64	26
1450	Mercury	µg.l ⁻¹	S - N	2.1	0.58	2.9	0.54
INORG-L18	TOC	mg.l ⁻¹ as C	A	20.0	22.5	3.2	12.3

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CERTIFICATE OF ANALYSIS 2559
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on the 07/09/17

Report Date
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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818213	280818214	280818215	280818216
Client Sample Reference:				C20	C21	C22	SW7/C25
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	37.6	15.3	<2.5
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	2.1	<0.5	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Fluorene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Phenanthrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05

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CERTIFICATE OF ANALYSIS 2559
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Report Date
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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818213	280818214	280818215	280818216
Client Sample Reference:				C20	C21	C22	SW7/C25
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Code	Determinand	Units	*	Sample Identification			
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Client Sample Reference:				C20	C21	C22	SW7/C25
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				C20	C21	C22	SW7/C25
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	3.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				C20	C21	C22	SW7/C25
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
ORG-L02	Naphthalene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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CERTIFICATE OF ANALYSIS 2559
Results of analysis of 29 samples received
on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818217	280818218	280818219	280818220
Client Sample Reference:				C1	C6	C2	C3
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	0.4	0.78	0.14	3.4
INORG-L01	pH	pH units	A	7.1	7.3	7.6	7.4
INORG-L13	Chloride	mg.l ⁻¹	A	30.8	3.6	32.2	22.9
INORG-L02	Conductivity	µS.cm ⁻¹	A	1,733	19,500	912	1,675
1450	Cadmium	µg.l ⁻¹	S - N	<0.080	0.21	<0.080	0.15
METALS-L	Nickel	µg.l ⁻¹	A	<1.5	<1.5	<1.5	<1.5
METALS-L	Chromium	µg.l ⁻¹	A	5.0	9.2	2.4	3.7
METALS-L	Copper	µg.l ⁻¹	A	2.6	14.6	9.3	15.6
METALS-L	Lead	µg.l ⁻¹	A	<4.1	<4.1	<4.1	<4.1
METALS-L	Zinc	µg.l ⁻¹	A	<1.1	<1.1	<1.1	17.8
ORL-L17	Mecoprop	µg.l ⁻¹	A	1.7	<0.1	<0.1	0.6
INORG-L06.1	BOD	mg.l ⁻¹ as O ₂	A	5.1	3.7	0.7	5.0
INORG-L09	Alkalinity	mg.l ⁻¹ as HCO ₃	A	756	1,240	525	647
INORG-L11	Nitrate	mg.l ⁻¹ as NO ₃	A	0.4	<0.1	3.3	3.4
INORG-L14	Nitrite	mg.l ⁻¹ as NO ₂	A	<0.004	<0.004	0.02	0.02
METALS-L	Iron	µg.l ⁻¹	A	294	46.6	28.3	116
METALS-L	Manganese	µg.l ⁻¹	A	2,060	1,773	12.3	500
METALS-L	Calcium	mg.l ⁻¹	A	134	212	113	111
METALS-L	Magnesium	mg.l ⁻¹	A	109	335	49.6	47.0
METALS-L	Sodium	mg.l ⁻¹	A	117	3,251	54.6	173
METALS-L	Potassium	mg.l ⁻¹	A	44.7	143	10.2	114
METALS-L	Sulphate	mg.l ⁻¹ as SO ₄	A	63.1	635	172	168
INORG-L37	Sulphide	mg.l ⁻¹ as H ₂ S	N	<0.1	<0.1	<0.1	<0.1
INORG-L05	COD	mg.l ⁻¹ as O ₂	A	7	59	11	55
1450	Mercury	µg.l ⁻¹	S - N	<0.50	1.4	<0.50	<0.50
INORG-L18	TOC	mg.l ⁻¹ as C	A	14.3	9.4	15.1	24.9

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Client Sample Reference:				C1	C6	C2	C3
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	<2.5	<2.5	55.0
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	0.8
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	6.5
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Fluorene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Phenanthrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	0.6	<0.05	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	2.2	<0.05	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	3.1	<0.05	<0.05
ORG-L02	Naphthalene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05

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Client Sample Reference:				C1	C6	C2	C3
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				C1	C6	C2	C3
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0

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Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0

