

Reporting of surface water monitoring for the period 01-Apr-2020 to 30-Jun-2020

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW201	Ionic balance	Calulation	07-Apr-2020		0.162	%
	Electrical conductivity (field)	Field	08-Apr-2020		264	µS/cm
			04-May-2020		295	µS/cm
			10-Jun-2020		131	µS/cm
	Groundwater level/dip		08-Apr-2020		16mm	m
			04-May-2020		15mm	m
			10-Jun-2020		15mm	m
	Water temperature		08-Apr-2020		9.3	°C
			04-May-2020		12.5	°C
			10-Jun-2020		16.9	°C
	Total Suspended solids	TM022	07-Apr-2020		7	mg/l
			13-May-2020		4.7	mg/l
			15-Jun-2020		6.53	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	07-Apr-2020		125	mg/l
	Total Alkalinity as CaCO3		07-Apr-2020		123	mg/l
	Total alkalinity as CaCO3 (filtered)		07-Apr-2020		125	mg/l
	Total organic carbon	TM090	07-Apr-2020		4.42	mg/l
	Ammoniacal Nitrogen as N	TM099	07-Apr-2020		<0.2	mg/l
			13-May-2020		<0.2	mg/l
			15-Jun-2020		<0.2	mg/l
Electrical conductivity @20°C (lab)	TM120	07-Apr-2020		267	µS/cm	
		13-May-2020		534	µS/cm	

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW201	Electrical conductivity @20°C (lab)	TM120	15-Jun-2020		264	µS/cm
	Cadmium (filtered)	TM152	07-Apr-2020		<0.00008	mg/l
	Calcium (filtered)		07-Apr-2020		47.5	mg/l
	Chromium (filtered)		07-Apr-2020		<0.001	mg/l
	Iron (filtered)		07-Apr-2020		0.159	mg/l
	Lead (filtered)		07-Apr-2020		<0.0002	mg/l
	Magnesium (filtered)		07-Apr-2020		4.41	mg/l
	Manganese (filtered)		07-Apr-2020		0.0284	mg/l
	Nickel (filtered)		07-Apr-2020		0.00046	mg/l
	Potassium (filtered)		07-Apr-2020		0.906	mg/l
	Sodium (filtered)		07-Apr-2020		8.52	mg/l
	Zinc (filtered)		07-Apr-2020		0.00476	mg/l
	4-Methylphenol	TM176	07-Apr-2020		<0.001	mg/l
	Diethyl phthalate		07-Apr-2020		<0.001	mg/l
	Chloride	TM184	07-Apr-2020		13	mg/l
			13-May-2020		45.1	mg/l
			15-Jun-2020		13.3	mg/l
	Nitrate as NO3		07-Apr-2020		7.47	mg/l
	Nitrite as NO2		07-Apr-2020		<0.05	mg/l
	Sulphate		07-Apr-2020		6.2	mg/l
	Total Oxidised Nitrogen as N		07-Apr-2020		1.69	mg/l
	Dichloromethane	TM208	07-Apr-2020		<0.003	mg/l
	pH (lab)	TM256	07-Apr-2020		7.98	pH units
			13-May-2020		8.08	pH units
			15-Jun-2020		7.73	pH units
	Mecoprop	TM411	07-Apr-2020		<0.00004	mg/l
SW202	Ionic balance	Calulation	07-Apr-2020		-1.49	%
	Electrical conductivity (field)	Field	08-Apr-2020		257	µS/cm
			04-May-2020		221	µS/cm

