

Permit Number: EPR/PP3993VS

Operator: Atlantic Recycling

Facility: Atlantic Recycling

Form Number: Groundwater1

Reporting of groundwater results for bi-annual monitoring in November 2018

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS01	Ammoniacal Nitrogen as N (low level)	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	0.0384	mg/l	TM099	26/11/2018	Lab Precision: 1.3%, Bias: 0.3%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS01	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	<1	mg/l	TM045	26/11/2018	Lab Precision: 5.9%, Bias: 1.6%, Expanded Uncertainty: 13.4%, Sampling Immeasurable
WS01	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5	ug/l	TM152	26/11/2018	Lab Precision: 3%, Bias: 1.3%, Expanded Uncertainty: 7.3%, Sampling Immeasurable
WS01	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	114	mg/l	TM152	26/11/2018	Lab Precision: 3.3%, Bias: 2.4%, Expanded Uncertainty: 9%, Sampling Immeasurable
WS01	Chloride	>300 mg/l	Monthly	83.5	mg/l	TM184	26/11/2018	Lab Precision: 1.7%, Bias: 5.5%, Expanded Uncertainty: 8.9%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS01	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	0.724	mS/cm	TM120	26/11/2018	Lab Precision: 0.7%, Bias: 3%, Expanded Uncertainty: 4.4%, Sampling Immeasurable
WS01	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	26/11/2018	Lab Precision: 11.5%, Bias: 6%, Expanded Uncertainty: 29%, Sampling Immeasurable
WS01	Lead (diss.filt)	>0.25 mg/l	Monthly	<0.2	ug/l	TM152	26/11/2018	Lab Precision: 2.5%, Bias: 1.3%, Expanded Uncertainty: 6.4%, Sampling Immeasurable
WS01	Nickel (diss.filt)	>0.1 mg/l	Monthly	2.01	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 0.1%, Expanded Uncertainty: 5.4%, Sampling Immeasurable
WS01	Nitrate as N	>1 mg/l	Monthly	0.309	mg/l	TM184	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS01	Nitrite as N	>1 mg/l	Monthly	<0.0152	mg/l	TM184	26/11/2018	Lab Precision: 1.1%, Bias: -0.9%, Expanded Uncertainty: 3%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS01	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	3.12	mg/l	TM187	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS01	pH	6.8 – 8.5	Monthly	7.5	pH Units	TM256	26/11/2018	Lab Precision: 0%, Bias: 0.1%, Expanded Uncertainty: 0.1%, Sampling Immeasurable
WS01	Phosphate (Ortho as P)	>1 mg/l	Monthly	<0.02	mg/l	TM184	26/11/2018	Lab Precision: 1%, Bias: 1.7%, Expanded Uncertainty: 3.7%, Sampling Immeasurable
WS01	Sulphate	>300 mg/l	Monthly	43.5	mg/l	TM184	26/11/2018	Lab Precision: 2.2%, Bias: 4.6%, Expanded Uncertainty: 9.1%, Sampling Immeasurable
WS01	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	11.5	mg/l	TM022	26/11/2018	Lab Precision: 0.9%, Bias: -1.1%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS01	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.8%, Bias: -1.7%, Expanded Uncertainty: 19.2%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS01	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.3%, Bias: -8.4%, Expanded Uncertainty: 24.9%, Sampling Immeasurable
WS01	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	0.314	mg/l	TM184	26/11/2018	Lab Precision: 2.4%, Bias: 5.5%, Expanded Uncertainty: 10.3%, Sampling Immeasurable
WS01	Zinc (tot.unfilt)	>1 mg/l	Monthly	<5	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 2.3%, Expanded Uncertainty: 7.6%, Sampling Immeasurable
WS02	Ammoniacal Nitrogen as N (low level)	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	2.73	mg/l	TM099	26/11/2018	Lab Precision: 1.3%, Bias: 0.3%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS02	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	<3	mg/l	TM045	26/11/2018	Lab Precision: 5.9%, Bias: 1.6%, Expanded Uncertainty: 13.4%, Sampling Immeasurable
WS02	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5	ug/l	TM152	26/11/2018	Lab Precision: 3%, Bias: 1.3%, Expanded Uncertainty: 7.3%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS02	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	59.9	mg/l	TM152	26/11/2018	Lab Precision: 3.3%, Bias: 2.4%, Expanded Uncertainty: 9%, Sampling Immeasurable