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Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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CERTIFICATE OF ANALYSIS 2559
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on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818221	280818222	280818223	280818224
Client Sample Reference:				C5	C8	C12	C13
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	6.1	7.0	21	21
INORG-L01	pH	pH units	A	7.3	7.1	7.2	7.3
INORG-L13	Chloride	mg.l ⁻¹	A	7.7	2.5	2.8	5.6
INORG-L02	Conductivity	µS.cm ⁻¹	A	8,000	20,800	22,200	11,130
1450	Cadmium	µg.l ⁻¹	S - N	<0.080	0.38	0.14	<0.080
METALS-L	Nickel	µg.l ⁻¹	A	8.0	<1.5	<1.5	<1.5
METALS-L	Chromium	µg.l ⁻¹	A	6.8	7.7	9.0	7.8
METALS-L	Copper	µg.l ⁻¹	A	<0.8	13.5	5.5	<0.8
METALS-L	Lead	µg.l ⁻¹	A	<4.1	<4.1	<4.1	<4.1
METALS-L	Zinc	µg.l ⁻¹	A	<1.1	8.8	<1.1	<1.1
ORL-L17	Mecoprop	µg.l ⁻¹	A	0.4	<0.1	<0.1	<0.1
INORG-L06.1	BOD	mg.l ⁻¹ as O ₂	A	3.9	2.2	7.9	18.7
INORG-L09	Alkalinity	mg.l ⁻¹ as HCO ₃	A	403	659	634	1,000
INORG-L11	Nitrate	mg.l ⁻¹ as NO ₃	A	0.3	1.8	0.3	0.4
INORG-L14	Nitrite	mg.l ⁻¹ as NO ₂	A	15.5	8.8	19.1	0.05
METALS-L	Iron	µg.l ⁻¹	A	1,858	4,939	1,105	1,506
METALS-L	Manganese	µg.l ⁻¹	A	407	1,750	795	1,775
METALS-L	Calcium	mg.l ⁻¹	A	108	221	188	235
METALS-L	Magnesium	mg.l ⁻¹	A	149	372	392	254
METALS-L	Sodium	mg.l ⁻¹	A	1,420	3,317	3,479	1,801
METALS-L	Potassium	mg.l ⁻¹	A	53.3	148	153	50.8
METALS-L	Sulphate	mg.l ⁻¹ as SO ₄	A	0.7	629	669	12
INORG-L37	Sulphide	mg.l ⁻¹ as H ₂ S	N	<0.1	<0.1	<0.1	<0.1
INORG-L05	COD	mg.l ⁻¹ as O ₂	A	37	53	62	49
1450	Mercury	µg.l ⁻¹	S - N	1.1	2.7	2.4	2.2
INORG-L18	TOC	mg.l ⁻¹ as C	A	17.8	3.5	14.8	12.5

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Client Sample Reference:				C5	C8	C12	C13
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	<2.5	<2.5	<2.5
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Fluorene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Phenanthrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Naphthalene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05

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Client Sample Reference:				C5	C8	C12	C13
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				C5	C8	C12	C13
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0

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Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0

