

Reporting of surface water monitoring for the period 01-Jan-2023 to 31-Mar-2023

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW201	Ionic balance	CALC	11-Jan-2023		-1.45	%
	Electrical conductivity (field)	Field	11-Jan-2023		345	µS/cm
			06-Feb-2023		370	µS/cm
			09-Mar-2023		282	µS/cm
	Groundwater level/dip		11-Jan-2023		41	mm
			06-Feb-2023		20	mm
			09-Mar-2023		19	mm
	Water temperature		11-Jan-2023		11.9	°C
			06-Feb-2023		7.2	°C
			09-Mar-2023		11.1	°C
	Total Suspended solids	TM022	11-Jan-2023		4.85	mg/l
			06-Feb-2023		2.75	mg/l
			07-Mar-2023		48.8	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023		285	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023		275	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023		285	mg/l
	Total organic carbon	TM090	11-Jan-2023		20.4	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023		4.86	mg/l
			06-Feb-2023		3.21	mg/l
			07-Mar-2023		0.356	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023		<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023		102	mg/l
	Chromium (filtered)		11-Jan-2023		<0.001	mg/l

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW201	Iron (filtered)	TM152	11-Jan-2023		0.219	mg/l
	Lead (filtered)		11-Jan-2023		0.00138	mg/l
	Magnesium (filtered)		11-Jan-2023		9.39	mg/l
	Manganese (filtered)		11-Jan-2023		0.183	mg/l
	Nickel (filtered)		11-Jan-2023		0.00307	mg/l
	Potassium (filtered)		11-Jan-2023		45.4	mg/l
	Sodium (filtered)		11-Jan-2023		20.1	mg/l
	Zinc (filtered)	TM176	11-Jan-2023		0.0144	mg/l
	4-Methylphenol		11-Jan-2023		<0.002	mg/l
	Diethyl phthalate		11-Jan-2023		<0.002	mg/l
	Chloride	TM184	11-Jan-2023		72.8	mg/l
			06-Feb-2023		95.1	mg/l
			07-Mar-2023		57.6	mg/l
	Nitrate as NO3		11-Jan-2023		9.37	mg/l
	Nitrite as NO2		11-Jan-2023		0.095	mg/l
	Sulphate		11-Jan-2023		28.3	mg/l
	Total Oxidised Nitrogen as N		11-Jan-2023		2.14	mg/l
	Dichloromethane	TM208	11-Jan-2023		<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023		729	µS/cm
			06-Feb-2023		834	µS/cm
			07-Mar-2023		661	µS/cm
	pH (lab)		11-Jan-2023		7.6	pH units
			06-Feb-2023		8.18	pH units
			07-Mar-2023		7.46	pH units
SW202	Mecoprop	TM411	11-Jan-2023		0.000186	mg/l
	Ionic balance	CALC	11-Jan-2023		-0.738	%
	Electrical conductivity (field)	Field	11-Jan-2023		196	µS/cm
			06-Feb-2023		182	µS/cm
			09-Mar-2023		184	µS/cm

SW202	Groundwater level/dip	Field	11-Jan-2023	53	mm
			06-Feb-2023	33	mm
			09-Mar-2023	29	mm
	Water temperature		11-Jan-2023	6.1	°C
			06-Feb-2023	8.3	°C
			09-Mar-2023	14	°C
	Total Suspended solids	TM022	11-Jan-2023	63.6	mg/l
			06-Feb-2023	8.85	mg/l
			07-Mar-2023	8.7	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023	200	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023	200	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023	200	mg/l
	Total organic carbon	TM090	11-Jan-2023	<3	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023	0.313	mg/l
			06-Feb-2023	<0.2	mg/l
			07-Mar-2023	<0.2	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023	<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023	73.9	mg/l
	Chromium (filtered)		11-Jan-2023	<0.001	mg/l
	Iron (filtered)		11-Jan-2023	<0.019	mg/l
	Lead (filtered)		11-Jan-2023	<0.0002	mg/l
	Magnesium (filtered)		11-Jan-2023	6.16	mg/l
	Manganese (filtered)		11-Jan-2023	0.0202	mg/l
	Nickel (filtered)		11-Jan-2023	0.000537	mg/l
	Potassium (filtered)		11-Jan-2023	4.96	mg/l
	Sodium (filtered)		11-Jan-2023	12.5	mg/l
	Zinc (filtered)		11-Jan-2023	0.00332	mg/l
	4-Methylphenol	TM176	11-Jan-2023	<0.001	mg/l
	Diethyl phthalate		11-Jan-2023	<0.001	mg/l

