

# **PFAS Monitoring Survey**

Study of Selected Sites on the River Brosna and River Shannon 2021 - 2022





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EPA Office of Radiation Protection and Environmental Monitoring Project Report

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This report is based on four rounds of monitoring carried out from June 2021 to February 2022. More recent data will have become available since the project was completed.

This report addresses the need for projects in Ireland to inform policymakers and other stakeholders on a range of questions in relation to environmental protection. The report is intended as a source of knowledge on PFAS topics for work by regulators and stakeholders on the protection of the environment. This report contributes to work by the EPA on the European Union (Persistent Organic Pollutants) Regulations 2020, as well as to water monitoring and protection initiatives.

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## **Details of Project Contracted Partners**

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## **EXECUTIVE SUMMARY**

PFAS are a large group of man-made chemicals which have been used in industrial and consumer products since the 1950s and are found in many everyday products. PFAS are often referred to as "forever chemicals" due to their persistence in the environment. They have been found to cause harmful effects on human and animal health, such as increased risk of cancers, high cholesterol, reproductive disorders, hormonal disruption and weakening of the immune system<sup>1</sup>. Exposure to PFAS can arise from a wide range of sources including ingestion of contaminated food and water, inhalation of PFAS particulates in household dust and air and dermal contact with consumer products containing PFAS.

Three PFAS are currently restricted under the international UN Stockholm Convention on Persistent Organic Pollutions and the EU Persistent Organic Pollutants Regulation; namely PFOS, PFOA and PFHxS. The Environmental Protection Agency (EPA) is designated as the competent authority for the EU Persistent Organic Pollutants (POPs) Regulation and has obligations under the POPs National Implementation Plan. One of these obligations is to carry out environmental monitoring to identify potential hotspots of POPs contamination within the Irish environment.

In previous work completed by the EPA under the Water Framework Directive monitoring programme, the River Brosna and Lough Owel were noted for increased levels of PFAS detections when compared to other areas monitored across Ireland, particularly for PFOA. To investigate further, this study was undertaken to analyse a range of PFAS compounds in water and sediment samples in the River Brosna. The nearby River Shannon was included in this study, firstly due to its large catchment area which includes industrial and domestic pressures, and also due to the River Brosna being a tributary, entering at Shannon Harbour, Co. Offaly. Samples were collected from sampling points along the River Brosna, at six locations, and the River Shannon, at nine locations, between June 2021 and February 2022.

Samples were collected on four separate occasions over the course of this monitoring campaign. Water samples were collected at each of the 15 locations during the four sampling events, while sediments samples were collected where possible. Including quality control samples, this totalled 120 water samples and 26 sediment samples in this survey campaign. PFAS were detected in four locations along the River Brosna and on one occasion in the River Shannon. This monitoring data suggests that PFAS are present in the River Brosna, from the first sampling point RB\_SW06 upstream of Mullingar town, County Westmeath as far downstream as RB\_SW03, Kilbeggan, County Westmeath. Although samples were not collected from Lough Owel and Lough Ennell during this campaign, monitoring was previously carried out in Lough Owel under the Water Framework Directive (WFD) monitoring programme during the latter half of 2019, PFAS were detected during that monitoring period. The status of PFAS is unknown in Lough Ennell, however PFAS were detected upstream and downstream of this lake.

This study can conclude that the investigated stretch of the River Brosna is a potential hotspot for PFAS, in particular for PFOA. These findings together with available monitoring data from the WFD programme would suggest that the waterbodies from Lough Owel as far downstream as Kilbeggan are potentially impacted by PFAS and require further investigation, as detailed in the Actions Taken and Planned section below. Further monitoring has been carried out in this area since the completion of this project and will continue as necessary under the Water Framework Directive

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HBM4EU - Human Biomonitoring for Europe – <a href="https://www.hbm4eu.eu/hbm4eu-substances/per-polyfluorinated-compounds/">https://www.hbm4eu.eu/hbm4eu-substances/per-polyfluorinated-compounds/</a>

# 1. INTRODUCTION

Per- and Poly-fluoroalkyl substances (PFAS) are a large group of organoflourine compounds, the most regulated and widely known of which are perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). Due to their unique chemical and physical properties, including those associated with repelling water and oil, thermal and chemical stability, and surfactant properties, PFAS have been widely used in a range of consumer products and industrial applications including stain-resistant fabric, non-stick coated cookware and firefighting foams.

Due to the well documented negative effects of these substances on human health and the environment, PFOS and its derivatives, were severely restricted under the Stockholm Convention<sup>2</sup> in May 2009, followed by PFOA, it's salts and related compounds in May 2019. Their use is also prohibited (PFOS, PFOA and related compounds), with some time-limited exemptions permitted, under the EU Persistent Organic Pollutants (POPs) Regulation (EU) 2019/1021<sup>3</sup>. In 2022, it was agreed by Parties of the Convention to add PFHxS to the list of POPs under the Stockholm Convention and restrictions for use of PFHxS, its salts and related compounds were added to the EU POPs Regulation in 2023. Perfluorocarboxylic acids ('C9-C14 PFCAs'), their salts and C9-C14 PFCA-related substances have been restricted under REACH Regulation (EC) 1907/2006<sup>4</sup> in 2023. Several other PFAS are being evaluated for restriction under the Stockholm Convention and/or are considered Substances of Very High Concern (SVHC) under the REACH Regulation (EC) 1907/2006<sup>4</sup> and undergoing extensive investigations for potential risks posed.

In Ireland, the European Union (Persistent Organic Pollutants) Regulation 2020 designate the Environmental Protection Agency (EPA) as the competent authority for the purposes of the EU POPs Regulation. The EPA's responsibilities include the preparation and maintenance of release inventories and, in consultation with public authorities concerned and the public, the preparation of a national action plan and implementation plan setting out how Ireland is meeting its obligations under the Stockholm Convention. The national POPs regulation also set out the roles of public authorities concerned in relation to POPs including a general obligation to cooperate with respect to obligations concerning POPs.

Under the POPs National Implementation Plan, the EPA has actions assigned to it covering nature and extent studies for specific POPs, risk assessments for certain POPs in relevant environmental media and including new and candidate POPs into relevant monitoring programmes. This environmental monitoring study to identify potential hot spots of persistent organic pollutants (POPs) contamination within the Irish environment was carried out in the context of these actions.

For this project, AECOM Ireland Limited were engaged to collect and process environmental samples, while ALS Life Sciences were responsible for analysis of selected PFAS and pesticides in surface water and sediment samples.

<sup>2 &</sup>lt;u>UN Stockholm Convention on persistent organic pollutants</u>

<sup>3</sup> Regulation (EU) 2019/1021 of the European Parliament and of the Council on persistent organic pollutants

<sup>4</sup> Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

## 1.1 OBJECTIVES

The aim of this study was to collect representative samples of water and sediment along a selected section of the River Shannon and River Brosna for PFAS analysis, to provide comment on findings and recommendations for future studies and to add to our knowledge base around the extent of PFAS in the Irish environment and so assist in determining the risks posed by these substances within the Irish context. The main objectives were to:

- 1. Engage AECOM to collect representative samples along the River Brosna and River Shannon for analysis of PFAS by ALS Life Sciences;
- 2. Determine the concentration of a range of PFAS within the River Brosna and River Shannon region;
- 3. Evaluate the potential impact and provide recommendations on the next steps.

## 2. BACKGROUND INFORMATION

The EPA has carried out several studies relating to PFAS in recent years, results from which have highlighted the potential risks posed to the aquatic environment and to human health, for example PFAS in fire-fighting foams and contamination of fire-training sites as well as PFAS in landfill leachate, see EPA webpage on PFAS<sup>5</sup> for further information. PFAS, specifically PFOS and PFOA, have also been detected at low levels in several Irish rivers, lakes and transitional and coastal waters as part of the WFD Monitoring Programme.

A scoping study was completed in 2017-2018 under the EPA's WFD monitoring programme to gather information on the 12 additional Priority Substances listed in the Environmental Quality Standard (EQS) Directive revision 2013/39/EU, S.I. 386 of 2015<sup>6</sup>. The analysis suite used included a number of different PFAS compounds, including PFOS and PFOA. Twenty-four water sampling points were chosen in conjunction with the EPA water catchments unit to find suitable locations which would give a representative data set of Ireland's inland waters. Sampling took place for the scoping study during four rounds from Autumn 2017 to Spring 2018. Twenty-one biota sampling points were chosen from the Inland Fisheries Ireland (IFI) 2017 sampling plan.

Results from the River Brosna were noted from this 2017/2018 study due to high levels of PFAS detected throughout the scoping study sampling campaign, specifically PFOA which had recently been added to the Stockholm Convention as a Persistent Organic Pollutant. PFOA was detected in this waterbody during all four rounds of sampling, while PFOS, Perfluoroheptanoic acid (PFHpA), Perfluorohexanoic acid (PFHxA) and Perfluorononanoic acid (PFNA) were detected in at least one sampling round during the 2017/2018 study. The sampling point, at Butler's Bridge downstream of Mullingar, had the highest concentrations of PFHpA, PFHxA and PFOA detected in the whole 2017/2018 study. PFOA was detected at 0.108  $\mu$ g/L during the final round of sampling in April 2018, while the average PFOA concentration at this sampling point over the campaign was just under 0.049  $\mu$ g/L. This is nearly 10 times higher than the next highest average concentration level detected during this 2017/2018 study, which was found at Ringsend, Dublin. Biota monitoring was also carried out as part of this scoping study in Lough Ennell, downstream of the River Brosna site, which found no detects of PFAS in biota.

Due to the rotating schedule of monitoring under the WFD programme, at the time of this 2021/2022 study there was no new data collected on PFAS in the River Brosna since the initial 2017/2018 scoping study. However, monitoring was carried out in Lough Owel, upstream of the River Brosna, during the latter half of 2019 under the WFD programme. Analysis of this WFD monitoring data also indicates that PFOA is present in Lough Owel, where the average level detected in the six month period of 2019 was approximately 0.008 µg/L.

The River Shannon is the largest river in Ireland, and has a large catchment area which contains a variety of pressures, such as industrial discharges, urban waste water treatment plant emissions, etc. The River Brosna is also a tributary of the River Shannon, joining at Shannon Harbour, Co. Offaly.

For the reasons outlined above, the EPA identified the River Brosna and nearby River Shannon area as a suitable location to carry out further surveys for PFAS and initiated a study to investigate this further.

In consultation with the National Aquatic Environmental Chemistry Group (NAECG), additional samples were taken during this survey to monitor pesticides and acid herbicides of interest in the River Brosna and River Shannon. Although these results are noted here, these will not be addressed in this report. Field measurements and field observations were also taken on site as part of this study to gather additional data on the sample collection points. This information can be used to further understand the results gathered; however, this is also not addressed in detail in this report.

<sup>5</sup> What are PFAS? - EPA webpage on PFAS

<sup>6</sup> S.I. No. 385 of 2015 - European Union Environmental Objectives (Surface Waters) (Amendment) Regulation 2015.

# 3. FINDINGS

## 3.1 STUDY RESULTS

The sampling study consisted of 4 sampling events, starting in June 2021 and ending in February 2022. Samples were collected at various points along the River Brosna (6 sites) and the River Shannon (9 sites), as shown in Figure 1 below. 100 independent water samples (60 primary water samples and 40 secondary) and 20 quality control samples were collected and analysed. In addition, 17 primary sediment samples, 9 duplicate sediment samples and 3 field equipment blanks were collected and analysed.

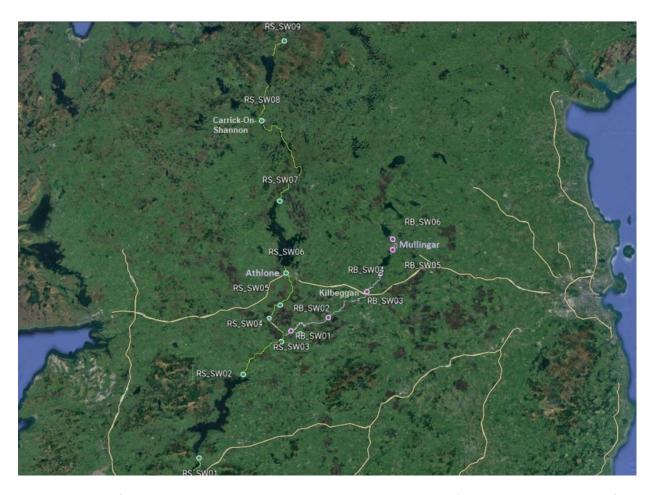


Figure 1. Map of Sampling Points on River Brosna and River Shannon (Generated with Microsoft PowerBI)

PFAS were detected in samples at five of the fifteen sites surveyed; one site on the River Shannon and four sites on the River Brosna, see Appendix A for tabulated detections information and Appendix B for all results. These detections from the study are summarised as follows:

 PFOS and PFHxS were detected in sediment at sampling point RS\_SW08 in the River Shannon during the third round of sampling. PFOS was detected in sediment at a concentration of 0.0100 mg/kg Dry Weight (DW), while PFHxS was detected in the same sample at 0.000502 mg/kg DW. This sampling location in Carrick-On-Shannon had not been highlighted previously as an area of interest.

- PFOA was detected in sediment at sampling point RB\_SW06 in the River Brosna, during three rounds of sampling. This sampling location is located beside the Greenway, downstream of Lough Owel, and upstream of Mullingar town. This sampling point is also referred to as Cullion Fish Farm/Greenway in Appendix B, however this sampling point description does not reflect on any operations in the locality or on the status of the fish farm mentioned. PFOA was detected in sediment at a concentration of 0.0269 mg/kg DW during the second sampling round, a second independent sample did not detect PFOA above the Limit of Reporting (LOR). During the third round of sampling two independent sediment samples were taken, where PFOA was detected in both samples at concentrations of 0.00175 mg/kg DW and 0.000796 mg/kg DW. PFOA was detected during the final sampling round at a concentration of 0.00269 mg/kg DW in sediment.
- PFOA and PFDA were detected at RB\_SW05 in the River Brosna, these samples were collected at the Joe Dolan Bridge downstream of Mullingar town. PFOA was detected in each of the four rounds of water sampling ranging in concentration from  $0.0258~\mu g/L$  to  $0.0478~\mu g/L$ . This site had the highest detected concentration of PFOA in water, and also the highest average concentration over the study period. PFDA was detected in one of the two independent samples collected during the third sampling date at sampling location RB\_SW05. This PFDA detect was on the LOR of  $0.010~\mu g/L$ , while the second sample was below the LOR of  $<0.010~\mu g/L$ .
- PFOA was detected in all four rounds of water monitoring at RB\_SW04 on the River Brosna, downstream of Lough Ennell, at Cloonagh. The PFOA concentrations detected ranged from 0.0120 μg/L and 0.0160 μg/L. These levels were lower than that detected upstream near Mullingar town.
- PFOS and PFOA were detected at RB\_SW03 on the River Brosna in Kilbeggan. PFOA was detected in sediment and water monitoring during all four sampling rounds; in water during rounds 1, 2 and 3 and in sediment in round 4. PFOA was detected between concentrations of 0.0108 0.0133 μg/L during the first three round of water sampling and detected in sediment during the final round at a concentration of 0.00429 mg/kg DW. These concentrations of PFOA detected in water are consistent with those found upstream at Cloonagh. PFOS was also detected in sediment during round four of sampling, at a concentration of 0.00437 mg/kg DW.

## 3.2 LIMITATIONS OF STUDY

The laboratory limit of reporting (LOR) for water analysis used in this campaign on the River Brosna and River Shannon is listed as <0.0100  $\mu$ g/L for PFOS and PFOA, and <0.010  $\mu$ g/L for all other PFAS analysed. This method LOR is not sensitive enough to assess the data accurately against the existing Annual Average Environmental Quality Standard (AA-EQS) values set for PFOS in the WFD Directive/EQS Directive, i.e. the LOR of 0.0100  $\mu$ g/L is over 15 times higher than the AA-EQS inland surface water value of 0.00065  $\mu$ g/L. The results generated in this study can be compared with the PFOS Maximum Allowable Concentration Environmental Quality Standard (MAC-EQS) value of 36  $\mu$ g/L, no detects were found to exceed this value during the study.

The laboratory LOR for sediment analysis used in this campaign was 0.000500 mg/kg DW for all PFAS analysis, however no PFAS substances have EQS assigned for the sediment compartment in the EU WFD Directive at present. Therefore, concentrations in sediment could not be directly compared to a legislative EQS value.

A number of detects were on or close to this LOR, however where consistency of detects across all sampling rounds were found in these locations, it was interpreted that these results were accurate.

PFAS were detected at significant values in some equipment field blanks, potentially due to the ubiquitous nature of the substances being assessed. These substances are present in many consumer products and clothing, therefore can be difficult to avoid. This coupled with low limits of detection, potential for cross contamination and measurement uncertainty presented the potential for false positives. Two independent samples were taken at each water monitoring point to assist data assessment. The addition of duplicates was useful for further data assessment and the identification of outliers in the data set.

Samples were collected on four occasions between June 2021 and February 2022. This spread of sampling should capture some seasonal variation, however this also limits the study when comparing to annual average concentrations, such as the WFD AA-EQS values.

# 4. DISCUSSION

The EPA has a role under the EU POPs regulation through its linked National Implementation Plan on persistent organic pollutants to identify potential POPs hotspots. Following on from the WFD scoping study results collected in 2017/2018, the River Brosna was identified as a potential area of interest and this study was undertaken to increase knowledge on PFAS in the environment.

PFOA was the most commonly detected PFAS in this study, which was detected in four sampling locations along the River Brosna both in water and in sediment. PFOA is persistent in the environment and can travel long distances due to its mobility. PFOA also accumulates in biota and is considered toxic to reproduction<sup>7</sup>, therefore further measures should be taken to minimise releases where feasible, such as identification of any potential source(s) and reduction of emissions to the environment, where required based on risk assessments.



Figure 2 River Brosna PFOA Detections. PFOA was detected in three sampling rounds at RB\_ SW06 and detected in all four sampling rounds at RB\_SW05, RB\_SW04 and RB\_SW03. (Generated with Microsoft PowerBI)

The source of these PFAS is unclear and warrants further studies both upstream and downstream of Mullingar. As PFAS are highly persistent and mobile within the environment the source could be difficult to identify and could potentially be from legacy and/or active sources. Identification of the PFAS source(s) along Lough Owel and the River Brosna should be prioritised to find if preventative measures could be put in place to limit further PFAS discharges to waterbodies in this area.

<sup>7</sup> European Chemicals Agency – PFOA Substance Information

These PFAS could potentially be present in Lough Owel and Lough Ennell, which were not sampled as part of this study. This conclusion is based on the detects of PFOA downstream of both lakes, as well as information gathered on Lough Owel in 2019 from the EPA WFD monitoring programme. This requires further investigation and follow up as Lough Owel is a drinking water source for the area. Lough Owel and Lough Ennell are also host to recreation water sports and activities. Further monitoring for a limited number of PFAS will continue in the River Brosna region under the EPA's WFD monitoring programme, to inform the status of these substances in this waterbody

PFAS were also detected in sediment samples at sampling location RS\_SW08, Carrick-On-Shannon, along the River Shannon, during one round of sampling. This was not found in the duplicate sample, also taken on this day. There is no indication of PFAS detections during other sampling rounds. Sampling locations upstream and downstream of this point were examined from data collected under the WFD monitoring programme, but show low level detects of PFOS and PFOA. As this was the only site on the River Shannon which registered a detect during this study, this may require further investigation when more data in this area becomes available.

# 5. CONCLUSION

Based on the information gathered in this study and the previous data gathered from WFD monitoring, it appears that there is a potential PFAS hotspot in the River Brosna, based on detects found at sampling points RB\_SW06, Greenway, RB\_SW05 Joe Dolan Bridge, RB\_SW04 Cloonagh and RB\_SW03, Kilbeggan. Geographically this represents a region upstream of Mullingar town, County Westmeath, as far downstream as Kilbeggan, County Westmeath as shown in Figure 2. There were no significant detections of PFAS in the areas sampled along the River Shannon and the lower River Brosna, at RB\_SW02 and RB\_SW01.

PFOA was the most commonly detected PFAS substance during this monitoring campaign, as it was detected through all four rounds of the sampling campaign in the areas surrounding Mullingar town. There is currently no environmental quality standard set under the WFD for PFOA. However, due to the rapid changes in legislation and standards regarding PFAS, the EPA will maintain a watching brief and assess any risks of PFAS in this area through further monitoring under the WFD monitoring programme. For example, the WFD Priority Substance List is currently under review, with 24 PFAS proposed to be added to the list<sup>8</sup>, and an agreed EQS for some PFAS is expected in the near future.

<sup>8</sup> Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2000/60/EC establishing a framework for Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy

## 6. ACTIONS TAKEN AND PLANNED

Actions have been carried out based on the findings of this report, to date these include:

- Westmeath County Council have been made aware of this study and an investigation is under way by them into any potential active or legacy PFAS source(s) within the catchment. Areas for investigation and further research include firefighting training sites, industry manufacturing process-sites that have used or still use PFAS (including any historical use of PFOA), discharges to surface water or to sewer, landfills, urban waste water discharges and sewage sludge. Work has been completed and is being finalised on a further monitoring survey and investigations into any potential or legacy PFAS sources in this area. These discussions between the EPA, Local Authorities Waters Programme (LAWPRO), Westmeath County Council, Inland Fisheries Ireland, and Uisce Éireann have been very positive, with suggestions on areas of further study and offers of assistance for this investigation. LAWPRO have taken the lead and coordinated an ongoing investigative campaign, working in collaboration with Westmeath County Council and the EPA.
- The EPA Water Framework Directive programme for 2023 included PFAS monitoring of the River Brosna. Due to the findings of this study, and to aid with further investigations in the area, supplementary points are also being monitored for PFAS around Mullingar town. This will generate additional data at three sites on the River Brosna in Mullingar and one site in Lough Owel. Data collected on PFOS and PFOA from the WFD monitoring programme will be used to maintain a watching brief over this potential hotspot and to inform the investigative plans. This data will be shared with the relevant regulatory bodies and organisations. Consideration should be given to including biota monitoring in the River Brosna region.
- Uisce Éireann have also been made aware of these detects in the River Brosna region, and will investigate any risks to public supplies within this area. Uisce Éireann have responsibilities in relation to provision of public water supplies that cover the monitoring, safety and security of supplies. They will have responsibilities for monitoring drinking water supplies for certain specific PFAS listed under the European Union (Drinking Water) Regulations 2023 (S.I. No 99 of 20239) from January 2026 and for risk assessment of any public drinking water sources in this area. For private drinking water supplies, the Local Authority will have responsibility for risk assessing these sources.
- EPA will map potential PFAS hotspots, such as areas highlighted in this report, fire training sites, industrial sites that use or have used PFOS/PFOA/PFHxS and areas where PFAS has been detected above the general data set under the WFD monitoring programme. This will increase knowledge of potential PFAS sources and PFAS monitoring data across Ireland and will aid with risk assessments and any further investigations into PFAS detections in the future.
- The EPA has added some extra monitoring sites across the country to the WFD Monitoring Programme specifically for PFOS and PFOA. These sites were chosen based on a risk assessment of potential PFAS sources. This additional monitoring will increase knowledge of PFAS around potential pressures across other regions of Ireland.

## 7. FURTHER INFORMATION

- The existing Environmental Quality Standard (EQS) for PFOS under the Water Framework Directive (WFD) for inland surface waters is as follows: The annual average EQS (AA-EQS) value is 0.00065 μg/L and MAC-EQS value is 36 μg/L.
- There is currently no EQS for PFOA under the WFD, but new proposals for water pollutants that include a wider range of PFAS have been published recently by the European Commission<sup>10</sup>.
- The recast EU Drinking Water Directive (EU 2020/2184), implemented in Ireland by S.I. No 99 of 2023, includes limits for total PFAS of 0.5  $\mu$ g/L and the sum of 20 PFAS of most concern of 0.1  $\mu$ g/L.
- Water suppliers have responsibilities in relation to provision of public water supplies that cover the safety and security of supplies. There are other key measures in the drinking water regulations that will be relevant in considering PFAS nationally. The regulations require water suppliers to have a risk-based approach to water supply which covers the catchment area, abstraction, treatment, storage and distribution of water (Regulation 9 of S.I. 99 of 2023). This includes a requirement to carry out risk assessment and risk management of catchment areas for abstraction points of water intended for human consumption by July 12, 2027. Guidelines will become available outlining the required coordinated approach for the protection of drinking water. This will include the respective roles, and responsibilities, of the supervisory authorities and Uisce Éireann.
- The EPA Drinking Water Advice Note No.8 contains guidance on hazard identification, risk assessment and the preparation of action plans for the hazards identified. It includes a list of typical hazardous events associated with each element of the supply. The potential hazard from PFAS in the source/catchment should be considered in this hazard identification.
- For comparison, other regulations and trigger values/limits in place or in draft across different countries at the time of this report, as shown in Table 1 below, may also be useful.