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CERTIFICATE OF ANALYSIS 2559
Results of analysis of 29 samples received
on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818221	280818222	280818223	280818224
Client Sample Reference:				C5	C8	C12	C13
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818225	280818226	280818227	280818228
Client Sample Reference:				C14	C16	C18	C19
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	36	2.1	0.9	0.9
INORG-L01	pH	pH units	A	7.2	7.0	7.4	7.4
INORG-L13	Chloride	mg.l ⁻¹	A	3.8	3.9	8.2	14.0
INORG-L02	Conductivity	µS.cm ⁻¹	A	17,310	31,900	6,950	5,260
1450	Cadmium	µg.l ⁻¹	S - N	<0.080	0.94	0.25	0.11
METALS-L	Nickel	µg.l ⁻¹	A	<1.5	<1.5	<1.5	<1.5
METALS-L	Chromium	µg.l ⁻¹	A	6.7	9.6	5.3	6.5
METALS-L	Copper	µg.l ⁻¹	A	<0.8	39.6	22.7	26.9
METALS-L	Lead	µg.l ⁻¹	A	8.8	<4.1	<4.1	<4.1
METALS-L	Zinc	µg.l ⁻¹	A	<1.1	43.2	9.3	5.4
ORL-L17	Mecoprop	µg.l ⁻¹	A	<0.1	<0.1	<0.1	<0.1
INORG-L06.1	BOD	mg.l ⁻¹ as O ₂	A	8.0	3.0	7.7	2.9
INORG-L09	Alkalinity	mg.l ⁻¹ as HCO ₃	A	878	220	1,290	49
INORG-L11	Nitrate	mg.l ⁻¹ as NO ₃	A	1.2	1.1	2.4	0.3
INORG-L14	Nitrite	mg.l ⁻¹ as NO ₂	A	0.02	0.02	5.9	<0.004
METALS-L	Iron	µg.l ⁻¹	A	846	1,013	54.3	43.0
METALS-L	Manganese	µg.l ⁻¹	A	386	1,076	34.4	32.0
METALS-L	Calcium	mg.l ⁻¹	A	156	385	224	191
METALS-L	Magnesium	mg.l ⁻¹	A	331	530	152	112
METALS-L	Sodium	mg.l ⁻¹	A	2,855	4,111	1,142	876
METALS-L	Potassium	mg.l ⁻¹	A	116	240	60.8	46.7
METALS-L	Sulphate	mg.l ⁻¹ as SO ₄	A	89.2	1,720	262	587
INORG-L37	Sulphide	mg.l ⁻¹ as H ₂ S	N	<0.1	<0.1	<0.1	<0.1
INORG-L05	COD	mg.l ⁻¹ as O ₂	A	72	119	42	36
1450	Mercury	µg.l ⁻¹	S - N	2.1	2.1	<0.50	<0.50
INORG-L18	TOC	mg.l ⁻¹ as C	A	7.3	2.1	9.7	23.2

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Client Sample Reference:				C14	C16	C18	C19
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	<2.5	<2.5	35.0
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	5.3
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Fluorene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Phenanthrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Naphthalene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05

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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818225	280818226	280818227	280818228
Client Sample Reference:				C14	C16	C18	C19
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				C14	C16	C18	C19
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				C14	C16	C18	C19
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0

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CERTIFICATE OF ANALYSIS 2559
Results of analysis of 29 samples received
on the 07/09/17

Report Date
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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818225	280818226	280818227	280818228
Client Sample Reference:				C14	C16	C18	C19
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Groundwater	Groundwater	Groundwater	Groundwater
1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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CERTIFICATE OF ANALYSIS 2559

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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818229	280818230	280818231	280818232
Client Sample Reference:				SW2	SW3	SW4	SW5
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Surface water	Surface water	Surface water	Surface water
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	0.01	0.01	0.05	0.13
INORG-L12	Ammonia	mg.l ⁻¹ as NH ₄	A	0.01	0.01	0.07	0.17
INORG-L13	Chloride	mg.l ⁻¹	A	18.3	19.6	30.4	19.5
INORG-L02	Conductivity	µS.cm ⁻¹	A	553	457	1,451	1,885
INORG-L01	pH	pH units	A	7.6	7.6	7.4	7.4
METALS-L	Nickel	µg.l ⁻¹	A	<1.5	<1.5	<1.5	<1.5
INORG-L06.1	BOD	mg.l ⁻¹ as O ₂	A	0.7	1.0	10.1	5.6
INORG-L06.1	BOD ATU	mg.l ⁻¹ as O ₂	A	0.5	0.7	9.6	5.2
-	TON	mg.l ⁻¹ as N	N	1.0	2.0	16.1	31.5
INORG-L10	Suspended Solids	mg.l ⁻¹	A	1.6	<1.5	3.2	4.4
INORG-L05	COD	mg.l ⁻¹ as O ₂	A	11	15	8	9
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	<2.5	20.8	<2.5
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	4.1
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	<0.5	<0.5	<0.5	<0.5
ORG-L02	Fluorene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Phenanthrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05

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Client Sample Reference:				SW2	SW3	SW4	SW5
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Surface water	Surface water	Surface water	Surface water
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	<0.05	<0.05	<0.05
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0

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Client Sample Reference:				SW2	SW3	SW4	SW5
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Surface water	Surface water	Surface water	Surface water
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	<1.0	<1.0	<1.0
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	<1.0	<1.0	<1.0
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	<0.0010	<0.0010	<0.0010