SW202	Chloride	TM184	11-Jan-2023	20.1	mg/l
			06-Feb-2023	17.1	mg/l
			07-Mar-2023	17.9	mg/l
	Nitrate as NO3		11-Jan-2023	6.8	mg/l
	Nitrite as NO2		11-Jan-2023	<0.05	mg/l
	Sulphate		11-Jan-2023	13.6	mg/l
	Total Oxidised Nitrogen as N		11-Jan-2023	1.54	mg/l
	Dichloromethane	TM208	11-Jan-2023	<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023	422	µS/cm
			06-Feb-2023	385	µS/cm
			07-Mar-2023	406	µS/cm
	pH (lab)		11-Jan-2023	7.21	pH units
			06-Feb-2023	7.87	pH units
			07-Mar-2023	7.05	pH units
	Mecoprop	TM411	11-Jan-2023	<0.00004	mg/l
SW203	Ionic balance	CALC	11-Jan-2023	-1.85	%
	Electrical conductivity (field)	Field	11-Jan-2023	385	µS/cm
	Groundwater level/dip		11-Jan-2023	62	mm
			06-Feb-2023	DRY	mm
			09-Mar-2023	DRY	mm
	Water temperature		11-Jan-2023	9.1	°C
	Total Suspended solids	TM022	11-Jan-2023	9.3	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023	350	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023	350	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023	350	mg/l
	Total organic carbon	TM090	11-Jan-2023	27.4	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023	11	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023	<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023	89	mg/l

SW203	Chromium (filtered)	TM152	11-Jan-2023	<0.001	mg/l
	Iron (filtered)		11-Jan-2023	0.162	mg/l
	Lead (filtered)		11-Jan-2023	0.00128	mg/l
	Magnesium (filtered)		11-Jan-2023	9.37	mg/l
	Manganese (filtered)		11-Jan-2023	0.321	mg/l
	Nickel (filtered)		11-Jan-2023	0.00429	mg/l
	Potassium (filtered)		11-Jan-2023	83.2	mg/l
	Sodium (filtered)		11-Jan-2023	30.7	mg/l
	Zinc (filtered)		11-Jan-2023	0.0144	mg/l
	4-Methylphenol	TM176	11-Jan-2023	<0.004	mg/l
	Diethyl phthalate		11-Jan-2023	<0.004	mg/l
	Chloride	TM184	11-Jan-2023	49.9	mg/l
	Nitrate as NO3		11-Jan-2023	15.4	mg/l
	Nitrite as NO2		11-Jan-2023	0.257	mg/l
	Sulphate		11-Jan-2023	55.9	mg/l
	Total Oxidised Nitrogen as N		11-Jan-2023	3.57	mg/l
	Dichloromethane	TM208	11-Jan-2023	<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023	837	µS/cm
	pH (lab)		11-Jan-2023	7.78	pH units
	Mecoprop	TM411	11-Jan-2023	<0.0002	mg/l
SW204	Ionic balance	CALC	11-Jan-2023	-1.32	%
	Electrical conductivity (field)	Field	11-Jan-2023	226	µS/cm
			06-Feb-2023	206	µS/cm
			09-Mar-2023	141	µS/cm
	Groundwater level/dip		11-Jan-2023	43	mm
			06-Feb-2023	18	mm
			09-Mar-2023	17	mm
	Water temperature		11-Jan-2023	9.3	°C
			06-Feb-2023	9.3	°C