<sup>10</sup> Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2000/60/EC establishing a framework for Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy

Table 1 - Trigger Values from Other Countries and upcoming EU Legislation

Substance(s)	Concentration (µg/l unless otherwise stated)	Medium	Source
	10	Human health - recreational water	Heads of Environment Protection Authority Australia and New Zealand <sup>11</sup>
PFOA *Comparative	0.56	Drinking water	Heads of Environment Protection Authority Australia and New Zealand <sup>8</sup>
value Only	0.01 – 0.1	Drinking water	UK Drinking Water Inspectorate <sup>12</sup>
	0.0003	Surface water	NL RIVM <sup>13</sup>
	0.000004	Drinking water	US Environmental Protection Agency <sup>14</sup>
Total PFAS	0.5	Drinking water	Directive (EU) 2020/2184 - Drinking Water Directive <sup>15</sup>
Sum of PFAS	0.1	Drinking water	Directive (EU) 2020/2184 - Drinking Water Directive <sup>12</sup>
	0.00065 (AA-EQS) 36 (MAC-EQS)	Inland surface waters	
PFOS	0.00013 (AA-EQS) 7.2 (MAC-EQS)	Other surface waters	Directive (EU) 2013/39/EU – Amending WFD 2000/60/EU <sup>16</sup>
	9.1 μg/kg	EQS Biota	
Per- and poly-	Sum of PFOA equivalents 0.0044 (AA-EQS)	Inland Surface Waters and Other Surface Waters	COM(2022) 540 – Proposal for a Directive of the European Parliament and of the Council amending Directive 2000/60/EC establishing a framework
fluorinated alkyl substances (PFAS)	Sum of PFOA equivalents 0.077 μg/kg	EQS Biota	for Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater
- sum of 24 **Proposed	0.0044	Groundwater Quality Standard	against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy <sup>17</sup>

<sup>11 &</sup>lt;u>PFAS National Environmental Management Plan Version 2.0 January 2020</u> – National Chemicals Working Group of the Heads of EPAs Australia and New Zealand

<sup>12</sup> Guidance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS and PFOA concentrations in drinking water United Kingdom Drinking Water Inspectorate (DWI).

<sup>13 &</sup>lt;u>Risk limits for PFAS in surface water. Translation of the health-based limit value of EFSA into concentrations in water</u> – Netherland RIVM

<sup>14</sup> United States Environmental Protection Agency (USEPA). 2022. <u>Drinking Water Health Advisory for PFOS.</u>

<sup>15 &</sup>lt;u>Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (recast)</u>

<sup>16</sup> Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy

<sup>17</sup> Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2000/60/EC establishing a framework for Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy

• The EPA reports and guidance on PFAS in the table below provide further information.

Table 2 - EPA Reports and Guidance on PFAS

Link
Monitoring & Assessment: Waste Publications   Environmental Protection Agency (epa.ie)
Monitoring & Assessment: Waste Publications   Environmental Protection Agency (epa.ie)
Monitoring & Assessment: Waste Publications   Environmental Protection Agency (epa.ie)
Monitoring & Assessment: Waste Publications   Environmental Protection Agency (epa.ie)
Monitoring & Assessment: Waste Publications   Environmental Protection Agency (epa.ie)
Environment & Health   Environmental Protection Agency (epa.ie)
Environment & Health   Environmental Protection Agency (epa.ie)
Advice & Guidance   Environmental Protection Agency (epa.ie)
Monitoring & Assessment: Freshwater & Marine Publications   Environmental Protection Agency (epa.ie)  Data sets are available on Catchments.ie - Water, from source to sea.

Table 3 - Further Guidance on PFAS

Торіс	Link
HSE Interim Position Paper Per- and Poly-Fluoroalkyl substances (PFAS) in Drinking Water (December 2022)	https://www.hse.ie/eng/services/list/1/environ/water/interim-position-paper-on-pfas-in-drinking-water.pdf
HSE National Drinking Water Group (Dec 2022) Interim FAQs - PFAS in Drinking Water - Frequently Asked Questions (FAQs)	https://www.hse.ie/eng/services/list/1/environ/water/faqs-on-pfas-in-drinking-water.pdf

## **APPENDIX A DETECTION TABLES**

Tables within this Appendix contain details of detections from this campaign, the results from the whole campaign, including non-detections data are available in Appendix B.

River Shannon Detections									
Sampling Location Code	EPA Reference	Sampling Round	Sample Date	Matrix	Parameter	LOR (limit of reporting)	Unit	Result	Measure of Uncertainty
RS_SW08	R26S020800	Q3	23/11/21	Sediment	PFHxS	0.000500	mg/kg DW	0.000502	± 30.0 %
RS_SW08	R26S020800	Q3	23/11/21	Sediment	PFOS	0.000500	mg/kg DW	0.0100	± 30.0 %

River Brosna Detections									
Sampling Location Code	EPA Reference	Sampling Round	Sample Date	Matrix	Parameter	LOR (limit of reporting)	Unit	Result	Measure of Uncertainty
RB_SW06	RS25B280380	Q2	26/08/21	Sediment	PFOA	0.000500	mg/kg DW	0.0269	± 30.0 %
RB_SW06	RS25B280380	Q3	25/11/21	Sediment	PFOA	0.000500	mg/kg DW	0.00175	± 30.0 %
RB_SW06	RS25B280380	Q3	25/11/21	Sediment	PFOA	0.000500	mg/kg DW	0.000796	± 30.0 %
RB_SW06	RS25B280380	Q4	24/02/22	Sediment	PFOA	0.000500	mg/kg DW	0.00269	± 30.0 %
RB_SW05	Non-EPA WFD location	Q1	10/06/21	Surface Water	PFOA	0.0100	μg/L	0.0346	± 30.0 %
RB_QC201 @ RB_SW05 (Duplicate)	Non-EPA WFD location – Joe Dolan Bridge	Q1	10/06/21	Water	PFOA	0.0100	μg/L	0.0315	± 30.0 %
RB_SW05	Non-EPA WFD location	Q2	27/08/21	Surface Water	PFOA	0.0100	μg/L	0.0354	± 30.0 %
RB_SW05	Non-EPA WFD location	Q3	25/11/21	Surface Water	PFDA	0.010	μg/L	0.010	± 40.0 %

River Brosna Detections									
Sampling Location Code	EPA Reference	Sampling Round	Sample Date	Matrix	Parameter	LOR (limit of reporting)	Unit	Result	Measure of Uncertainty
RB_SW05	Non-EPA WFD location	Q3	25/11/21	Surface Water	PFOA	0.0100	μg/L	0.0340	± 30.0 %
RB_SW05	Non-EPA WFD location	Q3	25/11/21	Surface Water	PFOA	0.0100	μg/L	0.0258	± 30.0 %
RB_SW05	Non-EPA WFD location	Q4	24/02/22	Surface Water	PFOA	0.0100	μg/L	0.0478	± 30.0 %
RB_SW05	Non-EPA WFD location	Q4	24/02/22	Surface Water	PFOA	0.0100	μg/L	0.0440	± 30.0 %
RB_SW04	RS25B090200	Q1	09/06/21	Surface Water	PFOA	0.0100	μg/L	0.0145	± 30.0 %
RB_SW04	RS25B090200	Q2	26/08/21	Surface Water	PFOA	0.0100	μg/L	0.0160	± 30.0 %
RB_SW04	RS25B090200	Q3	25/11/21	Surface Water	PFOA	0.0100	μg/L	0.0131	± 30.0 %
RB_SW04	RS25B090200	Q3	25/11/21	Surface Water	PFOA	0.0100	μg/L	0.0126	± 30.0 %
RB_SW04	RS25B090200	Q4	22/02/22	Surface Water	PFOA	0.0100	μg/L	0.0124	± 30.0 %
RB_SW04	RS25B090200	Q4	24/02/22	Surface Water	PFOA	0.0100	μg/L	0.0120	± 30.0 %
RB_SW03	RS25B090400	Q1	09/06/21	Surface Water	PFOA	0.0100	μg/L	0.0111	± 30.0 %
RB_SW03	RS25B090400	Q2	26/08/21	Surface Water	PFOA	0.0100	μg/L	0.0119	± 30.0 %
RB_SW03	RS25B090400	Q2	26/08/21	Surface Water	PFOA	0.0100	μg/L	0.0133	± 30.0 %
RB_SW03	RS25B090400	Q3	24/11/21	Surface Water	PFOA	0.0100	μg/L	0.0108	± 30.0 %
QC201 @ RB_SW03	RS25B090400	Q3	24/11/21	Water	PFOA	0.0100	μg/L	0.0131	± 30.0 %
(Duplicate)									
RB_SW03	RS25B090400	Q4	23/02/22	Sediment	PFOS	0.000500	mg/kg DW	0.00437	± 30.0 %
RB_SW03	RS25B090400	Q4	23/02/22	Sediment	PFOA	0.000500	mg/kg DW	0.00429	± 30.0 %

Quality Assurance/ Quality Control Rinsate Detects									
Sampling Location Code	EPA Reference	Sampling Round	Sample Date	Matrix	Parameter	LOR (limit of reporting)	Unit	Result	Measure of Uncertainty
QC101 RS_ SW05	RS26S021800	Q1	09/06/21	Van Veen Sampler - DI Water	6:2 FTS	0.010	μg/L	0.011	± 40.0 %
QC101 RS_SW01	LS250155b04500180	Q2	26/08/21	Bailer - DI water	PFOS	0.0100	μg/L	0.0184	± 30.0 %
QC101 RS_SW04	RS26S021900	Q3	23/11/21	Bailer - DI Water	PFOS	0.0100	μg/L	0.0332	± 30.0 %

## APPENDIX B AECOM REPORT



# 2021 - 2022 Monitoring Report

Procurement and Processing of Environmental Samples for PFAS and Pesticide Analysis along River Shannon & River Brosna

**Environmental Protection Agency** 

Project reference: SPCP-2018-02-1-L1#09

Project number: 60659529

03 May 2022

## Quality information

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The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken between **June 2021** and **February 2022** and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances. AECOM disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM's attention after the date of the Report.

The comments made on surface water conditions are based on observations made during site work and the limited monitoring programme. It should be noted that surface water levels might vary owing to seasonal or other effects.

The opinions expressed in this Report concerning any contamination found and the risks arising there from are based on current good practice simple statistical assessment and comparison with available soil guideline values, AECOM generic assessment criteria and other guidance values.

It should be noted that the effects of ground and water borne contamination on the environment are constantly under review, and authoritative guidance values are potentially subject to change. The conclusions presented herein are based on the guidance values available at the time this Report was prepared, however, no liability by AECOM can be accepted for the retrospective effects of any changes or amendments to these values.

Unless otherwise stated in this Report, the assessments made assume that the sites and facilities will continue to be used for their current purpose without significant changes.

Where assessments of works or costs identified in this Report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

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## **Executive Summary**

The Environmental Protection Agency (EPA) engaged AECOM Ireland Limited (AECOM) under the EPA Framework Agreement SPCP-2018-02-01 established in 2018 to provide support services to the Substance Reporting Unit of the EPA.

In March 2021, the EPA issued a request for quotation (RQF) (Reference Number SPCP-2018-02-1-L1#09) under the Framework to undertake procurement and processing of environmental samples for analysis of perand poly-fluoroalkyl substances (PFAS) and pesticides from surface water and sediments samples within the River Shannon and River Brosna.

AECOM understands the EPA's ulitmate objective is to provide the EPA with a high-level understanding of the potential risks associated with PFAS and certain pesticides to two waterbodies, namely the River Shannon and River Brosna. To better understand the associated potential environmental impacts of these chemicals, the EPA engaged AECOM for the procurement and processing of various sample media (surface water and sediment) from both the River Shannon and River Brosna, with the primary project focus on PFAS.

The sites selected along the River Shannon were:

- Site 01 Killaloe Bridge
- Site 02 Portumna Bridge
- Site 03 Bridge at Banagher Park (down stream of Banagher & River Brosna confluence)
- Site 04 Shannonbridge (upstream of Banagher & River Brosna confluence)
- Site 05 Clonmacnoise Castle
- Site 06 N6 Bridge
- Site 07 Lanesborough Bridge
- Site 08 N4 Bridge (Carrick-on-Shannon)
- Site 09 Dowra ED (Cavan-Belturbet Muncipal District near source of Shannon)

The sites selected along the River Brosna were:

- Site 01 R357 (Closest to Shannon Harbour)
- Site 02 Pollagh
- Site 03 Kilbeggan
- Site 04 Clonnagh
- Site 05 Joe Dolan Bridge on R394 (downstream of Mullingar)
- Site 06 Greenway / Cullion Fish Farm (upsteam of Mullingar)

#### In summary:

- 26 sediment samples were collected and submitted for laboratory analysis, of which:
  - 17 were primary samples; and
  - 9 were duplicate samples.
- 182 surface water samples were collect and submitted for laboratory analysis, of which:
  - Two independent PFAS samples per site for Q2 Q4.
  - One independent PFAS sample per site for Q1.
  - One pesticide sample per site for Q1 Q4.
  - 8 were duplicate samples; and
  - 12 equipment rinsate samples
- A comparative analysis of sample results across the 15 sites was undertaken and presented in Section 5 of this report.

To assess the risk to human health and/or the environment from these POPs, AECOM recommends the following additional works are considered:

- Despite not exceeding available screening criteria, further investigation along the River Brosna
  upstream of Mullingar (near SW06) and downstream of Mullingar (near SW03, SW04 and SW05) would
  be required to identifythe potential source of the PFOA and PFDA contamination and determine whether
  potential risk to human health and environment exists.
- AECOM considers further surface water and sediment assessment within the River Shannon close to the sediment detection (RS\_SW08) is necessary to assess the significance of this reported detection.
- Screening criteria for pesticides and PFAS are under regular development and review, as such
  consideration of these concentrations against newly-released criteria should be re-assessed on a 12
  month basis and / or as they are developed.

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### 1. Introduction

The Environmental Protection Agency (EPA) engaged AECOM Ireland Limited (AECOM) under the EPA Framework Agreement SPCP-2018-02-01 established in 2018 to provide support services to the Substance Reporting Unit of the EPA.

In March 2021, the EPA issued a request for quotation (RFQ) (Reference Number SPCP-2018-02-1-L1#09) under the Framework to undertake procurement and processing of environmental samples along the River Shannon and River Brosna for the analysis of range of hazardous substances which include:

- Per- and poly-fluoroalkylated substances (PFAS).
- · Acidic herbicides.
- Pesticides.

This report has been prepared in accordance with:

- AECOM proposal PR-26808\_ACM\_PL\_ENV\_001\_0, dated 13 April 2021.
- AECOM Sampling Analysis and Quality Plan (SAP), 60659529\_ACM\_RP\_ENV\_001\_01 (SAQP), dated 20 May 2021.

## 1.1 Background and Project Understanding

PFAS is an abbreviation for per- and poly- fluoroalkylated substances some of which are manufactured chemicals widely used in industry and the environment for over 50 years. Common PFAS products included non-stick coatings, water repellent and fire-, weather- and stain-resistant treatments for materials such as carpets, clothes, paper and fighting foam.

Based on information from the project kick-off meeting on Thursday 13 May 2021, AECOM understands that the EPA completed surface water monitoring within the River Brosna in 2020 and recorded PFOA contaminants as being present on a number of sampling occasions. PFOS and PFOA and related substances have been listed as persistent organic pollutants (POPs) in 2009 and 2019, respectively, with a recommendation for phasing them out under the Stockholm Convention.

### 1.2 Objectives

The overall objective of the assessment is to provide the EPA with a high-level understanding of the potential presence of PFAS and certain pesticides along the River Shannon and River Brosna.

To better understand the associated environmental impacts of these chemicals, the procurement and processing of various sample media (surface water and sediment) was undertaken. The primary focus is on PFAS contamination for the purposes of this project. Prior to undertaking the procurement of samples, the EPA requested a SAP be prepared, as detailed herein.

Project reference: SPCP-2018-02-1-L1#09 Project number: 60659529

## 1.3 Scope of Works

The following scope of works were completed:

- Preparation of Sampling Analysis and Quality Plan (SAQP), including:
  - Desktop review of publicly available and EPA-provided information to inform the subsequent selection of nine suitable sampling sites on the River Shannon and six suitable sampling sites on the River Brosna.
  - Outlined proposed fieldwork tasks, sampling and analysis methodologies.
  - Defined data assessment and investigation criteria selection.
  - Outlined the structure of final report to be submitted to the EPA.
- Field works:
  - Preliminary site discussion to ensure samples are collected in accordance with proposed sampling rationale following desktop review.
  - Collection of samples and submission to EPA approved laboratory.
- Preparation of this report.

## 2. Preliminary Works

### 2.1 Health, Safety and Environment Plan

An AECOM Safety, Health and Environment (SHE) Plan was prepared prior to commencement of AECOM works on site which describe the safety, health and environmental requirements for AECOM project personnel involved in the works.

The SHE Plan included key project responsibilities, standard safe working practices, general physical and chemical hazards, a detail hazard risk assessment, requirements for personal protective equipment (PPE), environmental management, decontamination procedures, waste management, management of change and considerations and emergency response plans. In addition, AECOM implemented COVID-19 specific controls in line with AECOM internal requirements and national guidance, including:

- Completion of AECOM COVID-19 sitework questionnaires and the Construction Industry Federation's (CIF) COVID-19 induction.
- Application of good hygiene practices.
- Application of social distancing, and where unable to be achieved a risk assessment and project-specific controls to have been adopted.

As samples were collected at waterways, AECOM's safety protocols required deployment of a two-person sampling team equipped with lifejackets. The AECOM field lead and the field assistant had the appropriate AECOM PFAS sampling and health and safety training.

## 2.2 Site Access

Site access across the 15 sample locations was arranged by AECOM to allow for safe access to sample locations prior to attending each of the sites. Site access arrangements were detailed within the AECOM SHE plan.

## 3. Sampling Locations and Methodology

The sampling program was completed in general accordance with the EPA-approved AECOM SAQP and field procedures, as summarised below.

## 3.1 Sample Locations and Rationale

Prior to undertaking sampling, AECOM undertook a site selection process as part of the SAQP. Suitable sampling points were identified at nine locations on the River Shannon and six locations on the River Brosna and were chosen to correspond to existing National Water Monitoring Stations, where possible. Sampling locations are presented in Figure 1, Appendix A. The specific site locations for the River Shannon and River Brosna are included in Tables 1 and 2 below.

**Table 1. River Shannon Sample Locations** 

River Section	Sample Point ID	EPA Sampling Point Reference	Sample Location	Coordinates (ITM)	
	RS_SW01	LS250155b04500180	Killaloe Bridge	633138	735541
Lower Section	RS_SW02	RS25S012310	Portumna Bridge	587008	704525
	ID         Reference         Sample Location         (ITM)           RS_SW01         LS250155b04500180         Killaloe Bridge         63313           RS_SW02         RS25S012310         Portumna Bridge         58700           RS_SW03         RS25S012000         Bridge at Banagher Park (downstream of Banagher & River Brosna confluence)         60047           RS_SW04         RS26S021900         Shannonbridge (upstream of Banagher & River Brosna confluence)         59662           RS_SW05         RS26S021800         Clonmacnoise Castle         60068           RS_SW06         Non-EPA Location         N6 Bridge         60294           RS_SW07         RS26S021600         Lanesborough Bridge         60050           tion         RS_SW08         RS26S020800         N4 Bridge, Carrick-on-Shannon         59370           Dowra ED, Cavan-Belturbet Municipal         Dowra ED, Cavan-Belturbet Municipal         59370	600479	715902		
	RS_SW04	RS26S021900	3 ( )	596622	725478
	RS_SW05	RS26S021800	Clonmacnoise Castle	600681	730712
	RS_SW06	Non-EPA Location	N6 Bridge	602949	742475
	RS_SW07	RS26S021600	Lanesborough Bridge	600503	769382
Upper Section	RS_SW08	RS26S020800	N4 Bridge, Carrick-on-Shannon	593704	799299
Upper Section	RS_SW09	RS26S020200	•	602056	828934

**Table 2. River Brosna Sample Locations** 

River Section	Sample Point ID	EPA Sampling Point Reference	Sample Location	Coordinates (ITM)	
Lower	RB_SW01	RS25B091100	R357 (Closest to Shannon Harbour)	604721 720919	
Section	RB_SW02	RS25B090761	Pollagh	618948 725732	
Section Lower	RB_SW03	RS25B090400	Kilbeggan	633138 735542	
Mid-Section	RB_SW04	RS25B090200	Clonnagh	638267 742344	
Upper	RB_SW05	Non-EPA Location	Joe Dolan Bridge on R394 (downstream of Mullingar)	642769 751345	
Upper	RS25B280380	Greenway/Cullion Fish Farm (upstream of Mullingar)	642853 755776		

Table 3 details the sampling areas along the river and subsequent analysis. AECOM proposed to collect 15 primary water samples, 4 primary sediment sample and 3 quality control water samples (22 samples per round).

**Table 3. Surface Water Monitoring Programme** 

River	River Shannon			River Brosna				
Section of River	Upper	Mid-section	Lower	Upper	Mid-section	Lower	Total Samples	
Site ID within Section of River	RS_SW09 - RS_SW07	RS_SW06 - RS_SW04	RS_SW03 – RS_SW01	RB_SW06 - RB_SW05	RB_SW04 - RB_SW03	RB_SW02 - RB_SW01	Analysed	
Surface Water (SW) samples submitted for PFAS analysis per quarter	6	6	6	4	4	4	100*	
SW samples submitted for Pesticides analysis per quarter	3	3	3	2	2	2	62**	
Sediment samples submitted for PFAS analysis (where feasible) per quarter	2	2	-	1	1	-	26	
Rinsate Sample	ple 2 rinsate samples per round (one per reusable sampling equipment, with one tap water in the first round)				8			
Duplicate Sample	1 duplicate surface water sample per river per round				8			

 $<sup>^{\</sup>star}$  Numbers differ from proposed SW total samples scheduled for PFAS analysis due to following reasons:

Source: 60659529\_ACM\_RP\_ENV\_001\_01\_(SAQP)

Prior to undertaking site work AECOM gathered information on site routes to each of the sites, including car parking locations and proximity to sampling points.

Samples were named with a standard site identification code and followed by the site assigned monitoring name, i.e., RS\_SW01 (River Shannon\_SurfaceWater01), RS\_SS01 (River Shannon\_SedimentSample01). The same convention was followed for the River Brosna using 'RB' as the acronym.

Equipment blank samples were assigned a quality control (QC) nomenclature, i.e., QC101, QC102. Duplicate laboratory samples were assigned a quality control (QC) nomenclature, i.e., RS\_QC201, RB\_QC201.

### 3.2 Field Work Methodology

## 3.2.1 Surface Water Sampling

The methodology used for surface water sampling was as follows:

- 1. Surface water samples taken using an HDPE bailer suspended on a rope. A new piece of rope and bailer used for each sampling point.
- Samples collected from mid-stream at mid-depth, if safe and practicable, by lowering a sampling container on a line.
- 3. A clean pair of nitrile gloves used for each environmental medium at each sampling location.
- 4. No re-usable sampling equipment was used for surface water sampling therefore no equipment decontamination was required.

<sup>-</sup> RS\_SW05 could not be sampled during Q4 due to the jetty at Clonmacnoise Castle being inaccessible due to flooding.

<sup>-</sup> No second independent sample were analysed for RB\_SW04 – RB\_SW06 during Q2 (August 2021).

<sup>-</sup> No second independent samples were analysed for all sample locations during Q1 (June 2021).

<sup>\*\*</sup> Numbers differ from proposed SW total samples scheduled for Pesticide analysis due to following reasons:

<sup>-</sup> RS\_SW05 could not be sampled during Q4 due to the jetty at Clonmacnoise Castle being inaccessible due to flooding.

<sup>-</sup> A full suite of pesticide analysis was not undertaken on RS\_SW09 as the laboratory container was broken by the laboratory handler.

- 5. Sampling location GPS co-ordinates were captured onsite using a field data collection application (ArcGIS Collector / Survey123), along with field observations, river observations (turbidity and flow rate) and corresponding photographs.
- 6. Samples were kept in ice cooled cool boxes and transported to the ALS laboratory drop-off location in Portlaoise under chain-of-custody procedures. Owing to AECOM standard procedures for PFAS sampling, bags of water ice were used for sample storage, rather than the laboratory-provided blue (or chemical) ice for sample storage.

## 3.2.2 Sediment Sampling

Sediment samples were collected where it was safely possible to do so at one location within the upper and middle sections of both the River Shannon and River Brosna.

The selection of the appropriate sediment sampling locations depended on several factors including the safety and accessibility of the sample locations; whether there was a requirement for relatively undisturbed samples and the required sample depth within the sediment body.

Where applicable, the collection of sediment samples took place immediately following surface water sampling, to avoid incorporation of disturbed sediment into water samples. The sediment samples were collected from the same locations as the surface water samples.

The sediment sampling used a grab system (Van Veen Grab (0.5L), consisting of one hinged clamshell bucket which is lowered to the river bed and which closes when raised, collecting disturbed sediment samples. The benefits of the grab system are that it is useful for waterbodies where access is limited and where the water body is too deep for manual sediment sampling methods, which is the case for the River Shannon and River Brosna.