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Client Sample Reference:				SW2	SW3	SW4	SW5
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Surface water	Surface water	Surface water	Surface water
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	<0.050	<0.050	<0.050
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Benzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	Toluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	<10	<10	<10
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	<10	<10	<10
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	<10	<10	<10

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CERTIFICATE OF ANALYSIS 2559
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on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818229	280818230	280818231	280818232
Client Sample Reference:				SW2	SW3	SW4	SW5
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Surface water	Surface water	Surface water	Surface water
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	<5.0	<5.0	<5.0
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	<2.0	<2.0	<2.0
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Styrene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	<50	<50	<50
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	<1.0	<1.0	<1.0
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	<1.0	<1.0	<1.0
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818229	280818230	280818231	280818232
Client Sample Reference:				SW2	SW3	SW4	SW5
Sample Date:				17/08/18	17/08/18	17/08/18	17/08/18
Sample Matrix:				Surface water	Surface water	Surface water	Surface water
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	<0.010	<0.010	<0.010

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Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818233	-	-	-
Client Sample Reference:				SW6	-	-	-
Sample Date:				17/08/18	-	-	-
Sample Matrix:				Surface water	-	-	-
INORG-L12	Ammonical Nitrogen	mg.l ⁻¹ as N	A	0.02	-	-	-
INORG-L12	Ammonia	mg.l ⁻¹ as NH ₄	A	0.03	-	-	-
INORG-L13	Chloride	mg.l ⁻¹	A	25.4	-	-	-
INORG-L02	Conductivity	µS.cm ⁻¹	A	495	-	-	-
INORG-L01	pH	pH units	A	7.8	-	-	-
METALS-L	Nickel	µg.l ⁻¹	A	<1.5	-	-	-
INORG-L06.1	BOD	mg.l ⁻¹ as O ₂	A	5.1	-	-	-
INORG-L06.1	BOD ATU	mg.l ⁻¹ as O ₂	A	4.5	-	-	-
-	TON	mg.l ⁻¹ as N	N	26.4	-	-	-
INORG-L10	Suspended Solids	mg.l ⁻¹	A	36.4	-	-	-
INORG-L05	COD	mg.l ⁻¹ as O ₂	A	12	-	-	-
ORG-L02	Phenol	µg.l ⁻¹	A	<2.5	-	-	-
ORG-L02	2-chlorophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2-methylphenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	4-methylphenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2 nitrophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2,4-dimethylphenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2,4-dichlorophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2,6-dichlorophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	4-chloro,3-methylphenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2,4,6-trichlorophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2,4,5-trichlorophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	Acenaphthylene	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	Acenaphthene	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	4-nitrophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	2,3,4,6-tetrachlorophenol	µg.l ⁻¹	A	<0.5	-	-	-
ORG-L02	Fluorene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Pentachlorophenol	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Phenanthrene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Anthracene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Fluoranthene	µg.l ⁻¹	A	<0.05	-	-	-

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Laboratory Sample Number:				280818233	-	-	-
Client Sample Reference:				SW6	-	-	-
Sample Date:				17/08/18	-	-	-
Sample Matrix:				Surface water	-	-	-
ORG-L02	Pyrene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Benza(a)anthracene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Chrysene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Benzo(b)fluoranthene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Benzo(a)pyrene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Indeno(123-cd)pyrene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Dibenza(ah)anthracene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L02	Benzo(ghi)perylene	µg.l ⁻¹	A	<0.05	-	-	-
ORG-L19	Alpha-BHC	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Beta-BHC	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Gamma-BHC	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Delta-BHC	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Heptachlor	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Aldrin	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Heptachlor Epoxide	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Endosulphan	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	pp-DDE	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Dieidrin	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Endosulphan-I	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	pp-DDD	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Endrin Aldehyde	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Endosulphan Sulphate	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	pp-DDT	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Endrin Ketone	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L19	Methoxychlor	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Ametryn	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Atraton	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Atrazine	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Bromacil	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Butachlor	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Butylate	µg.l ⁻¹	N	<1.0	-	-	-