WS02	Chloride	>300 mg/l	Monthly	204	mg/l	TM184	26/11/2018	Lab Precision: 1.7%, Bias: 5.5%, Expanded Uncertainty: 8.9%, Sampling Immeasurable
WS02	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	1.53	mS/cm	TM120	26/11/2018	Lab Precision: 0.7%, Bias: 3%, Expanded Uncertainty: 4.4%, Sampling Immeasurable
WS02	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	26/11/2018	Lab Precision: 11.5%, Bias: 6%, Expanded Uncertainty: 29%, Sampling Immeasurable
WS02	Lead (diss.filt)	>0.25 mg/l	Monthly	<0.2	ug/l	TM152	26/11/2018	Lab Precision: 2.5%, Bias: 1.3%, Expanded Uncertainty: 6.4%, Sampling Immeasurable
WS02	Nickel (diss.filt)	>0.1 mg/l	Monthly	0.826	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 0.1%, Expanded Uncertainty: 5.4%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS02	Nitrate as N	>1 mg/l	Monthly	<0.0677	mg/l	TM184	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS02	Nitrite as N	>1 mg/l	Monthly	<0.0152	mg/l	TM184	26/11/2018	Lab Precision: 1.1%, Bias: -0.9%, Expanded Uncertainty: 3%, Sampling Immeasurable
WS02	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	<0.3	mg/l	TM187	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS02	pH	6.8 – 8.5	Monthly	7.37	pH Units	TM256	26/11/2018	Lab Precision: 0%, Bias: 0.1%, Expanded Uncertainty: 0.1%, Sampling Immeasurable
WS02	Phosphate (Ortho as P)	>1 mg/l	Monthly	1.37	mg/l	TM184	26/11/2018	Lab Precision: 1%, Bias: 1.7%, Expanded Uncertainty: 3.7%, Sampling Immeasurable
WS02	Sulphate	>300 mg/l	Monthly	67.4	mg/l	TM184	26/11/2018	Lab Precision: 2.2%, Bias: 4.6%, Expanded Uncertainty: 9.1%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS02	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	2840	mg/l	TM022	26/11/2018	Lab Precision: 0.9%, Bias: -1.1%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS02	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.8%, Bias: -1.7%, Expanded Uncertainty: 19.2%, Sampling Immeasurable
WS02	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.3%, Bias: -8.4%, Expanded Uncertainty: 24.9%, Sampling Immeasurable
WS02	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	<0.1	mg/l	TM184	26/11/2018	Lab Precision: 2.4%, Bias: 5.5%, Expanded Uncertainty: 10.3%, Sampling Immeasurable
WS02	Zinc (tot.unfilt)	>1 mg/l	Monthly	25.6	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 2.3%, Expanded Uncertainty: 7.6%, Sampling Immeasurable
WS03	Ammoniacal Nitrogen as N (low level)	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	0.358	mg/l	TM099	26/11/2018	Lab Precision: 1.3%, Bias: 0.3%, Expanded Uncertainty: 2.9%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS03	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	<1	mg/l	TM045	26/11/2018	Lab Precision: 5.9%, Bias: 1.6%, Expanded Uncertainty: 13.4%, Sampling Immeasurable
WS03	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5	ug/l	TM152	26/11/2018	Lab Precision: 3%, Bias: 1.3%, Expanded Uncertainty: 7.3%, Sampling Immeasurable
WS03	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	491	mg/l	TM152	26/11/2018	Lab Precision: 3.3%, Bias: 2.4%, Expanded Uncertainty: 9%, Sampling Immeasurable
WS03	Chloride	>300 mg/l	Monthly	59.3	mg/l	TM184	26/11/2018	Lab Precision: 1.7%, Bias: 5.5%, Expanded Uncertainty: 8.9%, Sampling Immeasurable
WS03	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	2.21	mS/cm	TM120	26/11/2018	Lab Precision: 0.7%, Bias: 3%, Expanded Uncertainty: 4.4%, Sampling Immeasurable
WS03	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	26/11/2018	Lab Precision: 11.5%, Bias: 6%, Expanded Uncertainty: 29%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS03	Lead (diss.filt)	>0.25 mg/l	Monthly	<0.2	ug/l	TM152	26/11/2018	Lab Precision: 2.5%, Bias: 1.3%, Expanded Uncertainty: 6.4%, Sampling Immeasurable
WS03	Nickel (diss.filt)	>0.1 mg/l	Monthly	6.98	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 0.1%, Expanded Uncertainty: 5.4%, Sampling Immeasurable
WS03	Nitrate as N	>1 mg/l	Monthly	0.145	mg/l	TM184	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS03	Nitrite as N	>1 mg/l	Monthly	<0.0152	mg/l	TM184	26/11/2018	Lab Precision: 1.1%, Bias: -0.9%, Expanded Uncertainty: 3%, Sampling Immeasurable