Re-usable sampling equipment, such as the sediment grab sampler, was decontaminated between locations by rinsing with potable water, brushing with a solution of PFAS-free detergent and water, followed by a final rinse with laboratory-supplied deionised water.

#### 3.2.3 Equipment Blank / Duplicate Sampling

Two equipment blanks had been allowed per river per sample round. AECOM collected one equipment blank for each piece of equipment which came in direct contact with the surface water (bailer and rope) and one for the equipment used to collect the riverbed sediment (Van Veen sampler and rope). AECOM considered this to be sufficient to establish the risk of cross-contamination for the project as a whole. The same source of potable water and laboratory water was used throughout the duration of the project.

### 4. Field Results

#### 4.1 Field Work Summary

Field works were carried out over four sampling events (Q1 to Q4), as follows:

- Quarter 1 (Q1), 08 June 2021 10 June 2021.
- Q2, 25 August 2021 to 27 August 2021.
- Q3, 23 November 2021 to 25 November 2021.
- Q4, 22 February 2022 to 24 February 2022.

Sampling locations are presented in Figure 1, Appendix A. Sample schedules and field observations are presented in Tables 1a and 1b and 2, Appendix C. A photographic log showing the sampling locations is presented in Appendix B.

All sampling locations were accessible for all four sampling events with the exception of:

- RS\_SW05 a floating jetty- during Q4, due to high water levels and unsafe access due to recent heavy rainfall on the River Shannon, see photograph 16, Appendix B
- RS\_SS03 was collected as an additional sediment sample during Q1 due to concerns over the possible
  quality of the sample taken at a previous location (RS\_SS02). However, the sample from RS\_SS02
  proved suitable for laboratory analysis. Therefore, during Q2, Q3 and Q4 it was not deemed necessary
  to collect a third sediment sample from the River Shannon.

### 4.2 Surface Water Quality – Field Readings

During surface water sampling of each location, surface water field measurements were collected during sampling. The following is a summary of surface water monitoring field results which are included in Table 2 of Appendix C.

- pH values were generally neutral to slightly alkaline and were recorded between 7.4 and 8.5.
- Actual conductivity values varied between 105.8 μS/cm and 672 μS/cm.
- Temperature values varied between 6.1 °C and 19.8 °C.
- Field redox values varied between 61.6 mV and 216.3 mV.
- Dissolved Oxygen (DO) concentration varied between 4.52 mg/L and 12.42 mg/L.

## 5. Analytical Results

## 5.1 Screening Criteria

Laboratory results were screened against generic assessment criteria (GAC) considered for human health and ecological exposure for industrial / commercial and public open space / parkland land use settings. Residential land use GAC has not been considered.

AECOM emphasises adopted screening criteria are not intended for use as a default remediation trigger criterion, rather are intended as a preliminary screen for considering for further assessment.

A summary of the adopted screening criteria is detailed below.

#### 5.1.1 PFAS Screening Criteria

### Water

AECOM reviewed available screening criteria for human health and environmental systems for PFAS compounds in water.

Based on the site selection, dermal contact is considered to be the most representative human health exposure pathway. However, due to rural drinking water supplies commonly being abstracted from groundwater and river systems, AECOM also considered drinking water guidance.

No national guidance for water human health screening criteria was identified in Ireland. A review of international guidance identified available and verified water human health and/or recreational water use screening criteria for the United Kingdom, United States, Canada, Denmark, Germany, Italy, Netherlands, Sweden and Australia.

Based on the available land use scenarios, and the limited screening criteria available for PFAS contaminants due to its presence as an emerging contaminant, AECOM adopted the United Kingdom, Australian and USEPA criteria, utilising the below guidance:

- United Kingdom Drinking Water Inspectorate (DWI). Guidance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS and PFOA concentrations in drinking water. January 2021.
- United Kingdom DWI. Guardians of drinking water quality. 2009. Guidance on the Water Supply (Water Quality) Regulations 2000 specific to PFOS and PFOA concentrations in drinking water. October 2009.

- United States Environmental Protection Agency (USEPA). 2016. Drinking Water Health Advisory for PFOS. Office of Water (4304T). Health and Ecological Criteria Division, Washington, DC 20460. EPA Document Number: 822-R-16-004. May 2016.
- Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan (NEMP) Version 2.0, January 2020.

National guidance for environmental quality to surface water is available for PFOS in the following guidance:

 The European Union Environmental Objectives (Surface Waters) Regulations (S.I No. 77, as amended in 2019).

The laboratory Limit Of Reporting (LOR) presented are considered suitable to enable the assessment of the data against the environmental quality standard (EQS) for the maximum allowable concentration (MAC) for surface water, however, is not considered sensitive enough for assessing the annual average concentration (AAC) criteria.

#### Sediment

A review of national and international available guidance did not identify screening criteria for sediment samples. In the absence of published and verified screening criteria, AECOM will utilise available soil criteria.

No national guidance for soil human health screening criteria for PFAS-related compounds was identified in Ireland or the United Kingdom. A review of international guidance identified available and verified soil human health screening criteria for the United States (national and state level), Australia, Canada, Denmark and Norway.

In terms of human health, AECOM adopted Australian and USEPA criteria utilising the below guidance:

- United States Environmental Protection Agency (USEPA). 2020. Regional Screening Levels (RSLs).
   RSL User's Guide, and RSLs Calculator, May 2020.
- Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan (NEMP) Version 2.0, January 2020.
- No national guidance for soil ecological screening criteria was identified in Ireland. A review of
  international guidance identified available and verified soil ecological screening criteria in the United
  Kingdom (UK) and Australia.

In terms of ecological / environmental criteria, AECOM adopted the UK criteria utilising the below guidance:

 Environment Agency, Derivation and use of soil screening values for assessing ecological risks, report – ShARE id26 (revised), March 2020.

### 5.1.2 Pesticide Screening Criteria

AECOM could only obtain EQS screening criteria for the one of the two pesticides identified above the laboratory method detection limits (MDLs). Assessment criteria for 2-methyl-4-chlorophenoxyaceic acid (MCPA) was available; however, no screening criteria was available for Imazalil. Based on the setting of the watercourses (freshwater) and the potential receptors of drinking water in rural areas with groundwater wells, AECOM adopted the Ireland and Scotland criteria, utilising the below guidance:

- Guideline Threshold Value (GTV) Ireland Source: Ireland GTVs 2016.
- Aquatic Toxicity Ireland Freshwater Source: SEPA WAT-SG-53 Freshwater EQS AA 2015.
- Aquatic Toxicity Ireland Transitional/Coastal Source: SEPA WAT-SG-53 Marine EQS AA 2015.
- Drinking Water Standards Ireland Source: Ireland GTVs 2016.

It was not considered necessary to screen the rest of the pesticide data against screening criteria as all other pesticide analytes were below laboratory MDL.

## 5.2 Laboratory Analysis

Samples were sent to the EPA-selected contract laboratory ALS Life Sciences Ireland (ALS) for analysis.

All samples were analysed as agreed by the EPA, including the analysis of each PFAS sample in duplicate, with the exception of the following:

- All results from Q1 surface water and sediment samples.
- Sediment samples in Q4 were collected at different locations to previous rounds, due to difficulties with access to certain locations.
- RB\_SW05 and RB\_SW06 in Q2, the laboratory analysed these samples in duplicate for pesticides instead of PFAS compounds.
- Organochlorine Pesticides results for Q4 RS\_SW09 as the laboratory confirmed they had accidentally broken the sample container.

## 5.3 Laboratory Results

Laboratory results screened against the adopted screening criteria are presented in Tables 3, 4 and 5 in Appendix C. Laboratory Certificates are presented in Appendix D.

The analytical results above the laboratory MDL presented in Figures 2, 3 and 4 in Appendix A.

The following is a summary of the results:

#### Surface Water Sample Results

- No PFAS compounds were reported at any of the 9 surface water sampling locations on the River Shannon
- Perfluorodecanoic acid (PFDA) was detected at one surface water sampling location on the River Brosna (RB\_SW05) on one occasion – during the third quarter sampling (November 2021). The second independent sample collected from this location during this sampling event did not detect PFDA. No screening criteria is availale for PFDA to review the PFDA results against.
- Perfluorooctanoic acid (PFOA) was detected at 3 of the 6 surface water sampling locations on the River Brosna (RB\_SW03, RB\_SW04, RB\_SW05). These three sampling locations are located downstream of Mullingar. PFOA was detected on all four sampling occasions at sample locations RB\_SW04 and RB\_SW05 and only during 3 of the 4 sampling occasions (Q1 – Q3) at sample location RB\_SW03. The PFOA results exceeded drinking water standards for Tier 2 regulations (0.01 μg/L).
- All pesticide concentrations were below the laboratory MDL, with the exception of the following 3
  detections:
  - Imazalil reported in RB\_SW06 (upstream of Mullingar) in Q3 (November 2021) only. The detection was recorded as 0.104 μg/L and the MDL for Imazalil is <0.050 μg/L.
  - MCPA reported in RS\_SW07 (Lanesborough) in Q1 (June 2021) only. The detection was recorded as 0.062 μg/L and was below all water environment and drinking water assessment criteria.
  - MCPA reported in RS\_SW08 (Carrick-on-Shannon) in Q1 (June 2021) only. The detection was recorded as 0.065 μg/L and was below all water environment and drinking water assessment criteria.
- No screening criteria was available for Imazalil and both detected results for MCPA (RS\_SW07 and RS\_SW08) were below the adopted screening criterion.

### Sediment Sample Results

 In the River Shannon, PFAS compounds (Perfluorohexane sulfonic acid (PFHxS) and Perfluoroctane sulfonic acid (PFOS)) were detected in the sediment sample collected during Q3 (November 2021) at RS\_SW08 (Carrick-on-Shannon). All other sediment samples collected from the River Shannon recorded no detections for PFAS compounds.

- In the River Brosna, PFAS compounds were detected at two locations:
  - RB\_SW06 (upstream of Mullingar) recorded detection of PFOA on three occasions during sampling rounds Q2 – Q4. The sediment sample from Q2 recorded a PFOA result in exceedance of ecological screening criteria and below human health criteria. The PFOA resits at RB\_SW06 from Q3 and Q4 were recorded below both human health and ecological screening criteria.
  - RB\_SW03 (downstream of Mullingar) recorded detection of PFOA and PFOS during Q4 (February 2022) only. The detected results from Q4 were below both human health and ecological screening criteria.

## 6. Quality Assurance and Quality Control

The Quality Assurance and Quality Control (QA/QC) procedures adopted by AECOM provide a consistent approach to evaluation of whether the data quality of the project is acceptable. The QA/QC procedure focuses on the assessment of the usability of data in terms of accuracy and reliability in forming conclusion on the environmental medium being investigated.

#### Equipment Rinsate QC Results

AECOM collected equipment rinsate samples from re-usable equipment (Van-Veen sediment sampler) and from the primary surface water sampling equipment (bailer and string). A new bailer and section of string was used at every sampling location on every sampling occasion to prevent cross-contamination occurring during the sampling round.

During Q2 (August 2021) and Q3 (November 2021) sampling rounds, on each sampling occasion, one of the two independent samples for the bailers recorded a detection of PFOS. During the Q2 sampling round the detection was recorded as  $0.0184 \, \mu g/L$  and during the Q3 sampling round the detection was recorded as  $0.0332 \, \mu g/L$ . The other independent sample collected on each of these two occasions did not record any detection of PFOS.

A rinsate sample of the Van Veen sediment sampler recorded one detection of 6:2 Fluorotelomer sulfonic acid (6:2 FTS) during Q1 (June 2021). No detections of PFAS compounds were recorded on equipment rinsate samples during the Q2 and Q4 sampling rounds and no rinsate equipment sample was taken for the Van-Veen sediment sampler during Q3.

Neither PFOS nor 6:2 FTS were reported in any river water sample results.

## River Duplicate QC Results

All duplicate and independent samples collected from the River Shannon recorded no detection of PFAS compounds.

In the River Brosna, PFOA was recorded at RB\_SW05 with a concentration of 0.0346  $\mu$ g/L during Q1 (June 2021) and the duplicate sample from this sampling location on this sampling occasion recorded a concentration of 0.0315  $\mu$ g/L producing a relative percent difference (RPD) of 9.38% which is considered to be acceptable. In addition, PFOA was recorded at RB\_SW03 with a concentration of 0.0131  $\mu$ g/L during Q3 (November 2021) and the duplicate sample from this sampling location on this sampling occasion recorded a concentration of 0.0108 producing a RPD of -19.25% which is also considered to be acceptable.

Based on the assessment, AECOM considers the data representative of chemical concentrations in the environmental media at the time of sampling and to be suitable for their intended purpose of forming conclusions.

## 7. Difficulties Encountered

AECOM encountered the following difficulties during the sampling campaign:

## Sampling difficulties:

- Undertaking representative surface water quality readings was difficult at sample locations Brosna
  Site 01 and Brosna Site 05. The reason for this is that the high bridges meant that the distance from
  the bridge to the river was much longer than the length of cable on the AECOM water quality meter.
  Surface water quality readings were instead taken from a bucket of water retrieved using the bailer
  and are not considered representative to the river conditions.
- Sediment sampling was the most difficult and time-consuming part of the sampling process, as
  often the base of the river was not visible and therefore numerous attempts were required before
  collecting a suitable volume of river sediment sample.
- As discussed in Section 4, it was not possible to collect a sample from River Shannon Site 05 (Clonmacnoise jetty) in Q4. The Clonmacnoise jetty was shut to the public on the date of the sampling visit due to the high-water levels in the river. It was not possible to substitute a potential alternative location in the vicinity, as there were no bridges within the local area and access to third-party land on the river bank had not been previously arranged.

#### · Laboratory difficulties:

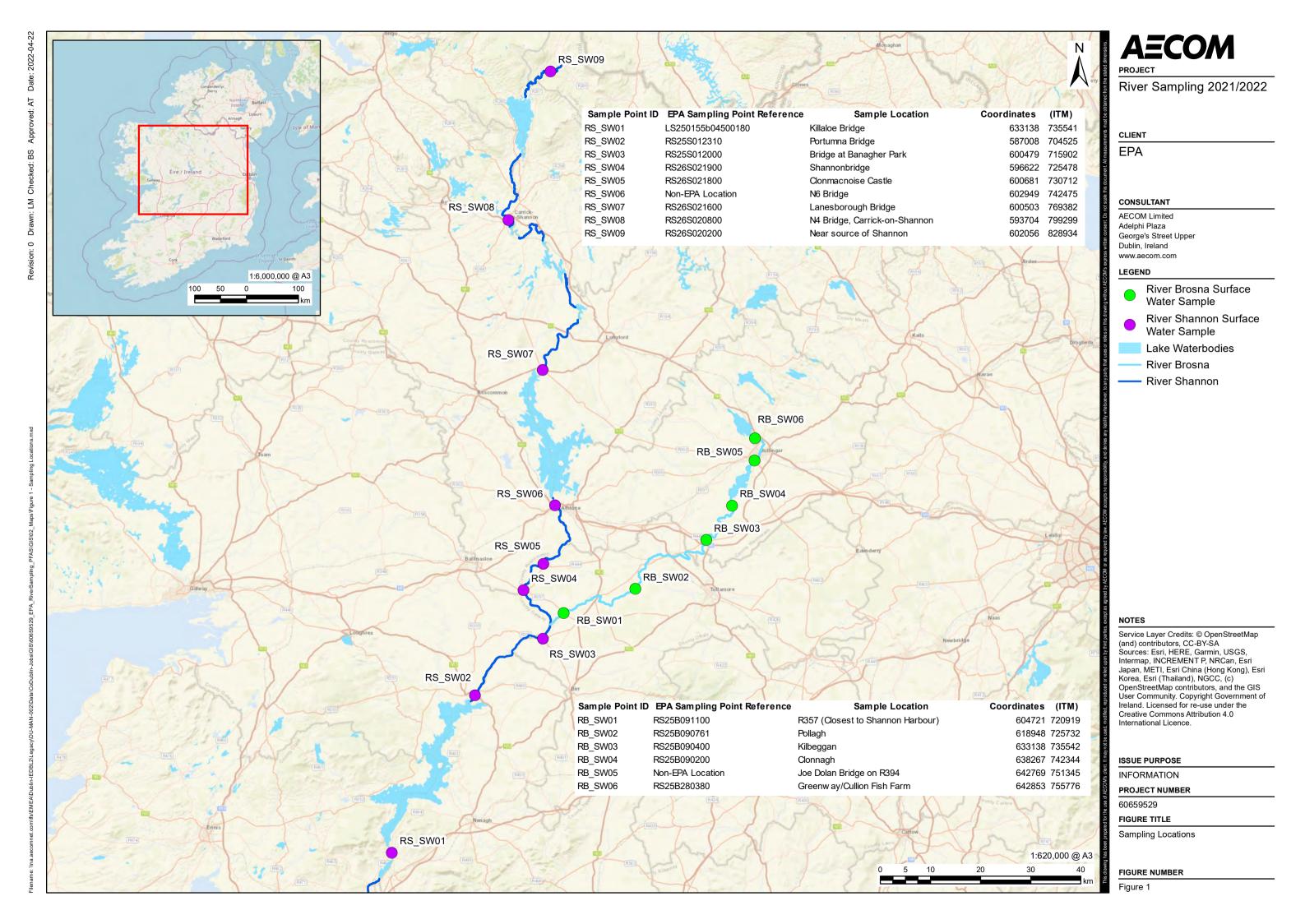
- Sampling containers were shipped to AECOM's Dun Laoghaire office from the ALS European branch which was accredited for the proposed analyses; these took 2 3 weeks to arrive.
- The sampling containers were not labelled with laboratory stickers and permanent marker would rub off the glass jar.
- The laboratory did not supply any packing materials (i.e. bubble wrap, etc.) to minimise potential for potential breakage of glass jars.
- The laboratory-supplied blue 'chemical ice' bricks for chilling samples. Internal AECOM procedures do not recommend using blue ice bricks, as some types are proven to have historically contained PFAS. AECOM procedures require use of wet ice (water ice) as an alternative.
- Additionally, the laboratory provided only waterproof soft cooler bags to transport the samples to the ALS shipment location in Ireland. Samples included glass containers and rigid plastic cooler boxes would be the preferred shipment container, due to a lower risk of physical damage to sample containers during local antransit and a risk that waterproof fabric could be treated with water proofing sprays/coatings which may contain PFAS. Alternatively, a trip blank should be considered to assess the potential cross contamination risk during transport.
- Sample results were presented in a combination of Excel spreadsheets and PDFs. It would be preferred if the laboratory supplied results in Esdat format (formatted csv file) or entirely in Excel format, to minimise manual handling of data from PDFs and the potential for transcription errors.
- The sensitive nature of the laboratory analytical methods, low limits of detection, potential for crosscontamination and measurement uncertainty could potentially lead to false positives at the low concentrations reported.

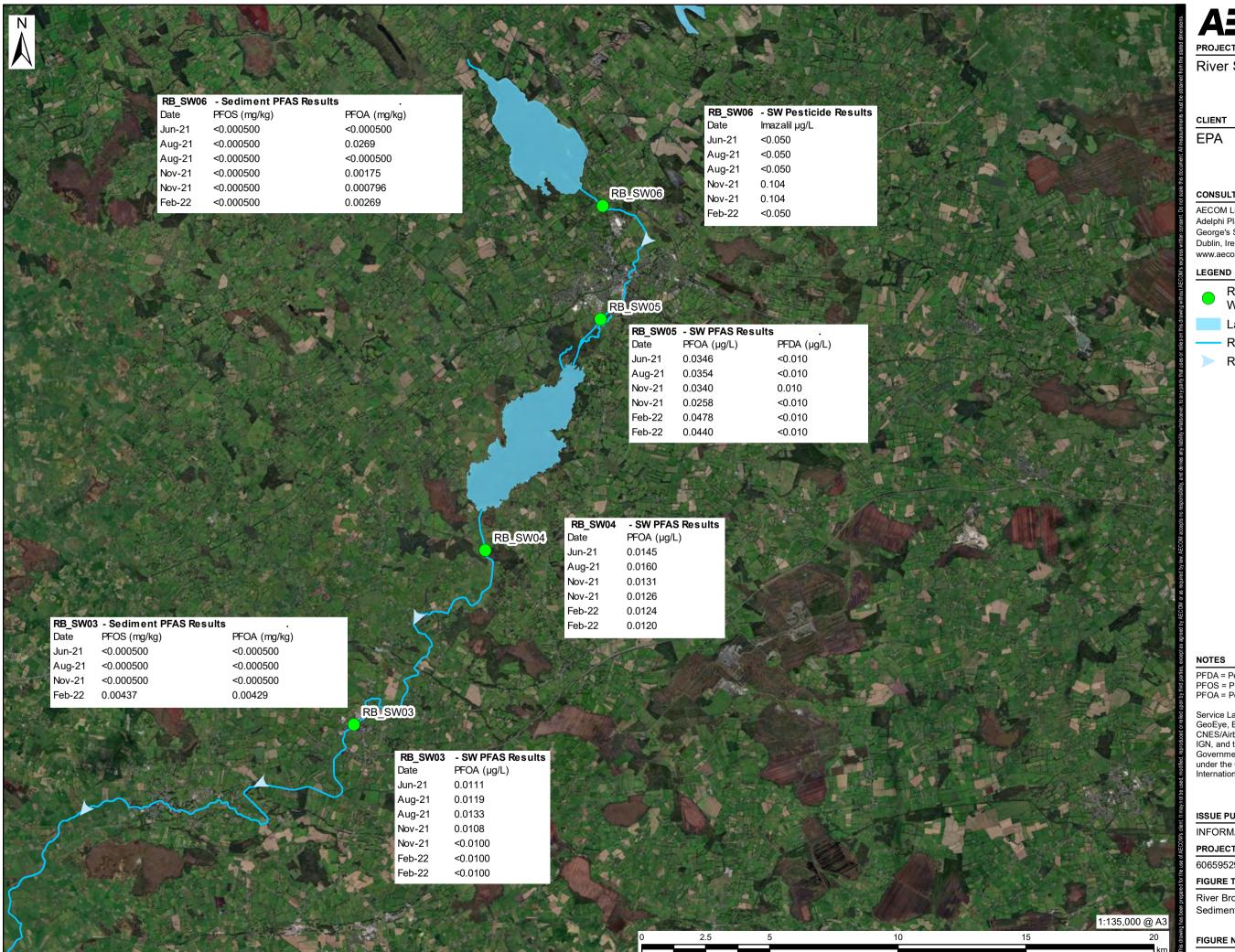
## 8. Recommendations

Based on the findings of the investigation, AECOM notes the following:

- No reportable concentrations of PFAS were identified in the surface water samples from the River Shannon. Two low level detections of Perfluorohexane sulfonic acid (PFHxS) and Perfluorooctane sulfonic acid (PFOS) compounds were reported in one sediment sample (RS\_SS01 Carrick-on-Shannon) in a singular sampling event (Q3). The PFOS detection result was equal to the laboratory method detection limit (MDL). AECOM considers further surface water and sediment assessment within the River Shannon close to this sediment detection is necessary to assess the significance of this reported detection.
- Surface water and/or sediment samples along the River Brosna reported PFAS compounds at multiple locations both upstream (RB\_SW06) and downstream (RB\_SW03, RB\_SW04, RB\_SW05) of Mullingar, all close to the detection limit of 0.01 ug/L. The predominant PFAS compound reported at the locations downstream of Mullingar was Perfluorooctanoic acid (PFOA). PFOA was the only PFAS compound identified across all four surface water sampling occasions at locations RB\_SW04 and RB\_SW05 and all results at these two locations exceeded Tier 2 regulations for drinking water standards (DWS). The DWS guidance recommends that, for exceedances of Tier 2 Regulation 10, the minimum action to be undertaken is to consult local health professionals and to monitor levels in drinking water. The River Brosna is not a drinking water source for Mullingar, as the Mullingar Regional Water Supply is sourced from Lough Owel and treated at the Portloman Water Treatment Plant; however, AECOM recommend that, in the first instance, further investigation along the River Brosna is undertaken to determine source(s) of PFAS contamination of the River Brosna and assess whether a potential risk to human health and environment exists.
- All pesticide results were below the laboratory MDL, with the exception of Imazalil (detected in a singular
  occurrence at the River Brosna) and MCPA (detected in two separate, singular occurrences on the River
  Shannon). These results do not indicate widespread pesticide contamination and EPA should consider
  whether further assessment for pesticides on these rivers is required.
- Screening criteria for pesticides and PFAS are under constant development and review, therefore these
  reported concentrations should be reassessed against newly-released guidance and criteria, either on a 12month basis and / or as they are developed.

# **Appendix A Figures**





Approved: AT

# **AECOM**

River Sampling 2021/2022

### CONSULTANT

AECOM Limited Adelphi Plaza George's Street Upper Dublin, Ireland www.aecom.com



River Brosna Surface Water Sample



River Brosna

River Flow Direction

PFDA = Perfluorodecanoic acid PFOS = Perfluorooctane sulfonic acid PFOA = Perfluorooctanoic acid

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Copyright Government of Ireland. Licensed for re-use under the Creative Commons Attribution 4.0 International Licence.