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Client Sample Reference:				SW6	-	-	-
Sample Date:				17/08/18	-	-	-
Sample Matrix:				Surface water	-	-	-
ORG-L20	Chlorpropham	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Cycloate	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Devrinon	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Diazinon	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Dichlorvos	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Dimethyl-p	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Nitrophenylphosphate	µg.l ⁻¹	A	<1.0	-	-	-
ORG-L20	Diphenamid	µg.l ⁻¹	A	<1.0	-	-	-
ORG-L20	Disulfoton Sulfone	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	EPTC	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Metolachlor	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Metribuzin	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Mevinphos	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	MGK	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Molinate	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Pebulate	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Prometon	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Prometryne	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Propazine	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Prophos	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Propyzamide	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Simazine	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Simetryn	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Terbacil	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Terbufos	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Terbutryne	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Tributylphosphoro-trithioite	µg.l ⁻¹	N	<1.0	-	-	-
ORG-L20	Vernolate	µg.l ⁻¹	N	<1.0	-	-	-
1730	Organotin (Total as TBTO)	µg.l ⁻¹	S-N	<0.050	-	-	-
1730	Dibutyl Tin	µg.l ⁻¹	S-N	<0.050	-	-	-
1730	Tetrabutyl Tin	µg.l ⁻¹	S-N	<0.0010	-	-	-

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Client Sample Reference:				SW6	-	-	-
Sample Date:				17/08/18	-	-	-
Sample Matrix:				Surface water	-	-	-
1730	Tributyl Tin	µg.l ⁻¹	S-N	<0.050	-	-	-
1730	Triphenyl Tin	µg.l ⁻¹	S-N	<0.050	-	-	-
1730	Monobutyl Tin	µg.l ⁻¹	S-N	<0.050	-	-	-
1760	Dichlorodifluoromethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Chloromethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Vinyl Chloride	µg.l ⁻¹	S-N	<1.0	-	-	-
1760	Bromomethane	µg.l ⁻¹	S-A	<5.0	-	-	-
1760	Chloroethane	µg.l ⁻¹	S-A	<2.0	-	-	-
1760	Trichlorofluoromethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,1-Dichloroethene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Trans 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,1-Dichloroethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Cis 1,2-Dichloroethene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Bromochloromethane	µg.l ⁻¹	S-A	<5.0	-	-	-
1760	Trichloromethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,1,1-Trichloroethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Tetrachloromethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,1-Dichloropropene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Benzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2-Dichloroethane	µg.l ⁻¹	S-A	<2.0	-	-	-
1760	Trichloroethene	µg.l ⁻¹	S-N	<1.0	-	-	-
1760	1,2-Dichloropropane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Dibromomethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Bromodichloromethane	µg.l ⁻¹	S-A	<5.0	-	-	-
1760	cis-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	-	-	-
1760	Toluene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Trans-1,3-Dichloropropene	µg.l ⁻¹	S-N	<10	-	-	-
1760	1,1,2-Trichloroethane	µg.l ⁻¹	S-A	<10	-	-	-
1760	Tetrachloroethene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,3-Dichloropropane	µg.l ⁻¹	S-A	<2.0	-	-	-
1760	Dibromochloromethane	µg.l ⁻¹	S-A	<10	-	-	-

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Laboratory Sample Number:				280818233	-	-	-
Client Sample Reference:				SW6	-	-	-
Sample Date:				17/08/18	-	-	-
Sample Matrix:				Surface water	-	-	-
1760	1,2-Dibromoethane	µg.l ⁻¹	S-A	<5.0	-	-	-
1760	Chlorobenzene	µg.l ⁻¹	S-N	<1.0	-	-	-
1760	1,1,1,2-Tetrachloroethane	µg.l ⁻¹	S-A	<2.0	-	-	-
1760	Ethylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	m&p-Xylene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	o-Xylene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Styrene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Tribromomethane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Isopropylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Bromobenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2,3-Trichloropropane	µg.l ⁻¹	S-N	<50	-	-	-
1760	N-Propylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	2-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,3,5-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	4-Chlorotoluene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Tert-Butylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2,4-Trimethylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Sec-butylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,3-Dichlorobenzene	µg.l ⁻¹	S-N	<1.0	-	-	-
1760	4-Isopropyltoluene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,4-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	N-Butylbenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2-Dichlorobenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2-Dibromo-3-Chloropropane	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2,4-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Hexachlorobutadiene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	1,2,3-Trichlorobenzene	µg.l ⁻¹	S-A	<1.0	-	-	-
1760	Methyl Tert-Butyl Ether	µg.l ⁻¹	S-N	<1.0	-	-	-
1815	PCB 28	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	PCB 52	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	PCB 90 + 101	µg.l ⁻¹	S-N	<0.010	-	-	-