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ⁽¹⁾ ⁽⁴⁾	Unit ⁽⁵⁾
SW202	Electrical conductivity (field)	Field	10-Jun-2020		251	µS/cm
	Groundwater level/dip		08-Apr-2020		20mm	m
			04-May-2020		15mm	m
			10-Jun-2020		17mm	m
	Water temperature		08-Apr-2020		10.3	°C
			04-May-2020		18.4	°C
			10-Jun-2020		16.4	°C
	Total Suspended solids	TM022	07-Apr-2020		4.45	mg/l
			13-May-2020		6.05	mg/l
			15-Jun-2020		3.1	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	07-Apr-2020		135	mg/l
	Total Alkalinity as CaCO3		07-Apr-2020		127	mg/l
	Total alkalinity as CaCO3 (filtered)		07-Apr-2020		135	mg/l
	Total organic carbon	TM090	07-Apr-2020		3.99	mg/l
	Ammoniacal Nitrogen as N	TM099	07-Apr-2020		<0.2	mg/l
			13-May-2020		<0.2	mg/l
			15-Jun-2020		<0.2	mg/l
	Electrical conductivity @20°C (lab)	TM120	07-Apr-2020		277	µS/cm
			13-May-2020		421	µS/cm
			15-Jun-2020		548	µS/cm
	Cadmium (filtered)	TM152	07-Apr-2020		<0.00008	mg/l
	Calcium (filtered)		07-Apr-2020		49.2	mg/l
Chromium (filtered)		07-Apr-2020		<0.001	mg/l	
Iron (filtered)		07-Apr-2020		0.143	mg/l	
Lead (filtered)		07-Apr-2020		<0.0002	mg/l	
Magnesium (filtered)		07-Apr-2020		4.46	mg/l	
Manganese (filtered)		07-Apr-2020		0.0234	mg/l	
Nickel (filtered)		07-Apr-2020		0.000693	mg/l	
Potassium (filtered)		07-Apr-2020		1.25	mg/l	

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾	
SW202	Sodium (filtered)	TM152	07-Apr-2020		8.75	mg/l	
	Zinc (filtered)		07-Apr-2020		0.00691	mg/l	
	4-Methylphenol	TM176	07-Apr-2020		<0.001	mg/l	
	Diethyl phthalate		07-Apr-2020		<0.001	mg/l	
	Chloride		TM184	07-Apr-2020		13.5	mg/l
				13-May-2020		27	mg/l
				15-Jun-2020		22.4	mg/l
	Nitrate as NO3		07-Apr-2020		7.04	mg/l	
	Nitrite as NO2		07-Apr-2020		<0.05	mg/l	
	Sulphate		07-Apr-2020		6.6	mg/l	
	Total Oxidised Nitrogen as N		07-Apr-2020		1.6	mg/l	
	Dichloromethane	TM208	07-Apr-2020		<0.003	mg/l	
	pH (lab)		TM256	07-Apr-2020		8.07	pH units
				13-May-2020		8.24	pH units
				15-Jun-2020		8.18	pH units
	Mecoprop	TM411	07-Apr-2020		<0.00004	mg/l	
	SW204	Ionic balance	Calulation	07-Apr-2020		-0.949	%
		Electrical conductivity (field)	Field	08-Apr-2020		295	µS/cm
				04-May-2020		137	µS/cm
10-Jun-2020					261	µS/cm	
Groundwater level/dip			08-Apr-2020		13mm	m	
			04-May-2020		13mm	m	
			10-Jun-2020		12mm	m	
Water temperature			08-Apr-2020		9.2	°C	
			04-May-2020		10.4	°C	
			10-Jun-2020		16.3	°C	
Total Suspended solids		TM022	07-Apr-2020		2.25	mg/l	
	13-May-2020			6.6	mg/l		
	15-Jun-2020			<4	mg/l		