## **ISSUE PURPOSE**

INFORMATION

## PROJECT NUMBER

60659529

### FIGURE TITLE

River Brosna Sampling Results (SW & Sediment)

#### FIGURE NUMBER

Drawn: LM Checked: BS

# **AECOM**

River Sampling 2021/2022

CLIENT

**EPA** 

### CONSULTANT

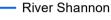
AECOM Limited Adelphi Plaza George's Street Upper Dublin, Ireland www.aecom.com

#### LEGEND



River Shannon Surface Water Sample







### NOTES

MCPA = 2-methyl-4-chlorophenoxyacetic acid PFOA = Perfluorooctanoic acid
PFDA = Perfluorodecanoic acid
PFHxS = Perfluorohexane sulfonic acid

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Copyright Government of Ireland. Licensed for re-use under the Creative Commons Attribution 4.0 International Licence.

## ISSUE PURPOSE

INFORMATION

## PROJECT NUMBER

60659529

## FIGURE TITLE

River Shannon Sampling Results (SW & Sediment)

#### FIGURE NUMBER

# **Appendix B Photolog**



## **PHOTOGRAPHIC LOG**

Client Name: Environmental Protection Agency

Site Location: River Shannon / River Brosna

Project No. 60659529

Photo No.

**Date:** 08/06/202

Direction Photo Taken:

Looking south west

Description

Shannon Sample Location 09.



Photo No.

**Date:** 08/06/2021

Direction Photo Taken:

Looking east

Description

Shannon Sample Location 08



**Date:** 08/06/2021

Direction Photo Taken:

Looking north

## Description

Shannon Sample Location 07.



Photo No.

**Date:** 08/06/2021

Direction Photo Taken:

Looking north

## Description

Shannon Sample Location 06.



**Date:** 08/06/2021

Direction Photo Taken:

Looking north

## Description

Shannon Sample Location 05.



Photo No.

**Date:** 08/06/2021

Direction Photo Taken:

Looking south

## Description

Shannon Sample Location 04.



**Date:** 09/06/2021

Direction Photo Taken:

Looking west

## Description

Water Sample taken from Shannon Sample Location 03.



Photo No.

8

**Date:** 09/06/2021

Direction Photo Taken:

Looking north

## Description

Shannon Sample Location 02.



**Date:** 09/06/2021

Direction Photo Taken:

Looking west

## Description

Shannon Sample Location 01.



Photo No. 10 **Date:** 26/08/2021

Direction Photo Taken:

Looking west

## Description

Water Sample taken from River Brosna Sample Location 01.



**Date:** 09/06/2021

Direction Photo Taken:

Looking west

Description

River Brosna Sample Location 02.



Photo No. 12 **Date:** 09/06/2021

Direction Photo Taken:

Looking south

Description

River Brosna Sample Location 03.



**Date:** 09/06/2021

Direction Photo Taken:

Looking south

## Description

River Brosna Sample Location 04.

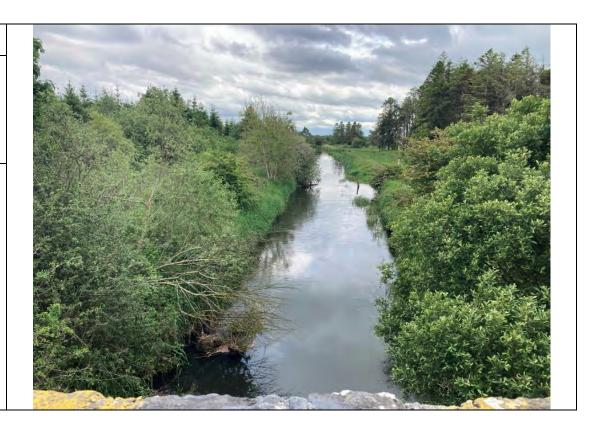


Photo No. 14 **Date:** 10/06/2021

Direction Photo Taken:

Looking east

## Description

River Brosna Sample Location 05.



**Date:** 10/06/2021

Direction Photo Taken:

Looking south

## Description

River Brosna Sample Location 06.



Photo No. 16 **Date:** 22/02/2022

Direction Photo Taken:

Looking south

## Description

Flooded River Shannon Sample Location 05 during Q4 sampling.



# **Appendix C Tables**



Appendix C - Table 1a. Sample Schedule Surface Water

	Q1	Q2	Q3	Q4
	08-10/06/2021	25-27/08/2021	23-25/11/2021	23-24/02/2022
Sample				
RB_SW01	X	X	X	Х
RB_SW02	X	X	X	X
RB_SW03	X	X	X	Х
RB_SW04	X	X	X	Х
RB_SW05	X	X	X	Х
RB_SW06	X	X	X	Х
RS_SW01	X	X	X	Х
RS_SW02	X	X	X	X
RS_SW03	X	X	X	X
RS_SW04	X	X	X	Х
RS_SW05	X	X	X	-
RS_SW06	X	X	X	X
RS_SW07	X	X	X	Х
RS_SW08	X	X	X	X
RS_SW09	Х	Х	X	Х

Appendix C - Table 1b. Sample Schedule Sediment

	Q1	Q2	Q3	Q4
	08-10/06/2021	25-27/08/2021	23-25/11/2021	23-24/02/2022
Sample				
RB_SS01	X	X	X	X
RB_SS02	X	X	X	X
RS_SS01	X	X	X	X
RS_SS02	X	X	X	X
RS_SS03	X	-	-	-

Sample analysed once only for PFAS
Not sampled







	ı												
							River Shannor	n Field Readings					
	Sample Location		RS_S	W01			RS_S	W02			RS_S	W03	
	Date	09/06/2021	26/08/2021	24/11/2021	23/02/2022	09/06/2021	26/08/2021	24/11/2021	23/02/2022	09/06/2021	26/08/2021	24/11/2021	23/02/2022
Fie	eld Readings	07/00/2021	20/00/2021	2471172021	10/02/2022	0770072021	20/00/2021	2471172021	10/01/1011	0770072021	20/00/2021	2471172021	25/02/2022
	Turbidity	Low	Low		Low	Low	Low	None	Low	Low	Low	None	None
Tem	nperature (°C)	14.1	19.7	10	7.33	16.5	18.7	8	7.19	16.3	18.8	8	7.28
	рН	8.34	8.5	8.22	8.44	8.17	8.07	7.94	8.05	8,19	8.13	7.9	8.05
Field	d Redox (mV)	149	-	172.5	128.7	154.2	-	213.7	151.8	177.6		211.7	140.9
Cond	uctivity (µS/cm)	437.8	416.6	389.5	318.8	454.4	384.5	396.3	326.4	442.2	375.2	399.6	362.7
Dissolv	ed Oxygen (mg/L)	9.28	10.38	11.07	11.92	8.95	9.09	11.18	10.524	9.1	8.8	10.89	10.604
	Weather	Overcast	Sunny/Dry	Overcast / wet	Overcast	Warm	Foggy / Dry	Overcast / wet	Overcast / windy	Rainy	Foggy/dry	140.9	Overcast / windy
	Row	Moderate	Moderate	Moderate	Moderate	Moderate	Low	Low	Low	Moderate	Low	Low	Moderate
Samp			Clear, no sediment, NEC	-	Light yellow, small amount of fine sediment, NEC	Pale, yellow, clear NEC	Clear, no sediment, NEC	Clear, light yellow, NEC	Light yellow, slightly turbid, NEC	Pale yellow , clear , NEC	Clear, no sediment, NEC	Clear, light yellow, NEC	Light yellow, slightly turbid, NEC

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	1											
						Rive	er Shannon Field Read	lings				
	Sample Location		RS_S	W04			RS_SW05			RS_	W06	
	Date	08/06/2021	25/08/2021	24/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	08/06/2021	25/08/2021	23/11/2021	22/02/2022
FI	ield Readings										i	
	Turbidity	Low	Low	None	Low				Low	Low	None	None
Ten	mperature (°C)	16.1	192	8.6	7.21	16.2	192	8.9	15	19	9.5	7.75
	pH	8.27	8.26	7.95	8.39	8.29	8.33	8.01	8.29	8.39	8	8.23
Fiel	ld Redox(mV)	154.8		147.3	139.9	170.3		167.4	192.7	-	141.3	150.3
Cond	ductivity (µS/cm)	360.3	345.6	320.4	285.1	370.0	339.2	317.5	358.9	335.8	309.4	288.8
Dissolv	ved Oxygen (mg/L)	9.6	9.18	11.13	11.85	9.6	9.58	10.93	9.18	8.64	9.98	11.07
	Weather	Overcast / windy	Dry/sunny	Overcast / wet	Overcast / windy	Dry/sunny	Dry/sunny	Clear / dry	Overcast	Dry/overcast	Clear / dry	Clear / windy
	Flow	Moderate	Moderate	Low	Low	Moderate	Moderate	Low	Low	Moderate	Low	Low
Sam		Pale, yellow, clear, NEC	Clear, no sediment, NEC	Clear, light yellow, NEC	Light yellow brown, low turbidity, NEC	Light yellow, clear, NEC	Clear, no sediment, NEC	Light yellow, clear, NEC	Yellow, clear, NEC	Clear, suspended sediments, NEC	Clear light yellow, moderatesuspended soilids, NEC	Slightly yellow , NEC

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#### Appendix C Table 2a: River Shannon Field Readings

	Г												
							River Shannor	n Field Readings					
	Sample Location		RS_S	W07			RS_S	W08			RS_S	W09	
	Date	08/06/2021	25/08/2021	23/11/2021	22/02/2022	08/06/2022	25/08/2022	23/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	22/02/2022
Fie	eld Readings												
	Turbidity	Low	Low	None	Moderate	Low	VeryLow	Moderate	Low	Low	Moderate	None	-
Tem	perature (°C)	18.1	19	8.5	6.74	17	18.6	8.7	6.72	15.3	14.9	6.5	6.49
	рН	7.94	7.52	7.67	8.15	7.92	7.52	7.47	7.92	8.1	7.61	7.41	7.95
Field	Field Redox(mV)		-	193.9	141.8	172.8	-	196.9	167.8	213.7	-	216.3	198.5
Cond	uctivity(µS/cm)	292.9	218.5	295.7	191.0	224.6	133.4	2622	167.6	201.6	130.6	122.9	105.1
Dissolv	ed Oxygen (mg/L)	8.37	7.12	10.33	11.66	8.43	7.91	8.78	11.79	10.29	9.65	12.22	12.42
	Weather	Overcast / windy	Sunny/dry	Clear / dry	Clear / windy	Warm / overcast	Dry/sunny	Overcast / dry	Clear / cold	Warm / overcast	Sunny/dry	Overcast / dry	Clear / dry
	Flow	Moderate	Moderate	Moderate	Moderate	Moderate	Low	Low	Moderate	Low	Low	Low	High
Samp	Sample Description		Clear, NEC	Clear, NEC	Cloudylight brown, NEC	Yellow , NEC	Clear, NEC	Yellow brown, NEC	Light brown, NEC	Yellow, NEC	Palebrown with sediment	Yellow brown, NEC	Slightly cloudy, NEC





Appendix C Table 2 a: River Shannon Field Readings

Appendix C - Table 2b: River Brosna Field Readings

						River BrosnaFi	ield Readings					
Sample Location		RB,	SW01			RB_S	W02			RB_S	W03	
Date	09/06/2021	26/08/2021	24/11/2021	23/02/2022	09/06/2021	26/08/2021	24/11/2021	23/02/2022	09/06/2021	26/08/2021	24/11/2021	23/02/2022
Field Readings												
Turbidity	Low	Low	None	Medium	Low	Low	Slight	Medium	Low	Low	Moderate	Low
Temperature (°C)	17	19.5	6.5	7.55	16.4	17.5	7.2	7.56	16.3	18.5	7.6	6.95
pH	8.17	8.26	7.93	7.8	8.04	8.07	7.88	7.93	8.12	8	7.92	8.1
Field Redox(mV)	141.4		209.5	155	152.2		159.6	149.5	122.7		182.3	146
Conductivity (µS/cm)	672.0	598.0	644.0	439.3	624.0	598.0	649.0	461.5	554.0	435.2	474.0	405.6
Dissolved Oxygen (mg/L)	7.85	7.82	12.09	10.36	10.11	10.85	11.62	10.454	10.24	10.07	12.23	11.113
Weather	Overcast	Dry/sunny	Overcast / wet	Overcast / windy	Overcast	Dry/sunny	Clear / dry	Overcast / cold	Warm / overcast	Sunny/dry	Overcast / dry	Overcast / windy
Flow		Moderate	Moderate	High	Moderate	Low	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Sample Description	Pale, NEC	Clear, NEC	Clear; NEC	Light yellow, NEC	Clear, NEC	Clear, NEC	Clear, NEC	Light yellow, NEC	Clear, NEC	Clear, NEC	Clear, NEC	Light yellow, NEC





#### Appendix C Table 2a: River Shannon Field Readings

	Г												
							River Brosna	Field Readings					
	Sample Location		RB_S	W04			RB_	SW05			RB_S	W06	
	Date	09/06/2021	26/08/2021	25/11/2021	23/02/2022	10/06/2021	27/08/2021	25/11/2021	24/02/2022	10/06/2021	27/08/2021	25/11/2021	24/02/2022
Fie	eld Readings												
	Turbidity	Low	Low	None	None	Low	Moderate	High		Low	Low	None	Low
Tem	perature (°C)	16.5	19.8	6.3	724	16.2	16.2	7.3	6.36	16.1	17.6	6.1	6.56
	рН	8.13	8.02	7.81	826	7.71	7.48	7.53	7.51	7.86	7.58	7.61	7.54
Field	d Redox (mV)	146.5	-	133.5	142.7	175.1	-		182.22	154.4	-	61.1	171.9
Cond	uctivity(µS/cm)	496.0	375.4	451.8	371.1	546.0	545.0	158.4	528.5	286.2	2942	306.1	441.0
Dissolv	ed Oxygen (mg/L)	10.46	10.93	10.02	11.997	6.07	4.52	7.12	10.8	9.58	8.85	11.75	9.8
	Weather	Overcast / warm	Dry/sunny	Clear	Overcast	Overcast	Overcast / Dry	Clear	Clear	Sunny	Sunny	Overcast	Overcast
	Flow	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Samp	Sample Description		Clear, NEC	Clear, NEC	Clear, NEC	Claar, stagnant odour	Clear, NEC	Dark grey brown , NEC	Cloudy, light brown, high turbidity	Clear, NEC	Clear, NEC	Clear, NEC	Light brown, NEC

				Sample Location			Bro	sna 6					Bro	sna 3		
Appendix C - Table 3: Sediment PFAS Results				Sample ID	RB_SS01	RB_SS02	RB_SS02	RB_SS02	RB_SS02	RB_SS02	RB_SS02	RB_SS01	RB_SS01	RB_SS01	RB_SS01	RB_SS01
				Laboratory Sample ID	PR2155273020	PR2183443016	PR2183443060	PR21B7051019	PR21B7681003	PR2217901019	PR2155273019	PR2183443017	PR2183443061	PR21B7051020	PR21B7681004	PR2217901020
				Quarter	Q1	Q2	Q2	Q3	Q3	Q4	Q1	Q2	Q2	Q3	Q3	Q4
				Sampling Date	10/06/2021	26/08/2021	26/08/2021	25/11/2021	25/11/2021	24/02/2022	09/06/2021	26/08/2021	26/08/2021	24/11/2021	24/11/2021	23/02/2022
			Human Health	Ecological Screening Criteria		<u> </u>		<u> </u>				<u> </u>				
Perfluorinated Compounds	MDL	Unit	Screening Criteria	Ecological Screening of iteria		<u> </u>		<u> </u>				<u> </u>				<u> </u>
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorobutane sulfonic acid (PFBS)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorobutanoic acid (PFBA)	0.0005	mg/kg DW	16, 400 <sup>#3</sup>		<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorodecane sulfonic acid (PFDS)	0.0005	mg/kg DW			<0.000500	< 0.00500	< 0.000500	<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorodecanoic acid (PFDA)	0.0005	mg/kg DW			<0.000500	< 0.00500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorododecanoic acid (PFDoDA)	0.0005	mg/kg DW			<0.000500	< 0.00500	< 0.000500	<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluoroheptane sulfonic acid (PFHpS)	0.0005	mg/kg DW			<0.000500	< 0.00500	<0.000500	<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluoroheptanoic acid (PFHpA)	0.0005	mg/kg DW			<0.000500	< 0.00500	<0.000500	<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorohexane sulfonic acid (PFHxS)	0.0005	mg/kg DW	1 #1 / 20 #2		<0.000500	< 0.00500	< 0.000500	<0.000500	< 0.000500	<0.000500	< 0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorohexanoic acid (PFHxA)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorononanoic acid (PFNA)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorooctane sulfonamide (FOSA)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorooctane sulfonic acid (PFOS)	0.0005	mg/kg DW	1 <sup>#1</sup> / 20 <sup>#2</sup> / 16.4 <sup>#3</sup>	0.014 <sup>#4</sup>	<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	0.00437
Perfluorooctanoic acid (PFOA)	0.0005	mg/kg DW	10 #1 / 20 #2 / 16.4 #3	0.022 <sup>#4</sup>	<0.000500	0.0269	<0.000500	0.00175	0.000796	0.00269	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	0.00429
Perfluoropentanoic acid (PFPeA)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluoroundecanoic acid (PFUnDA)	0.0005	mg/kg DW			<0.000500	<0.00500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Sum of 12 PFAS (M1)	0.003	mg/kg DW			-	0.0269	< 0.00300	0.00175	-	-	-	<0.00300	<0.00300	<0.00300	-	-
PFOS + PFHxS		mg/kg DW	20 #2		<0.0010	< 0.0010	<0.0010	<0.0010	< 0.0010	<0.0010	< 0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.00437
Physical Parameters										1				1		
Dry matter @ 105°C		%			70.6	31.0	52.6	40.4	38.1	73.5	91.4	84.7	81.8	91.5	85.9	42.8

#### Comments

- #1 Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan (NEMP)
- Version 2.0. January 2020. Public Open Space.
  Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan (NEMP) #2
- Version 2.0. January 2020. Commercial/ Industrial
  United States Environmental Protection Agency (USEPA). 2020. Regional Screening Levels (RSLs). RSL User's Guide, and RSLs Calculator, May #3 2020. Composite Worker.

  Environment Agency, Derivation and use of soil screening values for assessing ecological risks, report – ShARE id26 (revised), March 2020.
- #4

(blank): No assessment criteria available

MDL Method Detection Limit

xx Exceedance of Human Health Screening Criterion
xx Exceedance of Ecological Screening Criterion

Environmental Protection Agency

Table 2: Sediment PFAS Analytical Results

				Sample Location		Shannon 5		Shannon 4		Shannon 6				Shannon 8			Shar	nnon 9
Appendix C - Table 3: Sediment PFAS Results				Sample ID	RS_SS02	RS_SS02	RS_SS02	RS_SS02	RS_SS03	RS_SS03	RS_SS01	RS_SS01	RS_SS02	RS_SS02	RS_SS01	RS_SS01	RS_SS01	RS_SS01
				Laboratory Sample ID	PR2155273018	PR21B7051018	PR21B7681002	PR2217901018	PR2183443065	PR2183443066	PR2217901017	PR2155273017	PR2183443015	PR2183443059	PR21B7051017	PR21B7681001	PR2183443014	PR2183443058
				Quarter	Q1	Q3	Q3	Q4	Q1	Q1	Q4	Q1	Q2	Q2	Q3	Q3	Q2	Q2
				Sampling Date	08/06/2021	23/11/2021	23/11/2021	22/02/2022	25/08/2021	25/08/2021	22/02/2022	08/06/2021	25/08/2021	25/08/2021	23/11/2021	23/11/2021	25/08/2021	25/08/2021
			Human Health	Ecological Screening Criteria							<u> </u>							
Perfluorinated Compounds	MDL	Unit	Screening Criteria	Ecological Screening of iteria							<u> </u>							
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorobutane sulfonic acid (PFBS)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorobutanoic acid (PFBA)	0.0005	mg/kg DW	16, 400 <sup>#3</sup>		<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorodecane sulfonic acid (PFDS)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorodecanoic acid (PFDA)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500
Perfluorododecanoic acid (PFDoDA)	0.0005	mg/kg DW			<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500
Perfluoroheptane sulfonic acid (PFHpS)	0.0005	mg/kg DW			<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500
Perfluoroheptanoic acid (PFHpA)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluorohexane sulfonic acid (PFHxS)	0.0005	mg/kg DW	1 #1 / 20 #2		<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	0.000502	< 0.000500	<0.000500
Perfluorohexanoic acid (PFHxA)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500
Perfluorononanoic acid (PFNA)	0.0005	mg/kg DW			<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500
Perfluorooctane sulfonamide (FOSA)	0.0005	mg/kg DW			<0.000500	< 0.000500	<0.000500	< 0.000500	< 0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500
Perfluorooctane sulfonic acid (PFOS)	0.0005	mg/kg DW	1 <sup>#1</sup> / 20 <sup>#2</sup> / 16.4 <sup>#3</sup>	0.014 <sup>≇4</sup>	<0.000500	< 0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	0.0100	< 0.000500	<0.000500
Perfluorooctanoic acid (PFOA)	0.0005	mg/kg DW	10 #1 / 20 #2 / 16.4 #3	0.022 <sup>#4</sup>	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluoropentanoic acid (PFPeA)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Perfluoroundecanoic acid (PFUnDA)	0.0005	mg/kg DW			<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	< 0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Sum of 12 PFAS (M1)	0.003	mg/kg DW			-	< 0.00300	-	-	<0.00300	<0.00300	-	-	<0.00300	<0.00300	<0.00300	-	< 0.00300	< 0.00300
PFOS + PFHxS		mg/kg DW	20 #2		<0.0010	<0.0010	<0.0010	< 0.0010	<0.0010	<0.0010	<0.0010	< 0.0010	<0.0010	<0.0010	<0.0010	0.010502	< 0.0010	<0.0010
Physical Parameters											1						1	
Dry matter @ 105°C		%			42.8	74.5	65.0	28.9	76.8	73.7	86.1	47.0	54.3	61.0	85.1	78.8	90.1	91.5

#### Comments

#1 Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan (NEMP)

Version 2.0. January 2020. Public Open Space.
#2 Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan (NEMP)

Version 2.0. January 2020. Commercial Industrial
#3 United States Environmental Protection Agency (USEPA). 2020. Regional Screening Levels (RSLs). RSL User's Guide, and RSLs Calculator, May

2020. Composite Worker.

Environment Agency, Derivation and use of soil screening values for assessing ecological risks, report – ShARE id26 (revised), March 2020.