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW204	Water temperature	Field	09-Mar-2023		8.5	°C
	Total Suspended solids	TM022	11-Jan-2023		7.6	mg/l
			06-Feb-2023		<2	mg/l
			07-Mar-2023		2.05	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023		170	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023		170	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023		170	mg/l
	Total organic carbon	TM090	11-Jan-2023		19.5	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023		<0.2	mg/l
			06-Feb-2023		<0.2	mg/l
			07-Mar-2023		<0.2	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023		<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023		67.9	mg/l
	Chromium (filtered)		11-Jan-2023		<0.001	mg/l
	Iron (filtered)		11-Jan-2023		0.0989	mg/l
	Lead (filtered)		11-Jan-2023		0.00356	mg/l
	Magnesium (filtered)		11-Jan-2023		4.6	mg/l
	Manganese (filtered)		11-Jan-2023		0.0137	mg/l
	Nickel (filtered)		11-Jan-2023		0.00285	mg/l
	Potassium (filtered)		11-Jan-2023		42.4	mg/l
	Sodium (filtered)		11-Jan-2023		14.8	mg/l
	Zinc (filtered)		11-Jan-2023		0.00848	mg/l
	4-Methylphenol	TM176	11-Jan-2023		<0.002	mg/l
	Diethyl phthalate		11-Jan-2023		<0.002	mg/l
	Chloride	TM184	11-Jan-2023		33.9	mg/l
			06-Feb-2023		23.8	mg/l
			07-Mar-2023		15.1	mg/l
	Nitrate as NO3		11-Jan-2023		13.6	mg/l
	Nitrite as NO2		11-Jan-2023		<0.05	mg/l

SW204	Sulphate	TM184	11-Jan-2023		51.2	mg/l
	Total Oxidised Nitrogen as N		11-Jan-2023		3.08	mg/l
	Dichloromethane	TM208	11-Jan-2023		<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023		491	µS/cm
			06-Feb-2023		416	µS/cm
			07-Mar-2023		308	µS/cm
	pH (lab)		11-Jan-2023		7.8	pH units
			06-Feb-2023		8.32	pH units
			07-Mar-2023		8.21	pH units
	Mecoprop	TM411	11-Jan-2023		<0.0002	mg/l
SW205a	Ionic balance	CALC	11-Jan-2023		-1.38	%
	Electrical conductivity (field)	Field	11-Jan-2023		262	µS/cm
			06-Feb-2023		242	µS/cm
			09-Mar-2023		198	µS/cm
	Groundwater level/dip		11-Jan-2023		74	mm
			06-Feb-2023		8	mm
			09-Mar-2023		36	mm
	Water temperature		11-Jan-2023		8.4	°C
			06-Feb-2023		7.7	°C
			09-Mar-2023		10.4	°C
	Total Suspended solids	TM022	11-Jan-2023	<70 mg/l	8.95	mg/l
			06-Feb-2023	<70 mg/l	2.2	mg/l
			07-Mar-2023	<70 mg/l	4.2	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023		190	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023		190	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023		190	mg/l
	Total organic carbon	TM090	11-Jan-2023		31.9	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023	<1.0 mg/l	4.06	mg/l
			06-Feb-2023	<1.0 mg/l	<0.2	mg/l