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾	
SW204	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	07-Apr-2020		155	mg/l	
	Total Alkalinity as CaCO3		07-Apr-2020		150	mg/l	
	Total alkalinity as CaCO3 (filtered)		07-Apr-2020		155	mg/l	
	Total organic carbon	TM090	07-Apr-2020		4.07	mg/l	
	Ammoniacal Nitrogen as N		TM099	07-Apr-2020		<0.2	mg/l
				13-May-2020		<0.2	mg/l
				15-Jun-2020		<0.2	mg/l
	Electrical conductivity @20°C (lab)		TM120	07-Apr-2020		316	µS/cm
				13-May-2020		328	µS/cm
				15-Jun-2020		550	µS/cm
	Cadmium (filtered)	TM152	07-Apr-2020		<0.00008	mg/l	
	Calcium (filtered)		07-Apr-2020		55.8	mg/l	
	Chromium (filtered)		07-Apr-2020		<0.001	mg/l	
	Iron (filtered)		07-Apr-2020		0.0364	mg/l	
	Lead (filtered)		07-Apr-2020		<0.0002	mg/l	
	Magnesium (filtered)		07-Apr-2020		4.44	mg/l	
	Manganese (filtered)		07-Apr-2020		0.0535	mg/l	
	Nickel (filtered)		07-Apr-2020		0.000592	mg/l	
	Potassium (filtered)		07-Apr-2020		7.89	mg/l	
	Sodium (filtered)		07-Apr-2020		7.84	mg/l	
	Zinc (filtered)		07-Apr-2020		0.00484	mg/l	
	4-Methylphenol	TM176	07-Apr-2020		<0.001	mg/l	
	Diethyl phthalate		07-Apr-2020		<0.001	mg/l	
	Chloride		TM184	07-Apr-2020		13.3	mg/l
				13-May-2020		9.9	mg/l
				15-Jun-2020		12.3	mg/l
	Nitrate as NO3		07-Apr-2020		3.64	mg/l	
	Nitrite as NO2		07-Apr-2020		<0.05	mg/l	
	Sulphate		07-Apr-2020		11.1	mg/l	

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW204	Total Oxidised Nitrogen as N	TM184	07-Apr-2020		0.827	mg/l
	Dichloromethane	TM208	07-Apr-2020		<0.003	mg/l
	pH (lab)	TM256	07-Apr-2020		8.08	pH units
			13-May-2020		7.88	pH units
			15-Jun-2020		7.39	pH units
	Mecoprop	TM411	07-Apr-2020		<0.00004	mg/l
SW205a	Ionic balance	Calulation	07-Apr-2020		0.0736	%
	Electrical conductivity (field)	Field	08-Apr-2020		259	µS/cm
			04-May-2020		207	µS/cm
			10-Jun-2020		255	µS/cm
	Groundwater level/dip		08-Apr-2020		32mm	m
			04-May-2020		30mm	m
			10-Jun-2020		28mm	m
	Water temperature		08-Apr-2020		10.5	°C
			04-May-2020		13.8	°C
			10-Jun-2020		16.2	°C
	Total Suspended solids	TM022	07-Apr-2020	<70 mg/l	5.7	mg/l
			13-May-2020	<70 mg/l	2.65	mg/l
			15-Jun-2020	<70 mg/l	4.54	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	07-Apr-2020		135	mg/l
	Total Alkalinity as CaCO3		07-Apr-2020		131	mg/l
Total alkalinity as CaCO3 (filtered)		07-Apr-2020		135	mg/l	
Total organic carbon	TM090	07-Apr-2020		3.88	mg/l	
Ammoniacal Nitrogen as N	TM099	07-Apr-2020	<1.0 mg/l	<0.2	mg/l	
		13-May-2020	<1.0 mg/l	<0.2	mg/l	
		15-Jun-2020	<1.0 mg/l	<0.2	mg/l	
Electrical conductivity @20°C (lab)	TM120	07-Apr-2020		282	µS/cm	
		13-May-2020		409	µS/cm	
		15-Jun-2020		553	µS/cm	