#4 Environment Agency, Derivation and use of soil screening values for asset (blank): No assessment criteria available

MDL Method Detection Limit

xx Exceedance of Human Health Screening Criterion
xx Exceedance of Ecological Screening Criterion

Environmental Protection Agency

				Surface Water								SW Results						
				Sample Location				RB_SW01							RB_SW02			
				Sample ID	RB_SW01	RB_SW01	RB_SW01	RB_SW01	RB_SW01		RB_SW01	RB_SW02	RB_SW02	RB_SW02	RB_SW02		RB_SW02	
Appendix C - Table 4: Surface Water PFAS Results				Laboratory Sample ID		PR2183443008	PR2183443032	PR21B7051008	PR21B7051045	PR2217901008	PR2218053001	PR2155273009	PR2183443009	PR2183443033	PR21B7051009	PR21B7051046	PR2217901009	PR2217901042
				Quarter	Q1	Q2	Q2	Q3	Q3	Q4	Q4	Q1	Q2	Q2	Q3	Q3	Q4	Q4
				Sam pling Date	09/06/2021	26/08/2021	26/08/2021		24/11/2021	23/02/2022	23/02/2022	09/06/2021		26/08/2021	24/11/2021	24/11/2021	23/02/2022	23/02/2022
			Human Health Screening	Environmental Quality Standard														
Per fluor insted Com pounds		Unit	Criteria															
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010	μq/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010	μg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorobutane sulfonic acid (PFBS)	0.010	μg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorobutanoic acid (PFBA)		μg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorodecane sulfonic acid (PFDS)	0.010	μg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorodecanoic acid (PFDA)	0.010	μg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorododecanoic acid (PFDoDA)		μg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluoroheptane sulfonic acid (PFHpS)	0.010	μq/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluoroheptanoic acid (PFH pA)		μq/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorohexane sulfonic acid (PFHxS)	0.010	μq/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorohexanoic acid (PFHxA)	0.010	μq/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorononanoic acid (PFNA)		μq/L			<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorooctane sulfonamide (FOSA)	0.010	μq/L			<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010
Perfluorooctane sulfonic acid (PFOS)		μg/L	0.070 <sup>#4</sup> / 0.3 <sup>#3</sup> / 0.01 <sup>#9</sup> / 0.1 <sup>#10</sup>	0.00013 <sup>85</sup> / 0.00065 <sup>86</sup> / 7.2 <sup>87</sup> / 36 <sup>88</sup>	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluorooctanoic acid (PFOA)	0.0100	μg/L	10 *1 / 0.3 *3 / 0.56 *2 / 0.01*9 / 0.1*10		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluoropentanoic acid (PFPeA)	0.010	μg/L			<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010
Perfluoroundecanoic acid (PFUnDA)	0.010	μq/L			< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Sum of PFOS + PFHxS		μg/L	2.0 *1 / 0.07 *2		< 0.02	< 0.02	< 0.02	<0.02	<0.02	<0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Sum of PFOA + PFOS		μg/L	0.070 #4		< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
						•								•		•		

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MDL	Method Detection Limit
xx	Exceeds Human Health Screening Offeria Dtinking Water and / or Recreational Use
xx	Exceeds Environmental Screening Criteria Annual Average Concentration
xx	Exceeds Environmental Screening Criteria Maximum Allowable Concentration



			i	1													
				Surface Water						Rivi	er Bros na SW Res	ults					
				Sample Location				RB_SW03		·····	·····			RB_S	SW04		,
						٠	RB_SW03	RB_SW03	RB_SW03	RB_SW03	RB_SW03	RB_SW04	RB_SW04	RB_SW04	RB_SW04	RB_SW04	RB_SW04
Appendix C - Table 4: Surface Water PFAS Results				Laboratory Sample ID			PR2183443034		PR21B7051047			PR2155273011	PR2183443035	PR21B7051011	PR21B7051048	PR2217901044	PR2217901011
				Quarter						Q4					Q3		
				Sam pling Date	09/06/2021	26/08/2021	26/08/2021	24/11/2021	24/11/2021	23/02/2022	23/02/2022	09/06/2021	26/08/2021	25/11/2021	25/11/2021	22/02/2022	24/02/2022
			Human Health Screening	Environmental Quality Standard													
Per fluor insted Com pounds	MDL	Unit	Criteria														
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010	μg/L			<0.010		<0.010		<0.010				<0.010		<0.010		<0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorobutane sulfonic acid (PFBS)	0.010	μg/L			<0.010	<0.010	<0.010		<0.010		<0.010		<0.010	<0.010	<0.010		<0.010
Perfluorobutanoic acid (PFBA)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010		<0.010	<0.010	<0.010		<0.010
Perfluorodecane sulfonic acid (PFDS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorodecanoic acid (PFDA)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorododecanoic acid (PFDoDA)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluoroheptane sulfonic acid (PFHpS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluoroheptanoic acid (PFH pA)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorohexane sulfonic acid (PFHxS)	0.010	μg/L			<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorohexanoic acid (PFHxA)	0.010	μg/L			<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010
Perfluorononanoic acid (PFNA)	0.010	μg/L			<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010
Perfluorooctane sulfonamide (FOSA)	0.010	μg/L			<0.010	<0.010		< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010
Perfluorooctane sulfonic acid (PFOS)	0.0100	μg/L	0.070 *4 / 0.3 *3 / 0.01*9 / 0.1*10	0.00013 <sup>85</sup> / 0.00065 <sup>86</sup> / 7.2 <sup>87</sup> / 36 <sup>88</sup>	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluoroctanoic acid (PFOA)	0.0100	μg/L	10 *1 / 0.3 *3 / 0.56 *2 / 0.01*9 / 0.1*10		0.0111	0.0119	0.0133	0.0108	<0.0100	<0.0100	<0.0100	0.0145	0.0160	0.0131	0.0126	0.0124	0.0120
Perfluoropentanoic acid (PFPeA)	0.010	μg/L			<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010
Perfluoroundecanoic acid (PFU nDA)	0.010	μg/L			<0.010	< 0.010	<0.010	< 0.010		<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010
Sum of PFOS + PFHxS	Ţ	μg/L	2.0 *1 / 0.07 *2		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Sum of PFOA + PFOS	†	μg/L	0.070 #4		0.0111	0.0119	0.0133	0.0108	<0.02	<0.02	<0.02	0.0145	0.0160	0.0131	0.0126	0.0124	0.0120
Sum of PFOA + PFOS	<u> </u>	µg/L	0.070 *4	J	0.0111	0.0119	0.0133	0.0108	<0.02	<0.02	<0.02	0.0145	0.0160	0.0131	0.0126	0.0124	0.0120

2

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- #7 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Inland Surface Water #8 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Other Surface Water
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MDL	Method Detection Limit
xx	Exceeds Human Health Screening Criteria Diriking Water and / or Recreational Use
XX	Exceeds Environmental Screening Offeria Annual Average Concentration
xx	Exceeds Environmental Screening Criteria Maximum Allowable Concentration

				Surface Water						River Brosna						
				Sample Location				W05				·	RB_S	W06		
				Sample ID	RB_SW05	RB_SW05	RB_SW05	RB_SW05	RB_SW05	RB_SW05	RB_SW06	RB_SW06	RB_SW06	RB_SW06	RB_SW06	RB_SW06
Appendix C - Table 4: Surface Water PFAS Results				Laboratory Sample ID	PR2155273012	PR2183443036	PR21B7051012	PR21B7051049	PR2217901012	PR2217901045	PR2155273013		PR21B7051013	PR21B7051050	PR2217901046	PR2217901013
				Quarter	Q1	Q2	Q3	Q3	Q4	Q4	Q1	Q2	Q3	Q3	Q4	Q4
				Sam pling Date				25/11/2021		24/02/2022		27/08/2021	25/11/2021	25/11/2021		24/02/2022
			Human Health Screening	Environmental Quality Standard												
Per fluor insted Com pounds	MDL	Unit	Criteria	Environmental duality standard												
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010	μg/L			<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorobutane sulfonic acid (PFBS)	0.010	μg/L			< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorobutanoic acid (PFBA)	0.010	μg/L			<0.010	<0.020	< 0.020	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.020	< 0.010	<0.010	<0.010
Perfluorodecane sulfonic acid (PFDS)	0.010	μg/L			<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010
Perfluorodecanoic acid (PFDA)	0.010	μg/L			<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010
Perfluorododecanoic acid (PFDoDA)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluoroheptane sulfonic acid (PFH pS)	0.010	μg/L			< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluoroheptanoic acid (PFHpA)	0.010	μq/L			<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010
Perfluorohexane sulfonic acid (PFHxS)	0.010	μg/L			<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorohexanoic acid (PFHxA)	0.010	μg/L			<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010
Perfluorononanoic acid (PFNA)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorooctane sulfonamide (FOSA)	0.010	μg/L			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluoroctane sulfonic acid (PFOS)	0.0100	μq/L	0.070 *4 / 0.3 *3 / 0.01*9 /	0.00013 <sup>65</sup> / 0.00065 <sup>66</sup> / 7.2 <sup>67</sup> /	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
	<u> </u>	1	0.1*10	36 <sup>#8</sup>			<u> </u>		<u> </u>			<u> </u>	<u> </u>			<u> </u>
Perfluorooctanoic acid (PFOA)	0.0100	μg/L	10 *1 / 0.3 *3 / 0.56 *2 / 0.01*9 / 0.1*10		0.0346	0.0354	0.0340	0.0258	0.0478	0.0440	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluoropentanoic acid (PFPeA)	0.010	un/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010
Perfluoroundecanoic acid (PFUnDA)	0.010				<0.010	<0.010		< 0.010		<0.010	<0.010		<0.010		< 0.010	< 0.010
Sum of PFOS + PFHxS	1		2.0 *1 / 0.07 *2		<0.070	<0.02	d0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Sum of PEOA + PEOS	<del> </del>	<b></b>							0.0478	0.0440			ļ			
Sum or P+UA+P+US		μg/L	0.070 #4		0.0346	0.0354	0.0340	0.0258	0.0478	0.0440	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

3

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  Regulations 2000 openior to PDG and PDG Accordations in deficiting water Coulter 2009.
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  and Environment Coulter Duried.
- and Ecological Criteria Division, Washington, DC 20480. EPA Document Number: 822-R-16-004. May 2016

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- #6 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). AAC Other Surface Water
- #7 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Inland Surface Water
- #8 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Other Surface Water
- United Kingdom Drinking Water Inspectorate (DWI). Regulations 2016. Guidance on the Water Supply (Water Quality) Regulations 2000
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- Drinking Water Inspectorate, January 2021. Survaines Control Temperature 510 supportate) and PROA (perfluorocctancic acid) concentrations in drinking water Tier 3 Regulation 4(2)

MDL	Method Detection Limit
xx	Exceeds Human Health Screening Criteria Diriking Water and / or Recreational Use
xx	Exceeds Environmental Screening Criteria Annual Average Concentration
xx	Exceeds Environmental Screening Oriteria Maximum Allowable Concentration



				Surface Water							River Shanno	n SW Results						
				Sample Location				RS_SW01							RS_SW02			
					RS_SW01	RS_SW02												
Appendix C - Table 4: Surface Water PFAS Results				Laboratory Sample ID	PR2155273001	PR2183443001	PR2183443025	PR21B7051001	PR21B7051038	PR2217901001	PR2217901035	PR2155273002	PR2183443002	PR2183443026	PR21B7051002	PR21B7051039	PR2217901002	PR2217901055
				Quarter	Q1	Q2	Q3	Q3	Q3	Q4	Q4	Q1	Q2	Q3	Q3	Q3	Q4	Q4
		_		Sam pling Date		26/08/2021		24/11/2021		23/02/2022		09/06/2021		26/08/2021			23/02/2022	23/02/2022
			Human Health Screening	Environmental Quality Standard														
Per fluor inated Com pounds	MDL U		Criteria	Environmental Quality standard														
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010 µ	g/L			< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010 µ	g/L			< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluorobutane sulfonic acid (PFBS)		g/L			<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010
Perfluorobutanoic acid (PFBA)	0.010 µ	g/L			< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorodecane sulfonic acid (PFDS)	0.010 µ	g/L			<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010
Perfluorodecanoic acid (PFDA)	0.010 µ	g/L			< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010
Perfluorododecanoic acid (PFDoDA)	0.010 µ	g/L			< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluoroheptane sulfonic acid (PFHpS)	0.010 µ	g/L			< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluoroheptanoic acid (PFHpA)		g/L			<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorohexane sulfonic acid (PFHxS)		g/L			<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010
Perfluorohexanoic acid (PFH xA)	0.010 µ	g/L			< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010
Perfluorononanoic acid (PFNA)	0.010 µ	g/L			< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010
Perfluorooctane sulfonamide (FOSA)	0.010 µ	g/L			< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluoroctane sulfonic acid (PFOS)	1 1	0	1.070 *4 / 0.3 *3 / 0.01*9 /	0.00013 <sup>85</sup> / 0.00065 <sup>86</sup> / 7.2 <sup>87</sup> /	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Pentuoroociane surionic acid (PFOS)	1 1	g/L	0.1*10	36*8							•				•		•	
	† <u>†</u>		10 *1 / 0.3 *3 / 0.56 *2 /											I	1		1	1
Perfluorooctanoic acid (PFOA)	0.0100 μ	g/L	0.01*9 / 0.1*10		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluoropentanoic acid (PFPeA)	0.010 µ	g/L			<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluoroundecanoic acid (PFUnDA)	0.010 µ	g/L			<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010
Sum of PFOS + PFHxS		g/L	20 *1 / 0.07 *2		< 0.02	<0.02	<0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	<0.02
Sum of PFOA + PFOS		n/L	0.070 #4		<0.02	< 0.02	<0.02	< 0.02	<0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	<0.02	< 0.02
		9	0.070	<u> </u>		.0.02										.0.02		.3.02

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- #7 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Inland Surface Water
- #8 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019), MAC Other Surface Water United Kingdom Drinking Water Inspectorate (DWI). Regulations 2016. Guidance on the Water Supply (Water Quality) Regulations 2000
- specific to PFOS and PFOA concentrations in diriking water, January 2021. Tier 2 Regulation 10
  Deinking Water Inspectorate, January 2021. Guidance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS (per
- Dirinking Water Inspectorate, January 2011. Subsection of the August State Sta

MDL	Method Detection Limit
xx	Exceeds Human Health Screening Offerla Dinking Water and / or Recreational Use
XX	Exceeds Environmental Screening Offeria Annual Average Concentration
xx	Exceeds Environmental Screening Offeria Maximum Allowable Concentration



			Surface Water							River Shannor	n SW Results						
			Sample Location				RS_SW03							RS_SW04			
				RS_SW03	RS_SW04	RS_SW04	RS_SW04	RS_SW04	RS_SW04	RS_SW04	RS_SW04						
Appendix C - Table 4: Surface Water PFAS Results			Laboratory Sample ID	PR2155273003	PR2183443003	PR2183443027	PR21B7051003	PR21B7051040	PR2217901003	PR2217901036	PR2155273004	PR2183443004		PR21B7051004	PR21B7051041	PR2217901004	PR2217901037
			Quarter	Q1	Q2	Q3	Q3	Q3	Q4	Q4	Q1	Q2	Q3	Q3	Q3	Q4	Q4
			Sam pling Date		26/08/2021		24/11/2021		23/02/2022		08/06/2021		26/08/2021			22/02/2022	22/02/2022
		Human Health Screening	Environmental Quality Standard														
Per fluor insted Com pounds	MDL Unit	Criteria	Environmental duality Standard														
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010 µg/L			<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010 µg/L			<0.010	< 0.010	< 0.010	< 0.010	<0.010		< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluorobutane sulfonic acid (PFBS)	0.010 µg/L			<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010
Perfluorobutanoic acid (PFBA)	0.010 µg/L			< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorodecane sulfonic acid (PFDS)	0.010 µg/L			<0.010	< 0.010	<0.010	< 0.010	<0.010		<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010
Perfluorodecanoic acid (PFDA)	0.010 µg/L			<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010
Perfluorododecanoic acid (PFDoDA)	0.010 µg/L			< 0.010	<0.010	< 0.010	< 0.010	<0.010		< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010
Perfluoroheptane sulfonic acid (PFHpS)	0.010 μg/L			<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010
Perfluoroheptanoic acid (PFHpA)	0.010 μg/L			<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorohexane sulfonic acid (PFHxS)	0.010 μg/L			<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorohexanoic acid (PFHxA)	0.010 μg/L			<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorononanoic acid (PFNA)	0.010 µg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010
Perfluorooctane sulfonamide (FOSA)	0.010 µg/L			<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010
Perfluorooctane sulfonic acid (PFOS)	0.0100 µg/L	0.070 *4 / 0.3 *3 / 0.01*9 / 0.1*10	0.00013 <sup>85</sup> / 0.00065 <sup>86</sup> / 7.2 <sup>87</sup> / 36 <sup>88</sup>	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluorooctanoic acid (PFOA)	0.0100 µg/L	10 *1 / 0.3 *3 / 0.56 *2 / 0.01*9 / 0.1*10		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Perfluoropentanoic acid (PFPeA)	0.010 µg/L			<0.010	<0.010	<0.010	< 0.010	<0.010		<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010
Perfluoroundecanoic acid (PFUnDA)	0.010 µg/L			< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010
Sum of PFOS + PFHxS	μg/L	2.0 *1 / 0.07 *2		< 0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Sum of PFOA + PFOS	μg/L	0.070 #4		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.02

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  NELMP | Version 2.0, January 2020. Dinking Water.
  United Kingsborn Dinking Water Inspectionate (PMIN). Guardams of drinking water quality, 2009. Guidance on the Water Supply Water Quality)

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- #8 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019), MAC Other Surface Water United Kingdom Drinking Water Inspectorate (DWI). Regulations 2016. Guidance on the Water Supply (Water Quality) Regulations 2000
- specific to PFOS and PFOA concentrations in diriking water, January 2021. Tier 2 Regulation 10
  Deinking Water Inspectorate, January 2021. Guidance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS (per
- Dirinking Water Inspectorate, January 2011. Subsection of the August State Sta

MDL	Method Detection Limit
xx	Exceeds Human Health Screening Offerla Dinking Water and / or Recreational Use
XX	Exceeds Environmental Screening Offeria Annual Average Concentration
xx	Exceeds Environmental Screening Offeria Maximum Allowable Concentration

					-								Buo	r Shannon SW Ro	ente								
				Surface Water	ļ		RS SW05			ı							·····			RS SW07			
				Sample Location			,						,		,								
											<u> </u>	RS_SW06			RS_SW06			RS_SW07		RS_SW07	RS_SW07	RS_SW07	RS_SW07
Appendix C - Table 4: Surface Water PFAS Results				Labor ator y Sam ple ID		PR2183443041					PR2183443005	PR2183443029	PR21B7051005	PR21B7051042	PR2217901005		PR2156127002	PR2183443042	PR2183443053	PR21B7051053	PR21B7051054	PR2217901047	
				Quarter											Q4								
		1		Sam pling Date	08/06/2021	25/08/2021	25/08/2021	23/11/2021	23/11/2021	08/06/2021	25/08/2021	25/08/2021	23/11/2021	23/11/2021	22/02/2022	22/02/2022	08/06/2021	25/08/2021	25/08/2021	23/11/2021	23/11/2021	22/02/2022	22/02/2022
			Human Health Screening	Environmental Quality Standard																			
Per fluor insted Com pounds		Unit	Criteria																				
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluorobutane sulfonic acid (PFBS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010
Perfluorobutanoic acid (PFBA)	0.010	μg/L			< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010
Perfluorodecane sulfonic acid (PFDS)	0.010	μg/L		<u> </u>	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010
Perfluorodecanoic acid (PFDA)	0.010	µg/L		<u> </u>	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010
Perfluorododecanoic acid (PFDoDA)	0.010	μg/L		1	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010
Perfluoroheptane sulfonic acid (PFHpS)	0.010	μg/L		1	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010
Perfluoroheptanoic acid (PFH pA)	0.010	µg/L			< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	<0.010		< 0.010	<0.010	< 0.010
Perfluorohexane sulfonic acid (PFHxS)	0.010	µg/L			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010		<0.010	< 0.010	< 0.010
Perfluorohexanoic acid (PFHxA)	0.010	µg/L			<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010
Perfluorononanoic acid (PFNA)	0.010	µg/L			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010
Perfluorooctane sulfonamide (FOSA)	0.010	µg/L			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010		< 0.010	< 0.010	< 0.010
		1	0.070 *4 / 0.3 *3 / 0.01*9 /	0.00013 <sup>65</sup> / 0.00065 <sup>66</sup> / 7.2 <sup>67</sup> /				l	l				l					l					
Perfluorooctane sulfonic acid (PFOS)	0.0100	μg/L	0.1*10	36*8	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
	†	†	10 *1 / 0.3 *3 / 0.56 *2 /					ļ			†		·					ļ			†		†
Perfluorooctanoic acid (PFOA)	0.0100	μg/L			<0.0100	<0.0100	<0.0100	< 0.0100	<0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
			0.01** / 0.1***						ļ		ļ		ļ								ļ		ļ
Perfluoropentanoic acid (PFPeA)					<0.010	<0.010	<0.010	<0.010	<0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Perfluoroundecanoic acid (PFUnDA)	0.010					<0.010	<0.010	<0.010	<0.010		<0.010	<0.010		<0.010	<0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sum of PFOS + PFHxS	ļ	μg/L	2.0 *1 / 0.07 *2		<0.02	< 0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Sum of PFOA + PFOS	i	μg/L	0.070 #4	JI	<0.02	<0.02	<0.02	< 0.02	<0.02	< 0.02	<0.02	<0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	<0.02	< 0.02	< 0.02

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- #6 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). AAC Other Surface Water
- #7 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Inland Surface Water #8 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAIC Other Surface Water
- United Kingdom Drinking Water Inspectorate (DWI). Regulations 2016. Guidance on the Water Supply (Water Quality) Regulations 2000
- specific to PFOS and PFOA concentrations in diriking water. January 2021. Tier 2 Regulation 10
  Diriking Water Inspectorate, January 2021. Gui dance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS (per
- Drinking Water Inspectorate, January 2021. Survaines Control Temperature 510 supportate) and PROA (perfluorocctancic acid) concentrations in drinking water Tier 3 Regulation 4(2)

MDL	Method Detection Limit
xx	Exceeds Human Health Screening Otteria Dinking Water and / or Recreational Use
xx	Exceeds Environmental Screening Offeria Annual Average Concentration
xx	Exceeds Environmental Screening Offeria Maximum Allowable Concentration



				Surface Water							River Shannor							
				Sample Location				RS_SW08							RS_SW09			
				Sample ID	RS_SW08	RS_SW09	RS_SW09	RS_SW09	RS_SW09	RS_SW09	RS_SW09	RS_SW09						
Appendix C - Table 4: Surface Water PFAS Results				Laboratory Sample ID	PR2155273006	PR2183443006	PR2183443030	PR21B7051006	PR21B7051043	PR2217901006	PR2217901039	PR2155273007		PR2183443031	PR21B7051007	PR21B7051044	PR2217901007	PR2217901040
				Quarter	Q1	Q2	Q2	Q3	Q3	Q4	Q4	Q1	Q2	Q2	Q3	Q3	Q4	Q4
				Sam pling Date	08/06/2021	25/08/2021	25/08/2021		23/11/2021	22/02/2022	22/02/2022	08/06/2021		25/08/2021	23/11/2021	23/11/2021	22/02/2022	22/02/2022
			Human Health Screening	Environmental Quality Standard														
Per fluor insted Com pounds	MDL	Unit	Criteria	,														
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.010	μg/L			<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorobutane sulfonic acid (PFBS)	0.010	µq/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorobutanoic acid (PFBA)	0.010	μg/L			< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorodecane sulfonic acid (PFDS)	0.010	µq/L			< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010
Perfluorodecanoic acid (PFDA)	0.010	µq/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorododecanoic acid (PFDoDA)	0.010	μg/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluoroheptane sulfonic acid (PFHpS)	0.010	µq/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluoroheptanoic acid (PFH pA)	0.010	µq/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorohexane sulfonic acid (PFHxS)	0.010	μg/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorohexanoic acid (PFHxA)	0.010	µq/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorononanoic acid (PFNA)	0.010	μg/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorooctane sulfonamide (FOSA)	0.010	μg/L			< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010
Perfluorocctane sulfonic acid (PFOS)	0.0100	μq/L	0.070 *4 / 0.3 *3 / 0.01*9 /	0.00013 <sup>65</sup> / 0.00065 <sup>66</sup> / 7.2 <sup>67</sup> /	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	< 0.0100	<0.0100	< 0.0100	<0.0100	<0.0100	<0.0100	< 0.0100	<0.0100	<0.0100
	1		0.1*10	36**										1		•	1	1
Perfluorocctanoic acid (PFOA)	0.0100		10 *1 / 0.3 *3 / 0.56 *2 /		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
, , , ,	: :	μg/L	0.01*9 / 0.1*10			!								!			1	
Perfluoropentanoic acid (PFPeA)	0.010	μg/L			<0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluoroundecanoic acid (PFUnDA)	0.010	µq/L			< 0.010	<0.010	< 0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010	<0.010
Sum of PFOS + PFHxS	1 1	μg/L	2.0 *1 / 0.07 *2		< 0.02	< 0.02	< 0.02	< 0.02	<0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Sum of PFOA + PFOS		μg/L	0.070 *4		< 0.02	< 0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.02	< 0.02	< 0.02	<0.02	< 0.02	<0.02	<0.02
<u> </u>	•			-		•								•	-	•		

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- Heads of Environment Protection Authority (HEPA) Australia and New Zealand, 2018. PFAS National Environmental Management Plan
- NELMP | Version 2.0, January 2020. Recreditoral Water.
  Heads of Enricement Protection Authority (HEPA) Authorities and New Zealand, 2018, PFAS National Enricommental Management Plan
  NELMP | Version 2.0, January 2020. Dinking Water.
  United Kingsborn Dinking Water Inspectionate (PMIN). Guardams of drinking water quality, 2009. Guidance on the Water Supply Water Quality)

- #6 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). AAC Other Surface Water #7 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019). MAC Inland Surface Water
- #8 European Union Environmental Objectives (Surface Waters) Regulations (S.I.No. 77 as amended in 2019), MAC Other Surface Water United Kingdom Drinking Water Inspectorate (DWI). Regulations 2016. Guidance on the Water Supply (Water Quality) Regulations 2000
- specific to PFOS and PFOA concentrations in diriking water, January 2021. Tier 2 Regulation 10
  Deinking Water Inspectorate, January 2021. Guidance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS (per
- Dirinking Water Inspectorate, January 2011. Subsection of the August State Sta

MDL	Method Detection Limit
xx	Exceeds Human Health Screening Criteria Dtriking Water and / or Recreational Use
xx	Exceeds Environmental Screening Offerla Annual Average Concentration
xx	Exceeds Environmental Screening Criteria Maximum Allowable Concentration