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW205a	Ammoniacal Nitrogen as N	TM099	07-Mar-2023	<1.0 mg/l	<0.2	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023	<0.0001 mg/l	<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023		62.4	mg/l
	Chromium (filtered)		11-Jan-2023		<0.001	mg/l
	Iron (filtered)		11-Jan-2023		0.179	mg/l
	Lead (filtered)		11-Jan-2023		0.00123	mg/l
	Magnesium (filtered)		11-Jan-2023		5.12	mg/l
	Manganese (filtered)		11-Jan-2023		0.0908	mg/l
	Nickel (filtered)		11-Jan-2023		0.00395	mg/l
	Potassium (filtered)		11-Jan-2023		57.1	mg/l
	Sodium (filtered)		11-Jan-2023		18.2	mg/l
	Zinc (filtered)		11-Jan-2023		0.0143	mg/l
	4-Methylphenol	TM176	11-Jan-2023	<0.001 mg/l	<0.004	mg/l
	Diethyl phthalate		11-Jan-2023	<0.003 mg/l	<0.004	mg/l
	Chloride	TM184	11-Jan-2023	<150 mg/l	51.3	mg/l
			06-Feb-2023	<150 mg/l	37.1	mg/l
			07-Mar-2023	<150 mg/l	24.3	mg/l
	Nitrate as NO3		11-Jan-2023		11.8	mg/l
	Nitrite as NO2		11-Jan-2023		0.274	mg/l
	Sulphate		11-Jan-2023		38.8	mg/l
	Total Oxidised Nitrogen as N		11-Jan-2023		2.76	mg/l
	Dichloromethane	TM208	11-Jan-2023	<0.002 mg/l	<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023		572	µS/cm
			06-Feb-2023		516	µS/cm
			07-Mar-2023		434	µS/cm
	pH (lab)		11-Jan-2023	6 to 9 pH units	7.8	pH units
			06-Feb-2023	6 to 9 pH units	8.38	pH units
			07-Mar-2023	6 to 9 pH units	8.27	pH units
	Mecoprop	TM411	11-Jan-2023	<0.000055 mg/l	<0.0002	mg/l

SW206	Ionic balance	CALC	11-Jan-2023		-3.78	%
	Electrical conductivity (field)	Field	11-Jan-2023		101	µS/cm
			06-Feb-2023		202	µS/cm
			09-Mar-2023		232	µS/cm
	Groundwater level/dip		11-Jan-2023		82	mm
			06-Feb-2023		28	mm
			09-Mar-2023		27	mm
	Water temperature		11-Jan-2023		7.9	°C
			06-Feb-2023		7.7	°C
			09-Mar-2023		11.1	°C
	Total Suspended solids	TM022	11-Jan-2023	<50 mg/l	6.5	mg/l
			06-Feb-2023	<50 mg/l	16.2	mg/l
			07-Mar-2023	<50 mg/l	9.8	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023		70	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023		70	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023		70	mg/l
	Total organic carbon	TM090	11-Jan-2023		6.34	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023	<1.0 mg/l	<0.2	mg/l
			06-Feb-2023	<1.0 mg/l	0.597	mg/l
			07-Mar-2023	<1.0 mg/l	<0.2	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023	<0.0001 mg/l	<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023		29.2	mg/l
	Chromium (filtered)		11-Jan-2023		<0.001	mg/l
	Iron (filtered)		11-Jan-2023		0.0802	mg/l
	Lead (filtered)		11-Jan-2023		0.00025	mg/l
	Magnesium (filtered)		11-Jan-2023		1.72	mg/l
	Manganese (filtered)		11-Jan-2023		0.0062	mg/l
	Nickel (filtered)		11-Jan-2023		0.00081	mg/l
	Potassium (filtered)		11-Jan-2023		1.83	mg/l

SW206	Sodium (filtered)	TM152	11-Jan-2023		5.97	mg/l
	Zinc (filtered)		11-Jan-2023		0.00704	mg/l
	4-Methylphenol	TM176	11-Jan-2023	<0.001 mg/l	<0.001	mg/l
	Diethyl phthalate		11-Jan-2023	<0.003 mg/l	<0.001	mg/l
	Chloride	TM184	11-Jan-2023	<150 mg/l	15.2	mg/l
			06-Feb-2023	<150 mg/l	31.2	mg/l
			07-Mar-2023	<150 mg/l	33.2	mg/l
	Nitrate as NO3		11-Jan-2023		5.25	mg/l
	Nitrite as NO2		11-Jan-2023		<0.05	mg/l
	Sulphate		11-Jan-2023		6.8	mg/l
	Total Oxidised Nitrogen as N		11-Jan-2023		1.19	mg/l
	Dichloromethane	TM208	11-Jan-2023	<0.002 mg/l	<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023		194	µS/cm
			06-Feb-2023		432	µS/cm
			07-Mar-2023		511	µS/cm
	pH (lab)		11-Jan-2023	6 to 9 pH units	7.92	pH units
			06-Feb-2023	6 to 9 pH units	8.2	pH units
			07-Mar-2023	6 to 9 pH units	8.32	pH units
	Mecoprop	TM411	11-Jan-2023	<0.000055 mg/l	<0.00004	mg/l
SW207	Ionic balance	CALC	11-Jan-2023		-4.43	%
	Electrical conductivity (field)	Field	11-Jan-2023		157	µS/cm
			06-Feb-2023		193	µS/cm
			09-Mar-2023		225	µS/cm
	Groundwater level/dip		11-Jan-2023		101	mm
			06-Feb-2023		55	mm
			09-Mar-2023		52	mm
	Water temperature		11-Jan-2023		7.6	°C
			06-Feb-2023		6	°C
			09-Mar-2023		10.6	°C