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ⁽¹⁾ ⁽⁴⁾	Unit ⁽⁵⁾
SW205a	Cadmium (filtered)	TM152	07-Apr-2020	<0.0001 mg/l	<0.00008	mg/l
	Calcium (filtered)		07-Apr-2020		51.4	mg/l
	Chromium (filtered)		07-Apr-2020		<0.001	mg/l
	Iron (filtered)		07-Apr-2020		0.115	mg/l
	Lead (filtered)		07-Apr-2020		<0.0002	mg/l
	Magnesium (filtered)		07-Apr-2020		4.67	mg/l
	Manganese (filtered)		07-Apr-2020		0.0185	mg/l
	Nickel (filtered)		07-Apr-2020		0.000645	mg/l
	Potassium (filtered)		07-Apr-2020		1.7	mg/l
	Sodium (filtered)		07-Apr-2020		9.23	mg/l
	Zinc (filtered)		07-Apr-2020		0.00692	mg/l
	4-Methylphenol	TM176	07-Apr-2020	<0.001 mg/l	<0.001	mg/l
	Diethyl phthalate		07-Apr-2020	<0.003 mg/l	<0.001	mg/l
	Chloride	TM184	07-Apr-2020	<150 mg/l	13.5	mg/l
			13-May-2020	<150 mg/l	23.5	mg/l
			15-Jun-2020	<150 mg/l	22.3	mg/l
Nitrate as NO3		07-Apr-2020		7.25	mg/l	
Nitrite as NO2		07-Apr-2020		<0.05	mg/l	
Sulphate		07-Apr-2020		9.1	mg/l	
Total Oxidised Nitrogen as N		07-Apr-2020		1.65	mg/l	
Dichloromethane	TM208	07-Apr-2020	<0.002 mg/l	<0.003	mg/l	
pH (lab)	TM256	07-Apr-2020	6 to 9 pH units	8.03	pH units	
		13-May-2020	6 to 9 pH units	8.4	pH units	
		15-Jun-2020	6 to 9 pH units	8.19	pH units	
Mecoprop	TM411	07-Apr-2020	<0.000055 mg/l	<0.00004	mg/l	
SW206	Ionic balance	Calulation	07-Apr-2020		-1.19	%
	Electrical conductivity (field)	Field	08-Apr-2020		424	µS/cm
			04-May-2020		158	µS/cm
			10-Jun-2020		158	µS/cm

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾			
SW206	Groundwater level/dip	Field	08-Apr-2020		28mm	m			
			04-May-2020		25mm	m			
			10-Jun-2020		20mm	m			
	Water temperature		08-Apr-2020		10.2	°C			
			04-May-2020		10.2	°C			
			10-Jun-2020		17.4	°C			
	Total Suspended solids	TM022	07-Apr-2020	<50 mg/l	4.85	mg/l			
			13-May-2020	<50 mg/l	2.85	mg/l			
			15-Jun-2020	<50 mg/l	<4	mg/l			
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	07-Apr-2020		135	mg/l			
					Total Alkalinity as CaCO3	07-Apr-2020		135	mg/l
					Total alkalinity as CaCO3 (filtered)	07-Apr-2020		135	mg/l
	Total organic carbon	TM090	07-Apr-2020		3.39	mg/l			
			Ammoniacal Nitrogen as N	TM099	07-Apr-2020	<1.0 mg/l	<0.2	mg/l	
					13-May-2020	<1.0 mg/l	<0.2	mg/l	
15-Jun-2020	<1.0 mg/l	<0.2			mg/l				
	Electrical conductivity @20°C (lab)	TM120	07-Apr-2020		274	µS/cm			
			13-May-2020		437	µS/cm			
			15-Jun-2020		338	µS/cm			
	Cadmium (filtered)	TM152	07-Apr-2020	<0.0001 mg/l	<0.00008	mg/l			
			07-Apr-2020		49.5	mg/l			
			07-Apr-2020		<0.001	mg/l			
			07-Apr-2020		0.112	mg/l			
			07-Apr-2020		<0.0002	mg/l			
			07-Apr-2020		4.49	mg/l			
			07-Apr-2020		0.0179	mg/l			
			07-Apr-2020		0.000446	mg/l			
			07-Apr-2020		1.63	mg/l			
			07-Apr-2020		8.79	mg/l			