IppendixC - Table 5: Surface Water Pestidde Results		Sample L Samp Laboratory Samp	ID RB_SW01 ID PR2155273030	RB_SW01 PR2183443057	RB_SW01 PR21B7051030	RB_SW01 PR2217901029	RB_SW02 PR2155273031	RB_SW02 PR2183443022	RB_SW02 PR21B7051031	RB_SW02 PR2217901030	RB_SW03 PR2155273032	RB_SW03 PR2183443049	RB_SW03 PR21B7051032	PR22179
ppendic - ane 2. anae waer residue realis		Sampling	tuater 01 tete 09/06/2021	02 26/08/2021	03 24/11/2021	04 23/02/2022	Q1 09/06/2021	C2 26,08,/2021	03 24/11/2021	Q4 23/02/2022	01 09/06/2021	C2 26/08/2021	03 24/11/2021	23/02/
nganochlorine Pesticides		MCL Environmental Quality Standard	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<u> </u>
2.1.4. Suphiminary 2.1.	μgt 0	1.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0
.4-00E	1996   1996	1.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1
:4-00T :4-00D	μgt 0 μgt 0	0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.
.4:-DDE	µgt 0	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Lachtor	hâr o	3.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1 0
Udrin Chlordane-cis	μg/L 0. μg/L 0	.0050	<0.0050	<0.0050 <0.010	<0.0050	<0.0050	<0.0050 <0.010	<0.0050 <0.010	<0.0050 <0.010	<0.0050 <0.010	<0.0050	<0.0050 <0.010	<0.0050 <0.010	-0
hiordane-trans	µgt 0	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	- 0
Neldrin	hâr o	1.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
n dosulfan sulfate n drin	μgt 0 μgt 0	0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
hdrin aldehyde	μgt 0	1.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	-0
nonn wione Septablor	hâr o	3.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1
teptathloroepoxide-cis	μgt 0 μgt 0	0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
Seachlorobenzene (HCB)	μgt 0.	.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	- 0
se auchionog dohe aune Alpha	μgt 0	3.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1
le sixhlorogdohe sine. Be ta le sixhlorogdohe sine. Delta	μgt 0 μgt 0	0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
fexach lorogdoh exane Epsilon	µgt 0	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-0
An analysis of the control of the co	pgt 0	3.010 3.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	1
iodrin Aethosphior	µgt 0	0.010	<0.010	<0.010 <0.010	-									
Airex	μgt 0	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
ionachtor-trans	µgt 0 µgt 0 µgt 0 µgt 0	200 200 200 200 200 200 200 200 200 200	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1
ionathioritans Digithioritans rentathioris benzene	hâr o hâr o nar o	0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	0
en taktion bename um of 3 le trabilemblenbrens um of 4 seather benames um of 4 seather benames um of 4 isomen DDT um of 6 seather DDT	μgt 0	1.030	<0.030	<0.010	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	-
umof 4 isomers DDT	hâr 0 hâr 0	1.040	<0.040 <0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040 <0.040	<0.040	<0.040	<0.040	1 3
elodrin	hâr o	1.060	<0.060 <0.010	<0.060	<0.060	<0.060 <0.010	<0.060	<0.060 <0.010	<0.060 <0.010	<0.060	<0.060	<0.060 <0.010	<0.060 <0.010	- 0
iffuralin	μgt 0	0.010 0.010 0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-
ifforalin Igha findo sulfan ee la findo sulfan	µgt 0	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1
988 153	+			<u> </u>			ł	<u></u>		<u> </u>				
	µgl 0	3.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-0
Pesticides		<del>-</del>		1	ļ	<u> </u>								<u>†                                    </u>
-(3.4-dichloropheny) urea (DCPU)  3.4-Moderne nois and  Chloro 3.4-dis thy asstantile  -Methylus (long 4-stiffuonoms thy ben nois and	1915   0   1916   191	1.050	<0.050 <0.100	<0.050 <0.600	<0.050 <1.50	<0.050 <0.800	<0.050	<0.050	<0.050 <1.00	<0.050	<0.050	<0.050	<0.050 <1.50	- 0
-Chloro-2.6-die thylae tanilide	µgt 0	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
-mino-N-(isopropy)benzanide	hâr o	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
Mathylandron 4 enthronous thy barrain and search Coppengificanisates  4.40 florancia 4.4.5 flo	μgt 0 μgt 0	1.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	-0
.4-DP (isomen)	μgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0
.4.5-P	hâr o	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
-CPP -Chloroquinoxline-2,3-diol	μgt 0 μgt 0	0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	1 3
ice tamiprid ce tochlor	μgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	- 0
id benzolar-Smethyl	μgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 3
idfluorfen Idonifen	μgt 0	0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0
lightor	μgt 0	3.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0
Udicarb Udicarb sulfone	μgt 0	3.050 3.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 3
ime tryn Ierido sulfuron	μgt 0 μgt 0	1.050 1.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	- 0
iminopyalid	μgt 0	3.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050	-0
draine	μgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0
tratne tratne 2-hydro y tratne de sa thy	hâr 0 hâr 0	0.050 0.050 0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	
traine-desethyl  traine-desispropy			<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
uinphose inty Linphose thy		1.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	1
izo systro bin IAM	hâr o	3.050 3.050 3.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1 3
IDMC	μgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
	hâr 0		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 3
lendioarb lentarone	μgt 0 μgt 0	1.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050							
ientwone methyl	µgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
iteranol	hâr 0	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
to salid Formali	μglL 0 μglL 0	3.050 3.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	1 - 3
iro no pho se thy	µgt 0	1.050	<0.050	<0.050	<0.050 <0.050	1								
adusifos	μgt 0	3.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	# 3
abayi abendalm	μg/L 0	3.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1 0
abetanide abefuran	μgt 0 uat ^	3.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	- 0
uka hukun Aphrong uka hukun 3-biptong uka hukun 3-biptong uka hukun 3-biptong katan kuman 4-bipt khin disa munan	μgt 0	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
aboxin afentraone-ethyl	μgt 0 μgt 0	0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	0
hiorbromuron	µgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
hloridæon	hâr 0	1.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 3
hloridæon-desphenyl	μgt 0 μgt 0	1.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0
hloro to luro n-desme thyl	μgt 0	1.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
hloprophan	μgt 0	1.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	1 3
No to auron Anto propo plan Anto profes An	μgt 0. μgt 0	.0500	<0.0500 <0.050	<0.0500 <0.050	<0.0500 <0.050	<0.0500 <0.050	<0.0500 <0.050	<0.0500 <0.050	<0.0500 <0.050	<0.0500	<0.0500 <0.050	<0.0500 <0.050	<0.0500 <0.050	<0
hlorulfuron	μgt 0	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
	μgt 0		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	4

ippendixC - Table 5: Surface Water Pestidde Results			Sample Lodion Sample ID Laboratory Sample ID Custer Sampling Date	PR2155273030	RB_SW01 PR2183443057	PR21B7051030	RB_SW01 PR2217901029 O4	PR2155273031	PR2183443022 (19	RB_SW02 PR21B7051031 03	PR2217901030 C4	PR2155273032	RB_SW03 PR2183443049 C02	PR21B7051032	PR221791
			Coaffer Sampling Date	09/06/2021	Q2 26/08/2021	24/11/2021	04 23/02/2022	09/06/2021	26/08/2021	QS 24/11/2021	04 23/02/2022	09/06/2021	02 26/08/2021	24/11/2021	23/02/2
ganochlorine Pesticides	Unit		Environmental Quality Standards												1
lomeprop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
lothianidin	hâŗ hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
oumphos rimidine	hâţ.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.0
ynaine ybutyne (Isprol)	hâg hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.0
Computed Considerate Considera	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
yprom natole	hâr hâr	0.050		<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.0
yprodinil yomaine	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.
ymanic MADC Salarinon Salarinon Salarinon Salarinon	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.
Nation	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
Nomba Nichlofenthion	hâg. hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.
skalanina kalanina didelep sa supuka kalanina sa supuka sa supuka	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.
Ndofop Nantanhos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	- 40
Ne thofenoirb	µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	- 0
Nfenazoum Nfenozonazole	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.
Nfenowron Nflubenzuron	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.
XIII of enican	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.
iens thazhlor	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 3
Residential	hâg.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.
New thornorph Neose b	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	-
Nnoterb	hâg	0.050		<0.050	<0.050	<0.300	<0.250	<0.050	<0.050	<0.150	<0.100	<0.050	<0.050	<0.150	-0
Suron desmethyl (DCPMU)	µgt	0.050 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
PTC postonazole	hâţ	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	-0
posiconseole thiofencarb thion	hâr	0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 00000 0 00000 0 00000 0 00000 0 00000 0 00000 0 00000 0 00000 0 000000		<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	-0
tho furnesste	µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0
inamiphos enamiphos	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	-0
enaterol enhexerid	hâţ.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0
enomprop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	- 0
enpropidin	pgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0
enpropimorph ensulfothion	hâg r	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.
inuron Ipronii	hâg hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.
ipnonii loraulam luatiop luatiop bustip (borne)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0
luariop-butyl (isomen)	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
uurugg	hâg hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-0
lutolanii onofos	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-
oramsul furon	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0
communitation custificiant	hâr hâr	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	
lalosylop-methyl (isomen) fesiconsiole	µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0
Se xild no ne	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
madi	µgt.	0.050 0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
mazame thub e n.z-me thyl	hâr hâr	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	- 0
mae thapyr midadoprid	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	- 0
mid at opyrid nid at opyrid nid o warth o ynil	μgt	0.050 0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
pro dione	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
proturon	hâg.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1
so pro turo n-de sme thyl so pro turo n-mo no de sme thyl	hâg hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<
to pyrasm	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
recolormetry unadi nuton CCPA	µgt.	0.050 0.050 0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 3
nuron ICPA	hâg hâg	0.050	0.0751/122/801/0.0751	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1 4
ACPB ACPP (isomen)	1000   1000 	0.050		<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
COTT Toman Control Con	hâţ	0.050		<0.050	-0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
tandipropanid	µgt pgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	
te carbain te fenpy-die thyl	hâg hâg	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<
terosulfuron-enthyl	μgt	0.050 0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 co.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 co.050	<0.050 <0.050	-
etalanji (isomen)	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	# 3
le tanitron le taxishlor	hâg.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	
le tron arole le thaben athiasuron	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
le thanidophos	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
le thiolathion le thiolath	hâg.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	
fethornj fethoxfenoxide	hâg r	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	- 3
le to bromuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
Se towns	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
te tribuan	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050	1 0

			Simple Location	RB_SW01	RB_:	8W01 RB_SW01	an ewa	RB_SW02	RB_:	RB_SW02	99 9903	RB_SW03	RB_:	RB_SW03	RB_SW03
Appendix C - Table 5: Surface Water Pestidde Results			Semple Location Sample ID Laboratory Sample ID	PR2155273030	RB_SW01 PR2183443057	PR21B7051030	RB_SW01 PR2217901029	PR2155273031	RB_SW02 PR2183443022	PR21B7051031	RB_SW02 PR2217901030	PR2155273032	RB_SW03 PR2183443049	PR21B7051032	PR2217901031
			Quater Sampling Date	01 09/06/2021	02 26/08/2021	03 24/11/2021	04 23/02/2022	01 09/06/2021	02 26/08/2021	Q3 24/11/2021	04 23/02/2022	01 09/06/2021	02 26/08/2021	03 24/11/2021	04 23/02/2022
		L				•			•	•	•			•	
Organochlorine Pesticides	Unit		Environmental Quality Standards												!
Metribuan-desamino diketo	μglt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Metribužn-diketo	hâr hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molinite	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Monogotophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Monuton Monuton	hâg r	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Napropanide	hâr hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nap talam Na huma	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nicosulfuron	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nuarimo I	hâg	0.050	,	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Controls Control	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Compl	hâg hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pado bu trato I Pado xo n-e thyl	hâg	0.050	·	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Parao so n-mu thyl	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Parthion-ethyl  Penmagnie	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Penguron	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pendine thalin	hâg hâg	0.050	,	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Phosione	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Phoses t	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Phosphanidon Pidoram	hâg	0.050 0.050		<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n
Pico sylrobin	hâg hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pirimicals	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pirimiphosmethyl	hâg hâg	0.050		<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050
	hâg	0.000		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Printsulfuron-enthyl Prochloriz	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Prodiamine	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Profenofos Promovati	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Promiton	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Prometryn	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propantor Propanouth	hâg	0.050	·	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propinil	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propaguizato p	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propham	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propieonarole	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propoxir Propoxixibarone-sodium	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propyanide	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Proteifo arb  Proteifo arb	hâg	0.050	}	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pylbenzoxm	hâg L	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pylm thanii	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pytiproxiten Quindorsc	hâg hâg	0.050	}	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Quinmera:	hgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Outnoyfen Outstefon	µgt ugt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Rimulfuron	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Se buthylatine	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Se tho sydim	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Smalne	hâg.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Smalne-2-hydroxy Smetryn	hâg	0.050	·	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050
Spiro xerine	hâg hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
ipino serine Sulfo sulfuro n Bibournaso (s Bibournaso (s	µgt. µg <sup>a</sup>	0.050 0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050
Ebuthiuron	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Seflubenzuron	hâg			<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Terbuthy aine-desethy	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Neutriumn Industrium I	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
lerbutrys	μgt	0.050	·	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n
hisbendable	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
hians tho sen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
hiobencati	µgt.	0.050	;	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050
Thiophanate-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Fi-aliate Finding fon	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050
Fiadimenoi	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Figulfuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Fibenuron-methyl	hâg.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bidopy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Fidesin	µg/t µg/t	0.050	·	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.100 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.100	<0.050 <0.050	<0.050	<0.050 <0.050
Hod gole	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Higdae) e Hift o yyulfuron -sodium		0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Higdwole Hittosyulfuron-sodium Hittusufuron-essityl	μgt		,	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Rigolania Hitropolium n-endum	hâg hâg h	0.050	·	< 0.050											
Rispianis  Rispianis en union  Rispianis	hâg hâg hâg	0.050		<0.050 <0.050			<0.050	<0.050			<0.050	<0.050			<0.050
Integration Iffe specification and down Iffe specification and down Integration and down Integration I	hild	0.050		<0.050 <0.050 <0.050			<0.050 <0.050	<0.050 <0.050			<0.050 <0.050	<0.050 <0.050			<0.050 <0.050
International Conference of the Conference of th	hâg hâg hâg hâg hâg hâg	0.050 0.050 0.0150 0.020		<0.050 <0.050 <0.050	<0.0150 <0.0150		<0.050 <0.050 -	<0.050 <0.050	<0.0150 <0.020		<0.050 <0.050	<0.050 <0.050	<0.0150 <0.020		<0.050 <0.050
Imparison  Milling milling markets  Milling milling markets  Milling milling markets  Milli	hâg hâg hâg hâg hâg hâg hâg	0.050 0.050 0.0150 0.020		<0.050 <0.050 <0.050	<0.0150 <0.0150 <0.020		<0.050 <0.050	<0.050 <0.050	<0.0150 <0.020 <0.020		<0.050 <0.050	<0.050 <0.050	<0.0150 <0.020 <0.020		<0.050 <0.050
	hâg hâg hâg hâg hâg hâg hâg	0.050 0.050 0.0150 0.020 0.020		<0.050 <0.050 <0.050	<0.0150 <0.0150 <0.020 <0.030		<0.050	<0.050 <0.050	<0.0150 <0.020 <0.020 <0.030		<0.050	<0.050	<0.0150 <0.020 <0.020 <0.020		<0.050

Corrects

1 OWNE Water, GIV- Indiand - Source: Indiand This 2018

2 OWNE Water, Appeals: Texturity - Indiand - Freshment - Source: SEPA WAT GGG.2 Feach ECS. - AA - 2015

2 OWNE Water, Appeals: Texturity - Indiand - Freshment - Source: SEPA WAT GGG.25 Feach ECS. - AA - 2015

2 OWNE Water, Appeals: Texturity - Indiand - Texturities/Coastal - Source: SEPA WAT GGG.25 Marine ECS. - AA - 2015

		ſ	Simple Location			RB_SW04					RB_SW05					RB_SW06		
			Simple Location Sample ID	RB_SW04	RB_SW04 PR2183443011	RB_SW04	RB_SW04	RB_SW04	RB_SW05	RB_SW05	RB_SW05 RB_SW05 PR2183443023	RB_SW05	RB_SW05	RB_SW06	RB_SW06 PR2183443013	RB_SW06	RB_SW06 PR21B7051035	RB_SW06
Appendix C - Table 5: Surface Water Pestidde Results			Laboratory Sample ID Quater Sampling Date	PR2155273033 G1	PR2183443011 02	PR2183443050 02	PR21B7051033	PR2217901032 O4 24/02/2022	PR2155273034 01	PR2183443012 02	PR2183443023 02 27,08/2021	PR21B7051034	PR2217901033 O4 24/02/2022	PR2155273035 Q1	PR2183443013 C2	PR2183443051 02	PR21B7051035 CS	PR2217901034 04 24/02/2022
		Į	Sampling Date	09/06/2021	26/08/2021	26/08/2021	25/11/2021	24/02/2022	10/06/2021	27/08/2021	27/08/2021	25/11/2021	24/02/2022	10/06/2021	27,08/2021	27/08/2021	25/11/2021	24/02/2022
Organochlorine Pesticides	Unit	MDL	Environmental Quality Standards															
1.2.3.4-listrachlorobenzene	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1.2.3.5- & 1.2.4.5-% trablorobenzene	μgt	0.020		<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
2.4-DDE	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
2.4-00T 4.4-000	µgt.	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010
4.4°-00E	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4.4:-DDT Alashlor	µgt.	0.010		<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010
Aldrin	μgt	0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chlordane-trans	hâr hâr	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Dichlobenii	µgt ugt	0.050		<0.050 <0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.010	<0.050 <0.010	<0.050 <0.010	<0.050
indosulfan sulfate	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Section also have Section also have Section also have Section also have Section also Section als	µgt ugt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.030	<0.010 <0.030	<0.010	<0.010
indrin ketone	μgt	0.030		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Heptachtor Heptachtoroepoxide-cis	µgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010
Hie plathloro e poxide - trans	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Hesahlorobenzene (HCB) Hesahlorobutadiene	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Hexablorocido hexane Alpha Hexablorocido hexane Beta	µgt ugt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010
Pis sahi on budai e ne Pis sahi on ogdo husane Alpha Pis sahi on ogdo husane Alpha Pis sahi onogdo husane Be ta Pis sahi onogdo husane Be ta	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
	µgt µgt	0.010		<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010
nicaniorogone ane Gama	μglt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Me thoughlor	µgt.	0.010		<0.010 <0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010 <0.010
Mirex Nonahlor-ds	µgt.	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010
No nathlor-trans	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oeythlo rdane	µgt µgt	0.010		<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010
Pentahlorobenzene kum of 3 tetrachlorobenzenes	μgt	0.030		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Sum of 4 healthlorgdohealnes Sum of 4 isomers DDT	µgt.	0.040		<0.040 <0.040	<0.040	<0.040	<0.040	<0.040	<0.040 <0.040	<0.040 <0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Sum of 6 isomers DDT Blodrin	μg/L μg/L	MCL 0.010 0.		<0.060 <0.010	<0.060 <0.010	<0.060	<0.060 <0.010	<0.060 <0.010	<0.060 <0.010	<0.050	<0.060 <0.010	<0.060	<0.060	<0.060	<0.060 <0.010	<0.060 <0.010	<0.060 <0.010	<0.060 <0.010
Hituralin ápha Éndo sulfan	μglt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
ápha Endosulfan be ta Endosulfan	hâg r	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010
PEBs PBB 153	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Pesticides																		
1-(3.4-Dichlorophenyl) urea (DCPU)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
2,3,6-Trichlorbenzoic zid 2-Chloro-2.6-die thylze tanilide	hâg r	0.100		<0.100	<0.500	<0.600	<0.050	<0.800	<0.100	<0.500	<0.600	<0.050	<0.800	<0.100	<0.500	<0.600	<1.00 <0.050	<0.800
2-Methylsulfony-4-bifluoromethyl benzoic aid 2-minn-N-finnennylhenzmide	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050
2.4-0	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
2.4-08 2.4-0P (isomen)	µgt.	0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
2.4.5-1	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
4 CPP	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
6-Chloroquinoxiine-2,3-diol Acetamprid	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Asstochtor	μglt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Adfluorfen	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Adonifen Alahlor	µgt ugt	0.050		<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Aldicarb	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Aldicate sulfone Ametrys	μgt μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050
Amido sulfuro n	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Atraon	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Atraine Atraine -2-hydro sy	µgt.	0.010 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Atraine-desethyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Atriane-desisopropy Azinphosethyl				<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Azinphosmethy Azinwatehin	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
BAM	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
BDMC Benday)	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Language of the Control of the Contr	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
penoioùib Bentaone	μg/L μg/L	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Sentaene Sentaene methyl Billenox	μgt	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050
Bitertinol	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manager Manage	µgt. µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Bromophose thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cadusifos	µgt.	0.050		<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Catary	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cabellaride	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Carbo furan Carbo furan-3-hydro ay	µgt. µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Cabolin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
urrentrizone-ethyl Chlorbromuron	μg/L μg/L	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Chlorieninphos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloridæon-desphenyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloro to luron Chloro to luron -desmethyl	μgt. μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Chloroxuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
niorprophiin Chlorpyifos	µgt µgt	0.050		<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500
Chiorpyifo-methyl Chiorauffuron	μg/L μg/L	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Enlist group them  Enlist group them  Enlist group them  Enlist group the see the group  Enlist group grou	μgt	5.500 5.		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cio mato ne	μgt	0.050	L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

			Simple Location			RB_SW04					RB_SW05					RB_SW06		Y
Appendix C - Table 5: Surface Water Pestidde Results			Septe Location Sample ID Laboratory Sample ID Custor Sampling Date	RB_SW04 PR2155273033	RB_SW04  PR2183443011  C2  26/08/2021	RB_SW04 RB_SW04 PR2183443050	RB_SW04  PR2187051033  C3  25/11/2021	PR2217901032	RB_SW05 PR2155273034	RB_SW05 PR2183443012		RB_SW05 PR21B7051034	PR2217901033		RB_SW06 PR2183443013	RB_SW06 RB_SW06 PR2183443051	RB_SW06 PR21B7051035	PR2217901034
			Quater Sampling Date	01 09/06/2021	02 26/08/2021	02 26/08/2021	QS 25/11/2021	04 24/02/2022	01 10/06/2021	02 27/08/2021	02 27,08/2021	03 25/11/2021	04 24/02/2022	01 10,06/2021	02 27,08/2021	C2 27/08/2021	03 25/11/2021	04 24/02/2022
[		L																
Organochlorine Pesticides	Unit	M DL	Environmental Quality Standards															
Clomprop Clopyalid		0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.100	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Clothianidin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Coursphos Crimidine	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Lourage of Course of Cours	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cymosnii	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	µgt ugt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Cyprodinil	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cymmates BACC Users by Users by Control by Control Users	µgt.	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Do sino tryn	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Diainon Diomba	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050
Dichlofenthion	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlormid Dichlormid	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlorios Dichofop Dicao tophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Men to physic Die tho fencath Dife nation Dife nation Dife nation Dife nation Dife nation	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Difenazoum Difenazona	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050
Difenosuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Diffubenzuron Diffubenzuron Diffufenian	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Dimefuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Directhablor Directhonanid	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Sine Sure Sine Sure Sine Sure Sine Shrandid Sine Shrandid Sine Shrandid	μg/L	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dinoseb	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dinoterb	μgt	0.050		<0.050	<0.050	<0.050	<0.150	<0.050	<0.050	<0.050	<0.050	<0.200	<0.050	<0.100	<0.050	<0.050	<0.100	<0.050
Diuron Diuron desmethyl (DCPMU)	hâg hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Diuron desmethyl (DCPMU) BPIC Booksonapole	µg/L µg/L	0.050 0.05n		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
iposian naole Bhilofencab Bhilon Bhilon	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bhion Bhofure wie	µgt µgt	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bhoprophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
finamiphos finamimol	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050
Senhe serid	μg/L	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Control	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
fenpropidin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
fen propinorph fensulfothion	hâr h	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Renorm	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Borautan	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Anadas Buatas Buatas Buatas puri (lamen) Buasas Buasas Buatas Buatas	µgt ugt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Виго хру	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Husitanote Butolanii	μgt μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The state of the s	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
furathio carb	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Historytop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
rie saco naro le	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
He skinone He skinikox	µgt µgt	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
inspalii	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.104	<0.050
Imparrox	µgt pgt	0.050		<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050
man hey madayid madayi	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Indoxxxib	hâg.	0.050		<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050
lo yn il Boro dio ne	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050
	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
to proturon to proturon-desme thyl	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
tsoproturon-monodesmethyl				<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
sopy gazes Kristostes mothyl	hâg.	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050
tenzii Inuren	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The second secon	1987   1985	0.050	0.0751/122/801/0.0754	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MCPB	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Máloson	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Malathion Mandioropanid	µg/L	0.050 0.05n		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050
Mecaban	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mefenpy-diethy Mesosulfuron-methyl	hâg.	0.050		<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Meso trione	μg/L	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Metalayi (isomen) Metanitron	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Me tauchtor	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mile self-see   Mile see   Mile s	µgt.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
we make manuaron Metharidophos Methidabhon Methidabhon	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methioseb	hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Ad a binicata' Male bhorey Male bhorey Male bhorey Male bhorey Male bhore maide Male bo bin muron Male bolabider (binmers)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Metobromuron	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Metolashior (isomen) Metoasron Metribusin	µg/L µg/L	0.050 0.05n		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Metribuan	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Me tribuzin-de simino	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