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Client: Cardiff City Council
FAO: Gareth Ffoulkes

CERTIFICATE OF ANALYSIS 2559
Results of analysis of 29 samples received
on the 07/09/17

Report Date
21st September 2018

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				280818233	-	-	-
Client Sample Reference:				SW6	-	-	-
Sample Date:				17/08/18	-	-	-
Sample Matrix:				Surface water	-	-	-
1815	PCB 118	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	PCB 153	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	PCB 138	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	PCB 180	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	-	-	-
1815	Total PCBs (7 Congeners)	µg.l ⁻¹	S-N	<0.010	-	-	-

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Analytical Method	Method Code	Accreditation Status
Determination of pH in waters by electrode probe meter (In-house method)	INORG-L01	ISO 17025
Determination of conductivity in waters by potentiometric probe meter (In-house method)	INORG-L02	ISO 17025
Determination of ammonia in waters by colorimetric photometer (In-house method)	INORG-L12	ISO 17025
Determination of chloride by colorimetric photometer (In-house method)	INORG-L13	ISO 17025
Determination of metals in waters by ICP-OES (In-house method)	METALS-L	ISO 17025
Determination of mecoprop in waters by GS-MS (In-house method)	ORG-L17	ISO 17025
Determination of m + p Xylene in waters by GC-MS (Sub-Contracted method)	1760	ISO 17025
Determination of BOD in waters by titration (In-house method)	INORG-L06.1	ISO 17025
Determination of alkalinity in water by colorimetric photometer (In-house method)	INORG-L09	ISO 17025
Determination of nitrate in water by colorimetric photometer (In-house method)	INORG-L11	None
Determination of nitrite in water by colorimetric photometer (In-house method)	INORG-L14	ISO 17025
Determination of sulphate in waters by ICP-OES and calculation (In-house method)	METALS-L	ISO 17025
Determination of Sulphide in water by colorimetric photometer (In-house method)	INORG-L37	None
Determination of COD in waters by colorimetric photometer (In-house method)	INORG-L05	ISO 17025
Determination of metals in waters by ICP-MS (Sub-contracted method)	1450	ISO 17025
Determination of total organic carbon in waters by photometer (In-house method)	INORG-L18	ISO 17025

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Analytical Method	Method Code	Accreditation Status
Determination of Cyanide in water by colorimetric photometer (In-house method)	INORG-L31	None
Determination of Phenol in water by colorimetric photometer (In-house method)	INORG-L20	ISO 17025
Determination of Ortho-Phosphates in waters by UV Spectrometer (In-house method)	INORG-L21.1	ISO 17025
Determination of dissolved methane in waters by GC-MS (Sub-contracted method)	1630	None
Determination of suspended solids in waters by gravimetric (In-house method)	INORG-L10	ISO 17025
Determination of TON by summation of Nitrate and Nitrite (In-house method)	-	None
Determination of VOCs in waters by GC-MS (Sub-Contracted method)	1760	None
Determination of PCBs in waters by GC-MS (Sub-Contracted method)	1815	None
Determination of Organochlorine Pesticides in Water by GC-MS (In-house method)	ORG-L19	None
Determination of Organo-N,P-Pesticides in Water by GC-MS (In-house method)	ORG-L20	None

All results only relate to the items tested.

Where results have been labelled as deviating for any reason, the data may not be representative of the sample at the point of sampling:

[I/S]: Insufficient Sample

[U/S]: Unsuitable Sample

[A]: Date of Sampling not supplied

[B]: Sample age exceeds recommended storage time

[C]: Samples not received in appropriate containers

[D]: Broken Container

< "Less Than"

> "Greater Than"

Where any sub-contracted results have been noted as deviating by the laboratory in question, their deviations codes will be applied and detailed.

Accreditation statements are correct at the time of issue.

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***** END OF REPORT *****

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