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW206	Zinc (filtered)	TM152	07-Apr-2020		0.00473	mg/l
	4-Methylphenol	TM176	07-Apr-2020	<0.001 mg/l	<0.001	mg/l
	Diethyl phthalate		07-Apr-2020	<0.003 mg/l	<0.001	mg/l
	Chloride	TM184	07-Apr-2020	<150 mg/l	13.3	mg/l
			13-May-2020	<150 mg/l	12.2	mg/l
			15-Jun-2020	<150 mg/l	11.4	mg/l
	Nitrate as NO3		07-Apr-2020		7.36	mg/l
	Nitrite as NO2		07-Apr-2020		<0.05	mg/l
	Sulphate		07-Apr-2020		7	mg/l
	Total Oxidised Nitrogen as N		07-Apr-2020		1.67	mg/l
	Dichloromethane	TM208	07-Apr-2020	<0.002 mg/l	<0.003	mg/l
	pH (lab)	TM256	07-Apr-2020	6 to 9 pH units	8.05	pH units
			13-May-2020	6 to 9 pH units	8.36	pH units
			15-Jun-2020	6 to 9 pH units	8.36	pH units
	Mecoprop	TM411	07-Apr-2020	<0.000055 mg/l	4.3e-05	mg/l
SW207	Ionic balance	Calulation	07-Apr-2020		1.58	%
	Electrical conductivity (field)	Field	08-Apr-2020		280	µS/cm
			04-May-2020		157	µS/cm
			10-Jun-2020		146	µS/cm
	Groundwater level/dip		08-Apr-2020		52mm	m
			04-May-2020		33mm	m
			10-Jun-2020		30mm	m
	Water temperature		08-Apr-2020		7.8	°C
			04-May-2020		10.1	°C
			10-Jun-2020		18.8	°C
Total Suspended solids	TM022	07-Apr-2020		5.55	mg/l	
		13-May-2020		2.95	mg/l	
		15-Jun-2020		6	mg/l	
Bicarbonate alkalinity as CaCO3 (filtered)	TM043	07-Apr-2020		200	mg/l	

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW207	Total Alkalinity as CaCO3	TM043	07-Apr-2020		200	mg/l
	Total alkalinity as CaCO3 (filtered)		07-Apr-2020		200	mg/l
	Total organic carbon	TM090	07-Apr-2020		4.26	mg/l
	Ammoniacal Nitrogen as N	TM099	07-Apr-2020		<0.2	mg/l
			13-May-2020		<0.2	mg/l
			15-Jun-2020		<0.2	mg/l
	Electrical conductivity @20°C (lab)	TM120	07-Apr-2020		455	µS/cm
			13-May-2020		306	µS/cm
			15-Jun-2020		297	µS/cm
	Cadmium (filtered)	TM152	07-Apr-2020		<0.00008	mg/l
	Calcium (filtered)		07-Apr-2020		82.5	mg/l
	Chromium (filtered)		07-Apr-2020		<0.001	mg/l
	Iron (filtered)		07-Apr-2020		0.0553	mg/l
	Lead (filtered)		07-Apr-2020		<0.0002	mg/l
	Magnesium (filtered)		07-Apr-2020		8.23	mg/l
	Manganese (filtered)		07-Apr-2020		0.0887	mg/l
	Nickel (filtered)		07-Apr-2020		0.000831	mg/l
	Potassium (filtered)		07-Apr-2020		10.9	mg/l
	Sodium (filtered)		07-Apr-2020		13	mg/l
	Zinc (filtered)		07-Apr-2020		0.00285	mg/l
	4-Methylphenol	TM176	07-Apr-2020		<0.001	mg/l
	Diethyl phthalate		07-Apr-2020		<0.001	mg/l
	Chloride	TM184	07-Apr-2020		27.4	mg/l
			13-May-2020		11.2	mg/l
			15-Jun-2020		13.1	mg/l
	Nitrate as NO3		07-Apr-2020		5.75	mg/l
	Nitrite as NO2		07-Apr-2020		<0.05	mg/l
	Sulphate		07-Apr-2020		28.6	mg/l
	Total Oxidised Nitrogen as N		07-Apr-2020		1.31	mg/l

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW207	Dichloromethane	TM208	07-Apr-2020		<0.003	mg/l
	pH (lab)	TM256	07-Apr-2020		8.17	pH units
			13-May-2020		8.37	pH units
			15-Jun-2020		8.09	pH units
	Mecoprop	TM411	07-Apr-2020		<0.00004	mg/l

(1) The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

(2) Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.


(3) For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

(4) The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated; refer to laboratory data sheets for specific uncertainty.

(5) Depths reported as metres (m) are metres above base of ditch / stream.

(6) For details of the sampling method, frequency and parameters measured / analysed for, refer to the site Environmental Monitoring Management Plan (EMMP).

(7) Where blank, there is no defined compliance limit specified for the monitoring location / parameter.

Signature: 

Date: 23 July 2020

(Authorised to sign as representative of Operator)