		Ī	Smple Location			RB_SW04		,		,	RB_SW05	,				RB_SW06		
Appendix C - Table 5: Surface Water Pestidde Results			Septe Lostion Sample ID Laboratory Sample ID Custer Sampling Date	PR2155273033	PR2183443011 02	RB_SW04 RB_SW04 PR2183443050 O2	PR21B7051033 03	PR2217901032 O4	PR2155273034 Q1	RB_SW05 PR2183443012 C2	PR2183443023 02	RB_SW05 PR21B7051034 C3	RB_SW05 PR2217901033 O4	PR2155273035	RB_SW06 PR2183443013 CD	PR2183443051 Q2	RB_SW06 PR21B7051035 C3	PR2217901034 O4
		Ļ	Sampling Date	09/06/2021	26/08/2021	26/08/2021	25/11/2021	24/02/2022	10/06/2021	27/08/2021	27/08/2021	25/11/2021	24/02/2022	10/06/2021	27/08/2021	27.08/2021	25/11/2021	24/02/2022
Organochlorine Pesticides	Unit	M CL.	Environmental Quality Standards															
Metribužn-desamino diketo Metribužn-diketo	hâţ.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Metsulfuron-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molinate  Monogo to phos	hâţ.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050
Monotophos Monolinuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Monuron Nacroparide	µgt ugt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050
Repro parade Rep talan Ne buron Neos sifuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Neburon Necosulfuron	µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050
Nu arimo I	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
One thoute Oud tel	µgt ugt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050
Compl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
International Control of Control	µgt ugt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050
Paraoxon-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Parathion -e thyl	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Penguron Penguron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pendimethalin Phonale	µgt µgt	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Phosione	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Phose one Phose of Ph	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Pidoram	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Piconystrobin Pirimicarb	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Planytrobin Pirimicab Pirimicab Pirimichose thy Pirimichose thy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	200 200 200 200 200 200 200 200 200 200	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Pre til action Primisul furon-me thy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Produce Producine	µgt ugt	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Printeral form earthy Producer	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Front los Front	hâţ.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050
Promitrys	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propanior Propanous	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050
Propanii	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propaine Prophia Propionaloie	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propixonarole Propoxor	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050
Proposyarbarone-sodium	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propoyarbaone-io dium Propyaride Prosulfoath Prosulfoath	hâŗ hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pyrine Stand Pyrine Stand Pyrine Stand Davidous  Standardous  Standardous  Standardous  Standardous  Standardous	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pytiproxifen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Quinmerx	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Quino afen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
bibuthylatne Biduresion Bithogglin	µgt ug <sup>q</sup>	0.050 0.050		<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050
Si tho ydim	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Sewine-2-hydro y Sew tryn  piro weine  widowattaron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Spiroxemine Sulfosulfuron	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Sulfo sulfuron Te buso naso le	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
lebuthiuron leflubenzuron	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
le rbuthylatine	hâg hâg hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
lerbuthylaine-desethyl lerbuthylaine-desethyl-2-hydroxy	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
lerbulhylatne-hydroxy				<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
interlays Malerinadania Malerinadania Malerinadania Malerinadania Malerinadania Malerinadania Malerinadania	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
thiams tho xen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
hifensulfuron-methyl hiobencarb	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
hiophanate-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Inspiration with the second of	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Fiadimenol	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Piacifuron Piacophos	µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Fibenuron-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pidown	µgt µgt	0.050		<0.050 <0.100	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.100	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Hidopy Hidosin Higitania Hillospulfuron -a odium	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Hill o spul furon -so dium Hill usul furon -me thyl	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Fiforine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Piticonarole Pidoram (W-PBAM S0 4 Method)	hild.     hild	0.050		<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050
Hilbon apole Pidoram (W-PBMSD4 Method) Proposysthatone-todium (W-PBMSD4 Method)	hâr hâr hâr hâr	0.0155		<0.050				<0.050	<0.050				<0.050	<0.050				<0.050
time of 3 to trash for the manes (M1)  time of 4 he author cogdo he ames (M1)  time of 4 isomers DOT (M1)  time of 4 isomers DOT (M1)	µgt	0.020			<0.020	<0.0150 <0.020				<0.0150 <0.020	<0.0150			l	<0.0150	<0.0150		
Sum of 4 isomers DDT (M1)	μgt	0.020			<0.020	<0.020				<0.020	<0.020				<0.020	<0.020		
Access of DOMED DUT (MT)	μgt	0.030			cu.030	<0.030				<0.030	<0.030				< 0.030	<0.030		,

Correct

Control Water, GTV. Instant - Source: Instant GTV 2018

CONTROL Water, Aquatic Touristy - Instant - Freshment - Source: ESPA WAT-05635 Fresh ESS: AA-2015

CONTROL Water, Aquatic Touristy - Instant - Freshment - Source: ESPA WAT-05635 Fresh ESS: AA-2015

CONTROL Water, Aquatic Touristy - Instant - Touristical Country - Source: ESPA WAT-05631 Marine ESS: AA-2015

			Semple Location Sample ID Laboratory Sample ID	RS_SW01	RS_SW01	RS_SW01	RS_SW01	RS_SW02	RS_SW02	RS_SW02	RS_SW02	RS_SW03	RS_SW03	RS_SW03	RS_SW0
ppendix C - Table 5: Surface Water Pestidde Results			Laboratory Sample ID	PR2155273021	PR2183443043	RS_SW01  PR2187051021  O3  24/11/2021	PR2217901021	RS_SW02 PR2155273022	RS_SW02  PR2183443019  02  26/08/2021	PR21B7051022	PR2217901022	PR2155273023	PR2183443020	RS_SW03 PR21B7051023	RS_SW0: PR22179010
			Quarter Sampling Date	09/06/2021	02 26/08/2021	03 24/11/2021	04 23/02/2022	01 09/06/2021	02 26/08/2021	03 24/11/2021	04 23/02/2022	01 09/06/2021	02 26/08/2021	QS 24/11/2021	04 23/02/20
rganochlorine Pesticides	Unit	MDL 0.010	Environmental Quality Standards											ļ	ļ
.z.s.4-minshlorobenzine .z.s.4-minshlorobenzine	μgt	0.020		<0.010	<0.010	<0.010	<0.010	<0.010 <0.020	<0.010 <0.020	<0.010 <0.020	<0.010	<0.010	<0.010 <0.020	<0.010 <0.020	<0.01
4-000 4-000	μgt	0.010 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
4-DDT	hâr hâr	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
4°-00D	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
41-00E 41-00T	μgt.	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
lachtor	μg/t	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
iablor ddfin hlordane-ds hlordane-trans	µgt.	0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00
hiordane-trans ichiobenii	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
ichlobenil ieldrin	µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
dosulfan sulfate	μg/t	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
drin idrin äldehyde	µgt uat	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
WITH WIDHE	μgt	0.030		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.03
eptahlor eptahloroepoxide-ds	µg/t	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.01
eptathloroepoxide-ds aptathloroepoxide-trans auchtoroben ze ne (HCB)	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
eachtoroben zene (HCB) eachtorobut od lene	µg/t	0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050 <0.010	<0.00
sashionobulatione sashionogishesase Alpha sashionogishesase Alpha sashionogishesase Beta sashionogishesase Beta	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
exchlorogdohexane Beta exchlorogdohexane Delta	µgt.	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
exachtorogdohexane Spallon exachtorogdohexane Gamma	μg/t	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
exachlorogdohexane Camma exachloroethane	µgt µgt	0.010		<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.01
o drin	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
le thoughlor life x	µgt. uat	0.010		<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.01
ie thoughlor lines on mbhlor dis on mbhlor Pansi	hâr	0.010 0.010 0.010 0.010 0.010 0.010 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
on adhlor-frans eighlor dane	hâr hâr	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
ephlordane entahlorobenzene smof 3 tetrahlorobenzenes	hâr	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
mof 3 tetrablorobenzenes	µgt.	0.010 0.010 0.030 0.040 0.040 0.060 0.010		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.01
mof 4 isomers DDT	hâr hâr	0.040		<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.04
im of 4 isomers DDT im of 6 isomers DDT	hâr	0.060		<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.01
lodrin Murkin	hâg r	0.010		<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.01
pha-Endosulfan sta-Endosulfan	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
88 153															
	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01
esticides (3.4-Dichlorophenyl) urea (DCPU)		0.050 0.100 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050													
	µg/t.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
,3,6-Bithlorbenzoic zid Chloro-2,6-die thylze tznilide	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Methylsulfonyl-4-htifluoromethyl benzoicadd amino-N-(isopropyl)benzamide	µg/t	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
4-06	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
.4-DB -4-DP (isomen)	µg/t	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
.4-DP (tiomen) .4-5-T	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
4.5-1P CPP	µg/t	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
Chloroquinoxiline-2,3-diol	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
os tamiprid os tochlor	µgt uat	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.05
dbenzolar-Smethyl	μgt	0.050 0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
dhenzola-Smethyi dfluorfen donifen	µgt.	0.050		<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
ahlor	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
idicat	μgt	0.050 0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
me tryn	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
mido sulfuro n	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
ration	hâr hâr	0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
tráon traine traine - 2 Avatro w	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
traine-2-hydro sy traine-dese thyl	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
traine-deskopropy Knoboce thal				<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
anphosethyl anphosethyl	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
zo systro bin AM	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
no agento inin  AAA  AAA  AAA  AAA  AAA  AAA  AAA	hâr hâr	0.000 0.0000 0.000		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
endayi	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
endioarb	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
entazone	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
entaone methyl Ifenox	hâg r	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.05
(tertino)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
o soilid ro madi	hâţ hâţ	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.05
romophosethyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
romougnil adusafos	µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
abayi	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
arberg arberndalin arbeitelide arbeitelin	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.05
arbo furan	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
arbofuran-3-hydroxy arboxin	hâr hâr	0.050 0.050		<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.05
abofuran-3-hydroxy abouin afentusone-ethyl	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
h lorbromuron	hâŗ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
The control of the co	hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.05
hloridæon-desphenyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
hiorotoluron hiorotoluron-desmethyl	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.05
hloroxuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
hiorprophan hiorpylifos	µgt µgt	0.050		<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050 <0.0500	<0.050	<0.050 <0.0500	<0.050 <0.0500	<0.05
hlorpylifosem thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
hionulfuron	µgt uat	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.01

AECOM

			Simple Location Sample ID	RS_SW01	RS_SW01	RS_SW01	RS_SW01	RS_SW02 PR2155273022	RS_SW02	RS_SW02 PR21B7051022	RS_SW02 PR2217901022	RS_SW03 PR2155273023	RS_SW03 PR2183443020	RS_SW03 PR2187051023	RS_SW01
Appendix C - Table 5: Surface Water Pestidde Results			Simple Location Sample ID Laboratory Sample ID Custer Sampling Date	RS_SW01 PR2155273021 Ct	PR2183443043	RS_SW01  RS_SW01  PR2187051021  03  24/11/2021	RS_SW01 PR2217901021 04 23/02/2022	PR2155273022 Q1	RS_SW02  PR2183443019  02  26/08/2021	PR21B7051022 03	PR2217901022 O4	PR2155273023 Q1	PR2183443020 02	PR21B7051023 03	PR22179010
		Į	Sampling Date	09/06/2021	26/08/2021	24/11/2021	23/02/2022	09/06/2021	26/08/2021	24/11/2021	23/02/2022	09/06/2021	26/08/2021	24/11/2021	23/02/20
Aganochlorine Pesticides	Unit	M DL	Environmental Quality Standards											i	$\overline{}$
lomeprop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Nothinidia	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050	<0.050	<0.050	<0.100	<0.05
Clothianidin Coumphos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Crimidine Cynaine	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
Cybutryne (Irgan)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Cymoxinii Cypraine	hâţ.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
Cyprom narole	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Cyprodinii Cyromatne	hâţ.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.05
DNOC	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Dissino Iryn Dissinon	hâg hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Dicamb a	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Dichlofenthion Dichlormid	hâg hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Didolones Didolop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Dianotophos Die hofenarb	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Die thofenoarb	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Difenomonaple	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Difenozuron	μgt	0.000		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Diffusenian	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Diffusenion Dimefuson Dimethablor	µgt.	0.050 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.05n	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Dime then andd	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Dimethoule Dimethomorph	na <sub>t</sub>	0.050 0.05n		<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.05
Dinoseb	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Dinoterb Diuron	na <sub>t</sub>	0.050 0.05n		<0.050 <0.05n	<0.050 <0.050	<0.200 <0.05n	<0.150 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.200 <0.05n	<0.100 <0.050	<0.050 <0.050	<0.050 <0.050	<0.200 <0.05n	<0.15
Diuron desmethyl (DCPMU)	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
B°IC Sposico narole	µgt µat	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Bhiofenarb	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Bhion Bhofumeste	µgt µat	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Bhoprophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Rinamiphos Rinamimol	µgt.	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
fenhe særid	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Rinosaprop Rinosapr	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Renpropidin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Senpropinorph	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
fenuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Rpronil	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Russfop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Russifop-butyl (isomen)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Burospy Bustanole Butolanii	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Rutolanii	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
fonofos Foramulfuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Gurathio carb Halo sylop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Hidoxyfop-methyl (isomen)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Hexatonare	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
He sylh i seo x	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Irrepoliti Irrepolite that on 2-ms thy!	µgt µat	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05 <0.05
riuamos	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Irsan thapy Iridadoprid	µgt µat	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
indo xxxxb	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
lo synil Iprodione	µgt µat	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
provilicati	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
iso pro turo n -d e sme thyl	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Iso pro turo n-mo no desime thy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
tsopywan Kresown-methyl	1976 1977 1977 1977 1977 1977 1977 1977	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
lenzdi	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
ünuron MCPA	µgt µgt	0.050	0.0751/121/801/0.0754	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
MCPB MCPP (isomen)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
MCPP (isomen) Millioson	µgt µat	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Malacion Malahion	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Mandiproparid Meathan Meathan Melanpy-diethyl Melanpy-diethyl Mesanullison-eathyl	µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Mefenpy-diethy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Mesosulfuron-methyl Mesotrione	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Metalanj (isomen)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Metamitron Metazahlor	µgt µat	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
de antinea Mataing ferminal de attention de attention de attention	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Methaben ithiauron Methanidophos	ugt ugt	0.050 0.05n		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.05
Methidathion	hâŗ hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.01
Methicath Methoraji	μgt	0.050 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
we inomy Me thoryfeno 3 de Me to bromuron	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.01
Metobromuron Metobahlor (Nomera)	µgt.	0.050 0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.01
Metolathior (isomen) Metosuron	hâŗ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Me tribuzin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Metribuzin-desamino	post	0.050			<0.050	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050		

1968			Sample ID	RS_SW01	RS_SW01	RS_SW01	RS_SW01	RS_SW02 PR2155273022	RS_SW02	RS_SW02	RS_SW02	RS_SW03	RS_SW03	RS_SW03	RS_SW03
	Appendix C - Table 5: Surface Water Pestidde Results		Laboratory Sample ID	PR2155273021	PR2183443043	PR21B7051021	PR2217901021	PR2155273022	PR2183443019	PR21B7051022	PR2217901022	PR2155273023	PR2183443020	PR21B7051023	PR2217901023
			Quater Sampling Date	01 09/06/2021	02 26/08/2021	QS 24/11/2021	04 23/02/2022	01 09/06/2021	02 26/08/2021	QS 24/11/2021	04 23/02/2022	01 09/06/2021	02 26/08/2021	Q3 24/11/2021	04 23/02/2022
Mathematical		Į.				•	•							•	
Mathematical   Math	Organochlorine Pesticides		Environmental Quality Standards												
Mathematical   Math	Metribuzin-desamino diketo	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Metribuän-diketo	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Molinute	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Monogo tophos	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Monolinuron	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Monuron	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Napropantide Naptalan	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical		μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Nico sulfuron	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Nuarimol Desithoale	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Series of the se	Dadinj	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Series of the se	Danyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Series of the se	Padobutrarol	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Paracocon-methyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Parathion -e thyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1968	Penonaole	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Pendimethalin	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Phosile	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Phosione Phnomit	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Phosphamidon	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Pidoram	µg% 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Pico systrobin	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Pirimiphosethy	µgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Mathematical	Pirimiphosewithyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical	Prelilablor	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical   Math		µgr. 0.050 µgr. 0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical   Math	Pro diamine	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Mathematical   Math	Profenofos	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Series	romican	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Series	Prome tryn	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Series	Propaction	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M	Propierocarb Propiero	µgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050
Marche   M	Pro paquizafo p	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M	Propatine	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Semination of the semination o		µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Semination of the semination o	чороспаюне Ргорожит	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Semination of the semination o	Propoysarbasone-sodium	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M	Pro pysmide	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M	Pro thio oo naro le	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M	Pylbenzoxim	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M		μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M	Cuindors:	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marche   M		μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The content of the	Duino wjen	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The content of the	ZuizMoTop Rimmulfuron	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The content of the	e buthylatine	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The content of the	k dumiton	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marie   Mari	k tho ydim	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marie   Mari	Breatne-2-hydroxy	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marie   Mari	lime tryn	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marie   Mari	ptroxemine bifosulfuron	µgt 0.050		<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050
Marie   Mari		μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marie   Mari	Bouthiuron	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Seminangangangangangangangangangangangangang	eflubenzuron ferbuthvlatine	µgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Seminangangangangangangangangangangangangang		μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Seminangangangangangangangangangangangangang	lerbuthylatine-desicthyl-2-hydroxy	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marchan   Marc	lerbuthylatine-hydroay lerbutna	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Marchan   Marc		μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue				<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	hifensulfuron-methyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	hiophanie-methyl	µgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Manual Continue	F-diate	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	Fixtimefon	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	Figulfuron	µgr. 0.050 µgr. 0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	fiaophos	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	Fibenuron-methyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	noopy Ridosin	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	Figdatole	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	hifl oxysulfuron-sodium	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	Hillusulfuron-methyl	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	nionne Riticonarole	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Manual Continue	Pidoram (W-PBLM \$0.4 Method)	hâŗ		<0.050			<0.050	<0.050			<0.050	<0.050			<0.050
Market   M	Propozpabazone-sodium (W-PBMS04 Method)	hay 0.016.		<0.050		ļ	<0.050	<0.050	-0.0150		<0.050	<0.050		ļ	<0.050
Page	ism of 4 hexishlorogdohexines (M1)	μgt 0.0100			<0.020				<0.020				<0.020	·	
Command   Comm	lum of 4 isomers DDT (M1)	μgt 0.020			<0.020				<0.020				<0.020	Ī	
Commands (Commands)	lam of 6 isomers DDT (M1)	μgt 0.030		ļ	<0.030	ļ	-0.050	ļ	<0.030		-0.050	ļ	<0.030	ļ	,p. n5n
Comments		hâr •					cu.050				cu.050			-	cd.050
	Co	mments		]											

Comments

I CM/WE Water, GTV - Instand - Source: Instand GTVs 2016

CM/WE Water, GTV - Instand - Source: Instand GTVs 2016

CM/WE Water, Aquatic Toxicity - Instand - Freshwater - Source: SEPA WAT-SQ-53 Fresh EQS - AA - 2015

B'A Ref: 9\*CP-2018-02-1-L1#09

		Simple Location Sample ID Laboratory Sample ID	RS_SW04	RS_SW04  PR2183443021  02  25,08/2021	RS_SW04	PR2217901024	RS_SW05 PR2155273025	RS_SW05 RS_SW05 PR2183443044	RS_SW05	RS_SW06	RS_SW06	RS_SW06	RS_SW
ppendix C - Table 5: Surface Water Pestidde Results		Laboratory Sample ID	PR2155273024	PR2183443021	PR21B7051024	PR2217901024	PR2155273025	PR2183443044	PR21B7051025	PR2155273026	PR2183443045	RS_SW06 PR21B7051026	PR221790
		Quater Sampling Date	01 08/06/2021	02 25/08/2021	03 24/11/2021	04 22/02/2022	Q1 08/06/2021	02 25/08/2021	RS_SW05 PR2187051025 03 237172021	Q1 08/06/2021	02 25/08/2021	03 23/11/2021	04 22,02/2
						•		•	•		•	•	
rganochlorine Pesticides	Unit M.DL.	Environmental Quality Standards											
.2.3.4-Tetrathlorobenzene	μgl. 0.010	<u> </u>	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
.2.3.5- & 1.2.4.5-Tetrathlorobenzene	μgt 0.020	ļ	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.03
.4-00E	µgt 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
.4-DDT	µgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
A-000 A-006	μgt 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
4'-00T	μgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-0.0
lahlor	μgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
Jdrin hlordane-ds	µgt 0.0050	ļ	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01
h lordane-trans	µgt 0.010	İ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
idhlo benil	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
seldrin ndosulfan sulfate	μgt 0.010 μgt 0.010	<u> </u>	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	40.0
ndrin	μgt 0.010	İ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
drin aldehyde	μgt 0.030	ļ	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.0
ndrin ketone eptashlor	μgt 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-0.0
eptathloroepoxide-cis	μgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
eptachtoroepoxide-trans eachtoroben as ne (HCR)	μgt 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
existion but idiene	μgt 0.0030	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-0.0
esachloro ogdo hesane Alpha	μgt 0.010	Ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
exaction opdo hexane. Be ta exaction opdo hexane. Delta	μgt 0.010 μgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
exach lorogdoh exan e Epsilon	μgt 0.010	<u> </u>	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
agentine programme of the company of	μgt 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
esabloroethane odrin	μgt 0.010 μgt 0.010	ļ	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.0
te thoughlor	py) 0.000 py) 0.		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
tirex ionathlor-ds	µgt 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
ionachlor-ds ionachlor-trans	µgt 0.010	İ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	-0.0
ionathior-trans nighhiordiane en lathiorobenaene	µgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
entachlorobenzene umof 3 tetrachlorobenzenes	μgt 0.010 μgt 0.010	ļ	<0.010 <0.030	<0.010 <0.030	<0.010 <0.030	<0.010 <0.030	<0.010 <0.030	<0.010	<0.010 <0.030	<0.010 <0.030	<0.010	<0.010 <0.030	<0.0
en bahlon bename am of 4 headhlongdeheanes am of 4 headhlongdeheanes am of 4 isamen DDT am of 6 isamen DDT	µgt 0.040	ļ	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	1 -0.0
am of 4 isomers DDT	µgt 0.040		<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.0
umot 6 isomers DDT Hodrin	µgt 0.060 µgt 0.010	<del> </del>	<0.060	<0.060	<0.060	<0.060 <0.010	<0.060	<0.060	<0.060 <0.010	<0.060	<0.060	<0.060 <0.010	<0.0
ifluralin	μgt 0.010	İ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
pha-findosulfan e ta-findosulfan	μgt 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
e la-brido sul lan	μgt. 0.010	ļ	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
tiba		İ						ļ				İ	1
98a 88 153	μgt. 0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0
		<del>}</del>						<del>}</del>				<del>}</del>	<del> </del>
- 1,4 - 1 (in line phenyl) una (DCPU)  3,4 - 3 (in line phenyl) una (DCPU)  3,4 - 3 (in line phenyl) una (DCPU)  3,5 - 3 (in line phenyl) una (DCPU)  4,5 - 4,5 (in line phenyl) una (DCPU)  5,5 - 5,5 (in line phenyl) una (DCPU)  5,5	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
,3,6-Trichtorbenzoic add Chloro,2,6-die thelee terilide	μgt 0.100 μgt 0.050	ļ	<0.100	<0.600	<1.50	<0.800	<0.100	<0.600	<1.50	<0.100	<0.600	<1.50	<0.8
-Methylsulfonyl-4-trifluoromethyl benzoiczód	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
amino-N-(isopropy)benzamide	µgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
.4-0 .4-08	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.0
.4-DP (somen)	μgt 0.050	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
4.5-1	μgt 0.050	Ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
A.SP CPP	µgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
-Chloroquinoxline-2,3-diol	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
ce tamiprid	µgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050	-0.050	-0.050	<0.0
dbenzolar-Smethyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.0
dfluorfen	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
donifen	µgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050	-0.050	-0.050	<0.0
Idicarb	µgt 0.050	İ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.0
ldicarb sulfone	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
me tryn mido sulfuro n	μgt 0.050 μgt 0.050	<del> </del>	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.0
minopyráld	µgt 0.050		<0.050	<0.100	<0.050	<0.050	<0.050	<0.100	<0.050	<0.050	<0.100	<0.050	-0.0
Iraton	Principal		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
traine-2-hydrosy	μgt 0.050 μgt 0.050	<del> </del>	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.0
traine-3-hydroxy traine-desethyl	µgt 0.050	Į	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
traine-desisopropy Sonhose thal	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 000
ainphosethyl ainphosesthyl	µgt 0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.0
zo systro bin	µgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
AM DMC	μgt 0.050 μgt 0.050	ļ	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.0
en italij	1,000   1,00	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
enzolin endinath	μgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	- 0.0
entwone	pgt 0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 0.0
entazone methyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
ifenox itertinol	μgt 0.050 μgt 0.050	<del> </del>	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	<0.0
osalid	µgt 0.050	İ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
ro madil	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	40.0
romopnose thyl romospill	µgt 0.050 µgt 0.050	ļ	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	-0.0
adusifos	µgt 0.050	<u></u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 40.0
abay	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
arbendalm arbetamide	µgt 0.050 µgt 0.050	<del>†</del>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.0
aboluran	µgt 0.050	<u></u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.0
atho furan-3-hydroxy	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
anosen afentranne-ethyl	µgt 0.050 µgt 0.050	ļ	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.0 <0.0
hlorbromuron hlorfenwinphos	µgt 0.050	İ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 00
hlorlervinphos	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
hloridæon hloridæon-desphenyl	μgt 0.050 μgt 0.050	<del> </del>	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	<0.050 <0.05n	<0.0
hlordwon-desphenyl hlorotoluron	µgt 0.050	İ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1 -0.0
h loro to luron-desmethyl	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
hloroxiron hloroxophim	µgt 0.050	ļ	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.0
hlorprophan hlorpyrifos	µgt 0.0500	İ	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	1 .0.0
hlorpyllos hlorpyllosenthyl	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0
hionulfuron	μgt 0.050	<del> </del>	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.0
nonuntron Iodinafop	μgt ! 0.05n												