WS03	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	2.19	mg/l	TM187	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS03	pH	6.8 – 8.5	Monthly	7.24	pH Units	TM256	26/11/2018	Lab Precision: 0%, Bias: 0.1%, Expanded Uncertainty: 0.1%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS03	Phosphate (Ortho as P)	>1 mg/l	Monthly	<0.02	mg/l	TM184	26/11/2018	Lab Precision: 1%, Bias: 1.7%, Expanded Uncertainty: 3.7%, Sampling Immeasurable
WS03	Sulphate	>300 mg/l	Monthly	855	mg/l	TM184	26/11/2018	Lab Precision: 2.2%, Bias: 4.6%, Expanded Uncertainty: 9.1%, Sampling Immeasurable
WS03	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	78.5	mg/l	TM022	26/11/2018	Lab Precision: 0.9%, Bias: -1.1%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS03	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.8%, Bias: -1.7%, Expanded Uncertainty: 19.2%, Sampling Immeasurable
WS03	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.3%, Bias: -8.4%, Expanded Uncertainty: 24.9%, Sampling Immeasurable
WS03	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	0.154	mg/l	TM184	26/11/2018	Lab Precision: 2.4%, Bias: 5.5%, Expanded Uncertainty: 10.3%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS03	Zinc (tot.unfilt)	>1 mg/l	Monthly	<5	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 2.3%, Expanded Uncertainty: 7.6%, Sampling Immeasurable
WS04	Ammoniacal Nitrogen as N (low level)	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	4.35	mg/l	TM099	26/11/2018	Lab Precision: 1.3%, Bias: 0.3%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS04	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	<1	mg/l	TM045	26/11/2018	Lab Precision: 5.9%, Bias: 1.6%, Expanded Uncertainty: 13.4%, Sampling Immeasurable
WS04	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5	ug/l	TM152	26/11/2018	Lab Precision: 3%, Bias: 1.3%, Expanded Uncertainty: 7.3%, Sampling Immeasurable
WS04	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	157	mg/l	TM152	26/11/2018	Lab Precision: 3.3%, Bias: 2.4%, Expanded Uncertainty: 9%, Sampling Immeasurable
WS04	Chloride	>300 mg/l	Monthly	190	mg/l	TM184	26/11/2018	Lab Precision: 1.7%, Bias: 5.5%, Expanded Uncertainty: 8.9%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS04	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	2.2	mS/cm	TM120	26/11/2018	Lab Precision: 0.7%, Bias: 3%, Expanded Uncertainty: 4.4%, Sampling Immeasurable
WS04	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	26/11/2018	Lab Precision: 11.5%, Bias: 6%, Expanded Uncertainty: 29%, Sampling Immeasurable
WS04	Lead (diss.filt)	>0.25 mg/l	Monthly	<0.2	ug/l	TM152	26/11/2018	Lab Precision: 2.5%, Bias: 1.3%, Expanded Uncertainty: 6.4%, Sampling Immeasurable
WS04	Nickel (diss.filt)	>0.1 mg/l	Monthly	3.07	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 0.1%, Expanded Uncertainty: 5.4%, Sampling Immeasurable
WS04	Nitrate as N	>1 mg/l	Monthly	<0.0677	mg/l	TM184	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS04	Nitrite as N	>1 mg/l	Monthly	<0.0152	mg/l	TM184	26/11/2018	Lab Precision: 1.1%, Bias: -0.9%, Expanded Uncertainty: 3%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS04	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	0.68	mg/l	TM187	26/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS04	pH	6.8 – 8.5	Monthly	7.51	pH Units	TM256	26/11/2018	Lab Precision: 0%, Bias: 0.1%, Expanded Uncertainty: 0.1%, Sampling Immeasurable
WS04	Phosphate (Ortho as P)	>1 mg/l	Monthly	1.68	mg/l	TM184	26/11/2018	Lab Precision: 1%, Bias: 1.7%, Expanded Uncertainty: 3.7%, Sampling Immeasurable
WS04	Sulphate	>300 mg/l	Monthly	432	mg/l	TM184	26/11/2018	Lab Precision: 2.2%, Bias: 4.6%, Expanded Uncertainty: 9.1%, Sampling Immeasurable
WS04	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	93.5	mg/l	TM022	26/11/2018	Lab Precision: 0.9%, Bias: -1.1%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS04	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.8%, Bias: -1.7%, Expanded Uncertainty: 19.2%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS04	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	26/11/2018	Lab Precision: 8.3%, Bias: -8.4%, Expanded Uncertainty: 24.9%, Sampling Immeasurable