Monitoring location	Substance / parameter ⁽⁶⁾	Test method ⁽²⁾	Date ⁽³⁾	Compliance limit ⁽⁷⁾	Result ^{(1) (4)}	Unit ⁽⁵⁾
SW207	Total Suspended solids	TM022	11-Jan-2023		12.6	mg/l
			06-Feb-2023		6.4	mg/l
			07-Mar-2023		7.15	mg/l
	Bicarbonate alkalinity as CaCO3 (filtered)	TM043	11-Jan-2023		115	mg/l
	Total Alkalinity as CaCO3		11-Jan-2023		120	mg/l
	Total alkalinity as CaCO3 (filtered)		11-Jan-2023		115	mg/l
	Total organic carbon	TM090	11-Jan-2023		15.2	mg/l
	Ammoniacal Nitrogen as N	TM099	11-Jan-2023		0.947	mg/l
			06-Feb-2023		0.304	mg/l
			07-Mar-2023		<0.2	mg/l
	Cadmium (filtered)	TM152	11-Jan-2023		<0.00008	mg/l
	Calcium (filtered)		11-Jan-2023		42	mg/l
	Chromium (filtered)		11-Jan-2023		<0.001	mg/l
	Iron (filtered)		11-Jan-2023		0.126	mg/l
	Lead (filtered)		11-Jan-2023		0.00296	mg/l
	Magnesium (filtered)		11-Jan-2023		3.16	mg/l
	Manganese (filtered)		11-Jan-2023		0.0211	mg/l
	Nickel (filtered)		11-Jan-2023		0.00269	mg/l
	Potassium (filtered)		11-Jan-2023		21.9	mg/l
	Sodium (filtered)		11-Jan-2023		12.2	mg/l
	Zinc (filtered)		11-Jan-2023		0.0143	mg/l
	4-Methylphenol	TM176	11-Jan-2023		<0.001	mg/l
	Diethyl phthalate		11-Jan-2023		<0.001	mg/l
	Chloride	TM184	11-Jan-2023		31.6	mg/l
			06-Feb-2023		30.7	mg/l
			07-Mar-2023		32.2	mg/l
	Nitrate as NO3		11-Jan-2023		11.2	mg/l
	Nitrite as NO2		11-Jan-2023		0.151	mg/l
	Sulphate		11-Jan-2023		22.3	mg/l

SW207	Total Oxidised Nitrogen as N	TM184	11-Jan-2023	2.59	mg/l
	Dichloromethane	TM208	11-Jan-2023	<0.003	mg/l
	Electrical conductivity @20°C (lab)	TM256	11-Jan-2023	346	µS/cm
			06-Feb-2023	410	µS/cm
			07-Mar-2023	503	µS/cm
	pH (lab)		11-Jan-2023	7.87	pH units
			06-Feb-2023	8.23	pH units
			07-Mar-2023	8.3	pH units
	Mecoprop	TM411	11-Jan-2023	0.0000471	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.

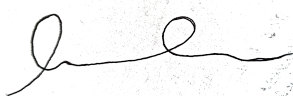
(3) For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

(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: 28 March 2023

(Authorised to sign as representative of
Operator)