WS04	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	<0.1	mg/l	TM184	26/11/2018	Lab Precision: 2.4%, Bias: 5.5%, Expanded Uncertainty: 10.3%, Sampling Immeasurable
WS04	Zinc (tot.unfilt)	>1 mg/l	Monthly	16.1	ug/l	TM152	26/11/2018	Lab Precision: 2.7%, Bias: 2.3%, Expanded Uncertainty: 7.6%, Sampling Immeasurable
WS05	Ammoniacal Nitrogen as N (low level)	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	1.83	mg/l	TM099	28/11/2018	Lab Precision: 1.3%, Bias: 0.3%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS05	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	5.99	mg/l	TM045	28/11/2018	Lab Precision: 5.9%, Bias: 1.6%, Expanded Uncertainty: 13.4%, Sampling Immeasurable
WS05	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5	ug/l	TM152	28/11/2018	Lab Precision: 3%, Bias: 1.3%, Expanded Uncertainty: 7.3%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS05	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	331	mg/l	TM152	28/11/2018	Lab Precision: 3.3%, Bias: 2.4%, Expanded Uncertainty: 9%, Sampling Immeasurable
WS05	Chloride	>300 mg/l	Monthly	224	mg/l	TM184	28/11/2018	Lab Precision: 1.7%, Bias: 5.5%, Expanded Uncertainty: 8.9%, Sampling Immeasurable
WS05	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	2.36	mS/cm	TM120	28/11/2018	Lab Precision: 0.7%, Bias: 3%, Expanded Uncertainty: 4.4%, Sampling Immeasurable
WS05	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	28/11/2018	Lab Precision: 11.5%, Bias: 6%, Expanded Uncertainty: 29%, Sampling Immeasurable
WS05	Lead (diss.filt)	>0.25 mg/l	Monthly	<0.2	ug/l	TM152	28/11/2018	Lab Precision: 2.5%, Bias: 1.3%, Expanded Uncertainty: 6.4%, Sampling Immeasurable
WS05	Nickel (diss.filt)	>0.1 mg/l	Monthly	7.15	ug/l	TM152	28/11/2018	Lab Precision: 2.7%, Bias: 0.1%, Expanded Uncertainty: 5.4%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS05	Nitrate as N	>1 mg/l	Monthly	<0.0677	mg/l	TM184	28/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS05	Nitrite as N	>1 mg/l	Monthly	0.0177	mg/l	TM184	28/11/2018	Lab Precision: 1.1%, Bias: -0.9%, Expanded Uncertainty: 3%, Sampling Immeasurable
WS05	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	1.52	mg/l	TM187	28/11/2018	Lab Precision: N/A, Sampling Immeasurable
WS05	pH	6.8 – 8.5	Monthly	7.21	pH Units	TM256	28/11/2018	Lab Precision: 0%, Bias: 0.1%, Expanded Uncertainty: 0.1%, Sampling Immeasurable
WS05	Phosphate (Ortho as P)	>1 mg/l	Monthly	0.0241	mg/l	TM184	28/11/2018	Lab Precision: 1%, Bias: 1.7%, Expanded Uncertainty: 3.7%, Sampling Immeasurable
WS05	Sulphate	>300 mg/l	Monthly	246	mg/l	TM184	28/11/2018	Lab Precision: 2.2%, Bias: 4.6%, Expanded Uncertainty: 9.1%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Unit	Test Method ⁽²⁾	Sample Date and Time ⁽³⁾	Uncertainty ⁽⁴⁾
WS05	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	1020	mg/l	TM022	28/11/2018	Lab Precision: 0.9%, Bias: -1.1%, Expanded Uncertainty: 2.9%, Sampling Immeasurable
WS05	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	28/11/2018	Lab Precision: 8.8%, Bias: -1.7%, Expanded Uncertainty: 19.2%, Sampling Immeasurable
WS05	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	28/11/2018	Lab Precision: 8.3%, Bias: -8.4%, Expanded Uncertainty: 24.9%, Sampling Immeasurable
WS05	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	<0.1	mg/l	TM184	28/11/2018	Lab Precision: 2.4%, Bias: 5.5%, Expanded Uncertainty: 10.3%, Sampling Immeasurable
WS05	Zinc (tot.unfilt)	>1 mg/l	Monthly	131	ug/l	TM152	28/11/2018	Lab Precision: 2.7%, Bias: 2.3%, Expanded Uncertainty: 7.6%, Sampling Immeasurable

*Total ammoniacal nitrogen converted to unionised ammonia using water temperature and pH.

[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 Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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.



Signed.....
(Authorised to sign as representative of Operator)

Date: January 2019

Permit Number EPR/PP3993VS