Appendix C - Table 5: Surface Water Pestidde Results		Seeple Lostion Sample ID Laboratory Sample ID Custer Sampling Date	RS_SW04 PR2155273024 O1 08/06/2021	RS_SW04  PR2183443021  00  25,08/2021	RS_SW04  PR2187051024  03  24/11/2021	RS_SW04  PR2217901024  O4  22,02/2022	RS_SW05 PR2155273025	RS_SW05 RS_SW05 PR2183443044 C2 25/08/2021	RS_SW05 PR2187051025 03 23/11/2021	PR2155273026	PR2183443045	RS_SW06 PR21B7051026 03 23/11/2021	RS_ PR2211
		Quater Sampling Date	01 08/06/2021	02 25/08/2021	03 24/11/2021	04 22/02/2022	01 08/06/2021	02 25/08/2021	03 23/11/2021	Q1 08/06/2021	02 25/08/2021	03 23/11/2021	22,02
Organochlorine Pesticides	Unit MDL	Environmental Quality Standards	en n5n	-0.050	z0.050	-0.050	-0.050	-0.050	zn.050	-0.050	en n5n	-0.050	<u> </u>
Topyslid	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	1
Ciothianidin	μgl. 0.050 μgl. 0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	1 - 1
rindine	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
-yeutryne (Ingeol)	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Cymosinit Cynsiine	μgt 0.050 μgt 0.050		<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	+
yroonable	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
:yondinii :yondine	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
DNDC	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
Nainon	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Dicamba Dichlofenthion	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	+
Dichlormid	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Ndofop	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Nao tophos Ne thofenarb	μgt 0.050 μgt 0.050		<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	┼
Menapum	μgl 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Menomonatole Menomuron	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<del> </del>
Nflubenzuron Nflufenian	μgt. 0.050 uat. 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.05n	<b></b>
Simefuron	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
imethablor imethenamid	μgt. 0.050 μgt. 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del>†</del> −-†
Simethode	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
Nnoseb	µgt. 0.050 µgt. 0.050		<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	1
Noterb Nuron	μgl. 0.050 μgl. 0.050		<0.050	<0.050 <0.050	<0.150 <0.050	<0.150 <0.050	<0.050 <0.050	<0.050	<0.250 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	+
Nuron desmethyl (DCPMU)	μgt. 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
PIC postonanie	μgl. 0.050 μgl. 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1-
thiofenarb Thion	μgt 0.050 μgf 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-
3ho furne sale	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
thoprophos in miphos	μgl. 0.050 μgl. 0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
enatino!	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
enne seno enoseprop	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
enongarb enpropidin	μgt 0.050 μgt 0.050		<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	┼
inpropinorph	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
ensulfothion enuron	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<del> </del>
ipronii Avanules	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
lualfop	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
łuwifop-butyl (Isomen) łurosypy	μgt 0.050 μgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
fusitable	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
bnofos	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
oramsulfuron urathiogati	μgt. 0.050 μgt. 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	ļ
tidoxylop	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
nialoxyfop-methyl (isomens) riexxxonxxole	μgt 0.050 μgt 0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<del> </del>
fexzinone fexilizar	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
madil	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
mizere thib en 2-me thyl mizero x	μgl. 0.050 μgl. 0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
mae thap y	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
ndo xxxb	µgt. 0.050 µgt. 0.050		<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	1
o ynil prodione	μgl. 0.050 μgl. 0.050		<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	+
provilicati	μgt. 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
soproturon soproturon-desmethyl	100   100		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1-
so pro turo n-mo no de sms thyl	µgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-
Crescosins-methyl	##   ##   ##   ##   ##   ##   ##   #		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
enadi Inuron	μgt. 0.050 μgt. 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1-
мсра	µgl 0.050	0.0751/122/801/0.0754	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
MCPP (isomen)	μgt 0.050 μgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1-
Adamon Adahlon	μgt 0.050 μgt 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-
Mandipropamid	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
decarbam defenpy-diethy	μgt. 0.050 μgt. 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-
Aesosulfuron-methyl Aesotriana	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Actalogi (somen)	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
de tamitron de taxablor	μgl. 0.050 μgl. 0.050		<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	+
de tron arote	μgt. 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Methabenathiasuron Methamidophos	μgl. 0.050 μgl. 0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1-
de thid athion	μgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	Ţ
Methioarb Methornyl	µgt 0.050		<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	1
Aetho wjeno žde Aeto bromuron	μgt 0.050 μg <sup>0</sup> 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	ļ
Metolashlor (isomen)	µgt 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
Metribuzin	μgt. 0.050 μgt. 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	-
Aetribuzin-desamino	μgt. 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1

Part				Sample ID	RS_SW04	RS_SW04	RS_SW04	RS_SW04	RS_SW05	RS_SW05	RS_SW05 PR21B7051025	RS_SW06	RS_SW06	RS_SW06	RS_SW06
The stands	Appendix C - Table 5: Surface Water Pestidde Results			Laboratory Sample ID	PR2155273024	PR2183443021	PR21B7051024	PR2217901024	PR2155273025	PR2183443044	PR21B7051025	PR2155273026	PR2183443045	PR21B7051026	PR221790102
The stands				Quarter	Crt .	œ	CS CS	04	C1	œ	CS CS	C1	œ	CS .	04
Description				Sampling Date	08/06/2021	25/08/2021	24/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	08/06/2021	25/08/2021	23/11/2021	22/02/2022
Description			_				_	_		_	_		_	_	_
Series		Unit		Environmental Quality Standards											
Series	Metribuzin-desamino diketo	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Metribuän-dikato	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Me tsul furon-me thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Molinate	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Monogolophos	µgt.	0.050	ļ	<0.050	-0.050	<0.050	<0.050	-0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.050
Description	Monuron	ugt.	0.050	÷	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Napropanide	μgt	0.050	ļ	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Nap til am	μgt	0.050	†	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Neburon	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Naco sul furo n	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Nuaimo I	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Ome thouse	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Country	µgt.	0.050	ļl	<0.050	-0.050	<0.050	<0.050	-0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.050
Description	Date but sand	µgt.	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Paracon ethyl	μgt	0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Parao son-mothyl	μgt	0.050		< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050
Description	Parathion -e thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Penconarole	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Penguron	μgt	0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Pendim thiin	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Description	Phosione	µgt.	0.050	ļ	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050
Management	Phosmit	hag.	0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Phosphanidon	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Pidoram	μgt	0.050	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Picoxytrobin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Pirimicarb	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Pirimiphosethyl	μgt	0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Pirimiphosmethyl	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Primitalitum numethal	µgt.	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Prochlora	µgt.	0.050	ļ	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050
Management	Prodiamine	hay	0.050	†	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Profenofos	μgt	0.050	I	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Promicato	μgt	0.050	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Prometon	μgt	0.050	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Prometryn	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propablor	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Prop amocarb	μgt	0.050	įJ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propanii	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propagatas	µgt.	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propham	μgt	0.050	<b>†</b>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propionade	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Ргорохиг	μgt	0.050	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propozat zone-sodium	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Propyanide	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Prosulfo carb	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Prothio o narole	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Pyrime than il	µgt.	0.050	фl	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Management	Pylproxifen	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Quindors	μgt	0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Ouinmersc	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Quinoxfen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Quiziofop	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Rimulfuron	μgt	0.050	ļJ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	e outry anné	µgt.	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	& tho adim	µgt.	0.050	<del> </del>	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050
Management	âmaine	hay.	0.050	4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Smaine-2-hydroxy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Siene tryn	μgt	0.050	Y	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	ipiroxenine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	Sulfo sulfuro n	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management	le buco nazo le	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management   Man	Effubenauron	µgt.	0.050	<del> </del>	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050
Management   Man	Serbuthylaine	μgt	0.050	\$	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management   Man	Terbuthylaine-desethy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management   Man	Berbuthylatine-desethyl-2-hydroxy	μgt	0.050	Y	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Management   Man	lerbuthylaine-hydroxy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
March   Marc	lierbutryn	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
March   Marc	hisendaple	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
March   Marc	num inosim Bifansifunnum bil			ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Company   Comp		μgr.	0.050	<u> </u>	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The second sec	hiophanate-methyl	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
March   Marc	Bi-dide	μgt	0.050	ĵ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Second   197	Fiadims fon	μgt	0.050	I	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Property Service   1975   19	Fiadimenol	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Property   Property	Haulfuron	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Proceedings	Figophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
The control of the	tibenuron-methyl	μgt	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Program			0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Proceedings	Bidopy	μgt		\$	<0.100	<0.050 <0.050	<0.050	<0.050 <0.050	<0.100	<0.050 <0.050	<0.050	<0.100	<0.050	<0.050	-0.050
	Hidopy Hidosin Hindiante	µgt µgt	0.050		.0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050
Management   Man	Hidopy Hidosin Higidanie Higidanie Higidanie	hâg hâg hâg	0.050	ļ			10.050	.0.050	-0.050	<0.050	.0.050	.0.050	.0.050	.0.050	<0.050
	Hidopy  Highani  Highani  Highani  Hilliopulluron-edium	har har har har	0.050 0.050 0.050		<0.050	<0.050	< 0.050								
Companion   Comp	Nalapy Nalam Najanie Najanie Nilaminanadium Nilaminanadium Nilaminanadium	hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Proceedings   Procedings   Procedings   Proceedings   Proceedings   Proceedings   Procedings   Pr	Riflusulfuron-methyl Riforine	hâr hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
March   Marc	Riflusulfuron-methyl Riforine	hâr hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050	<0.050 <0.050 <0.050
Read of the Administration   Part   0.000	Riflusulfuron-methyl Riforine	hâr hâr hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050
Reserved (Frame (ADDISM)	iifluulfuron-methyl liforine	hâr hâr hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.0150	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050
Barrier or Nation Long (1911)   1941   0.000   -0.000   -0.000   -0.000   -0.000   -0.000	iifluulfuron-methyl liforine	hâr hâr hâr hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050 <0.0150 <0.0150	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.0150 <0.020	<0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050 <0.0150 <0.010	<0.050 <0.050	<0.050 <0.050 <0.050 <0.050
	iifluulfuron-methyl liforine	hâr hâr hâr hâr hâr hâr hâr hâr hâr	0.050 0.050 0.050 0.050 0.050 0.050		<0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050 <0.0150 <0.010	<0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.0150 <0.010 <0.010	<0.050 <0.050	<0.050 <0.050 <0.050 <0.050 <0.050	<0.050 <0.050 <0.050 <0.0150 <0.0150 <0.020	<0.050 <0.050	<0.050 <0.050 <0.050 <0.050

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WE Water, GTV - Ireland - Source: Neland GTVs 2016

WE Water, Aquatic Toxicity - Ireland - Freshwater - Source: SEPA WAT-SG-63 Fresh EQS - AA - 2015

V/WE Water. Aquatic Toxicity - Ireland - Transitional/Coastal - St V/WE Water. DWS - Ireland - Source: Ireland GTVs 2016

		I	Simple Losition		RS_S	SW07			RS_S	:wos			RS_S	SW09	
Appendix C - Table 5: Surface Water Pestidde Results			Simple Loution Sample ID Laboratory Sample ID  Outloo	RS_SW07 PR2155273027	PR2183443046	RS_SW07 PR21B7051027	RS_SW07 PR2217901026 O4 22,02/2022	RS_SW08 PR2155273028	RS_SW08 PR2183443047 02	RS_SW08 PR21B7051028	RS_SW08 PR2217901027 O4 22,027/2022	RS_SW09 PR2155273029	RS_SW09 PR2183443048	RS_SW09 PR21B7051029	RS_SW09 PR2217901028
			Quater Sampling Date	Q1 08/06/2021	02	03	04	01	02 25/08/2021	03	04	01	02 25/08/2021	03	Q4 22,02/2022
Organochlorine Pesticides	Unit	M DL	Environmental Quality Standards												
1.2.3.4-lie trachtorobenzene 1.2.3.5- & 1.2.4.5-lie trachtorobenzene	μgt μgt	0.010		<0.010 <0.020	<0.010 <0.020	<0.010 <0.020	<0.010 <0.020	<0.010	<0.010 <0.020	<0.010 <0.020	<0.010 <0.020	<0.010	<0.010 <0.020	<0.010 <0.020	
2.4-DDD 2.4-DDE	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
2.4-DDT	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
4.4°-DDD 4.4°-DDE	μgt. μgt.	0.010		<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
4.4°-DDT	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Aldrin	hâg	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Chlordane-dis Chlordane-trans	nar har	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Dichlobenii	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
bleidrin Endosulfan sulfate	μgt μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
lindrin	hâr	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Endrin sidehyde Endrin ketone	hâr	0.030		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	
Heptachtor Heptachtoroepoxide-ds	µgt µgt	0.010		<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	
te pizhloro spoxide-di te pizhloro spoxide-trans te azhlorobena ne (HCB) te azhlorobu tale e ne	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Headhlorobenzene (HCB) Headhlorobutatiene	hâg hâg	0.0050		<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	
He sacht on buttel eine He sacht on gelo he san e. Alpha He sacht one gelo he san e. Be tä He sacht one gelo he san e. Be tä He sacht one gelo he san e. De ttä	μgt. μgt	0.010		<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
Mexachtorogdohexane Delta	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Mexachlorogdonexane costlon	µgt	0.010		<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	<0.010	<0.010	<0.010 <0.010	<0.010	
Nexach loro ethane sodrin	µgt µat	0.010		<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
Methosphior	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Nonahlords	μgt	0.010		<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
Non ach lor-trans Depth lord an e	µgt µat	0.010		<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
Pentahlorobenzene	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Sum of 3 tetrachlorobenzenes Sum of 4 hexachloropdohexanes		0.030		<0.030 <0.040	<0.010 <0.040	<0.030 <0.040	<0.030 <0.040	<0.030 <0.040	<0.010 <0.040	<0.030 <0.040	<0.030 <0.040	<0.030 <0.040	<0.030 <0.040	<0.030 <0.040	<u> </u>
Sum of 4 isomers DDT Sum of 6 isomers DDT	µgt.	0.040		<0.040 <0.040	<0.040	<0.040 <0.040	<0.040	<0.040 <0.040	<0.040 <0.040	<0.040 <0.040	<0.040	<0.040 <0.040	<0.040 <0.040	<0.040 <0.040	
klodrin	hâţ	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Bifluralin apha-Endosulfan	µgt µgt	0.010		<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	<0.010 <0.010	<0.010	<0.010 <0.010	<0.010 <0.010	
be ta-find o sulfan	μgt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
PSSs	<u> </u>				<u> </u>										
P88 153	μglt	0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Posticides 1-(3.4-Dichlorophenyl) urea(DCPU)	ļ														
1-(3.4-Didhloropheny) urea(DCPU) 2,3,6-Trichlorbenzoic aid	hâg hâg	0.100		<0.100	<0.600	<0.050	<0.050	<0.050	<0.600	<0.050	<0.050	<0.050	<0.600	<0.050	<0.300
2-Chloro-2.6-diethylæstanilide 2-Methylsulfonyl-4-trifluoromethyl benzoic add	nar nar	0.050		<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
2-amino-N-(isopropy)benzamide	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
2.4-DB	µgt.	0.050		<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050
2.4-DP (somen)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
2.4.5-P	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
4-CPP 6-Chloroquinoxiine-2,3-diol	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Ace tamiprid	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Adbenzolar-Smethyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Adfluorfen Adonifen	hâţ.	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Alghior	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Aldicate sulfone	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Amutryn Amidosulfuron	µgt µgt	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Aminopysiid	1995   1995 	0.050		<0.050	<0.100	<0.050	<0.050	<0.050	<0.100	<0.100	<0.050	<0.050	<0.050	<0.050	<0.050
Atraine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Atraine-2-hydroxy Atraine-desethyl	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Atraine-deskopropy	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Adinpho see thy	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Azo syltro bin BAM	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
BDMC Benided	µgt µm	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050
Benwolin		0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sentaone Sentaone	µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Bentaone methyl Bifenos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050
Bitertanol	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromail Bromail	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Bromophose thyl Bromophi	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Calcustos	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cabary Cabendaim	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Carbe tarride	µgt d	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Cabo furan-3-hydroxy	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Catosin Cafentraone-ethyl	hâţ	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Chlorbromuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloridwon	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Chloridaen-desphenyl	µgt d	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloro to luron-desme thy	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloroxuron Chlorprophim	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
Chlorpyifos	μgt	0.0500		<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Chlorpyifosmithyl Chlorwifuron	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050
čio dinafo p Čio mao ne	hât hât	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050

			Sample Location Sample ID	RS_SW07	RS_SW07	RS_SW07	RS_SW07	RS_SW08	RS_SW08	W08 RS_SW08	RS_SW08	RS_SW09	RS_SW09	RS_SW09	RS_
ippendixC - Table 5: Surface Water Pestidde Results			Semple Location  Sample ID  Laboratory Sample ID  Quarter	RS_SW07 PR2155273027 C1	RS_SW07 PR2183443046 02	PR21B7051027	RS_SW07 PR2217901026 O4	RS_SW08 PR2155273028 Ct	RS_SW08 PR2183443047 02	RS_SW08 PR21B7051028 CS	RS_SW08 PR2217901027 O4	RS_SW09 PR2155273029 Q1	PR2183443048	RS_SW09 PR21B7051029 03	PR2211
			Sampling Date	08/06/2021	25/08/2021	23/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	22,02
ganochlorine Pesticides	Unit	M CL.	Environmental Quality Standards												
Clomeprop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	- 0
lopyald	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050	<0.050	<0.050	<0.050	1
lothianidin oumaphos	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
rimidine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
ybutryne (Irgeni)	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
yeoxanii yenzine	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<del> </del>
yproconazole	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
yordinii 'yomaine	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
MOC	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
Nation Nation	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<u> </u>
iomba	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
Sichlormid	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ_
ichlonos idofop	μgt μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
Nao tophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
iethofencarb ifenacoum	µgt µgt	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<del> </del>
ffenomnæle	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
Mubenzuron	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<u>†</u>
iflufenian Imefuron	μg/t μg/t	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	ļ
ine thablor	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
ree the named ine thoule	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
ine thomorph	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
inoterb	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.150	<0.050 <0.150	<0.050	<0.050	<0.010 <0.300	<0.050 <0.200	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	1
luron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
PE	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<u> </u>
oxicon xole hiofen carb	µgt µgt			<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
hion	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	‡
hofumesile hoprophos	μgt μgt	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
namiphos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
natinol inhe xinid	µgt µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<del> </del>
noseprop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
npropidin	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
n propino rph	µgt ugt	0.050		<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
inuton	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
ipronil Ioraulam	µgt µgt	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
uatfop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
ntoxibit manob-ontit (nount)	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<u>†                                    </u>
usizole utolanii	µgt ugt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	
nofos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
ramsulfuron urathio carb	µgt µgt	0.050		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del> -
Monfop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
alosyfop-methyl (isomen) esseonaeole	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<u>†                                     </u>
extinone	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
wall	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
stame thib en z-me thyl	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
nan thapy midaloprid	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	Ţ
ndo xxxib	hâr hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050	+
oynil orodione	μg/t μg/t	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	ļ
rouliarb	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	‡
proturon proturon-desmethyl	hâg hâg	0.050 0.050 0.050 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
o pro turo n-mo no desme thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ļ
opyseen resources thy	hâg	0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
næll nuron	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	₩.
	µgt.	0.050	0.0751/122/801/0.0754	0.062	<0.050	<0.050	<0.050	0.065	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<u>†</u>
CCPS CCPP (tomen)	μg/t μg/t	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	ļ
Mason Mahlon	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<del> </del>
la athion Iandiproparid	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	ļ
earban	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	Ţ
esosulfuron-methyl	hâg	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	t
esotrione etalani (isomen)	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	μ
le tarritron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	‡
	μgt μgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<del> </del>
le thaben Xhiasuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	‡
le thamidophos le thidathion	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	┼
le thiosab	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
le tho xfeno xide	µgt µgt	0.050		<0.050 <0.050	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<u> </u>
4 ID DIO MUTO N	µgt un	0.050 0.05n		<0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	ļ
le to lash for (isomero) le to surron le tribusin	hâţ.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1
	ugt	0.050		<0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	4
letribuan letribuain-desimino	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	

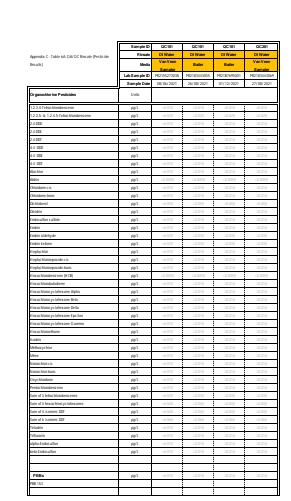
			Simple Location	BR PMAY	RS_1	SW07	BR PWAY	BK PWAR	RS_S	SWOS PWAR	ge pune	gg pwnn	les ewas	Be omen	ge eu
Appendix C - Table 5: Surface Water Pestidde Results			Sample ID Laboratory Sample ID Quater	PR2155273027	PS_SW07 PR218344304^	RS_SW07  RS_SW07  PR2187051027  CS  23711/2021	PR2217901024	RS_SW08 PR2155273028	RS_SW08 PR2183443047	RS_SW08 PR2187051028 Q3 23711/2021	PR2217901027	RS_SW09 PR2155273029	MS_SW09 PR218344304*	RS_SW09 PR2187051029 C3 23711/2021	PR22179010
			Quater	Q1	02	CS CS	04	Crt Crt	CE	O3	04	01 08/06/2021	02	03	04
			Sampling Date	08/06/2021	25/08/2021	23/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	22/02/2022	08/06/2021	25/08/2021	23/11/2021	22/02/20
	-														
Organochlorine Pesticides		MDL 0.050	Environmental Quality Standards			<u> </u>				<u> </u>			<u> </u>	<u> </u>	ļ
Metribuzin-desimino diketo	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Metsulfuron-methyl	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molinale	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050
Monogolophos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Monolinuron	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Napropanide	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.05
Naptalan	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Neburon	μgt	0.050	ļ 	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Nicosulturon Nuarimol	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Ome thouse	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Osatinji	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Oxemyl Parto hustrami	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Paraoxon-e thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Paraoxon-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Parathion -e thyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Penguron Penguron	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Pendimethalin	μgt	0.050	L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Phorate	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Phose I	μgt	0.050	<b> </b>	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
Phosphamidon	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Pidoram	μgl	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Picosystrobin	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Pirimiphosethyl	hâg hâg	0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.050	<0.05
Pirimipho smethyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Pretilablor	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
rnmunuron-mithy Produlora	µgt. uat.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Prodiamine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Profenofos	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Promecab	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Promitrys	hâr	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Propathlor	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Prop ano carb	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Propanii Propanuizatoo	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.05
Propaine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.05
Propham	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Propio nato le	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Proposyarbarone-sodium	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Propytamide	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Prosulfo arb	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050	<0.050	-0.050	<0.050	<0.050
Pylbenzoxim	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pylmethanii	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.051
Pylproxifen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Quindors: Quinmers:	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-0.05
Quinoxylen	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ouizilofop	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.054
Rimsulfuron	μglL	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Sedumeton	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Se thoughim	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Smithe	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
amane-z-hydroxy Smitryn	µgt. uat.	0.050		<0.050	<0.050	<0.050 <0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Spiroxemine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Sulfosulfuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Te buto nato le	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Teflubenzuron	hâţ.	1   1   1   1   1   1   1   1   1   1		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Terbuthylaine	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Terbuthylaine-desethyl Terbuthylaine-desethyl-2-hydroxy	hâţ	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Terbuthylaine-desethyl-2-hydroay Terbuthylaine-hydroay	µgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Birbutryn	hâr	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
hisbendarole	μgt	0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
hiane tho aim hife nsulfuron-me thy	μgt	0.050 0.050		<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050	<0.050	<0.050 <0.05n	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.05
hile nutium es thý hiobenath hiophanie es thý Hallae Biadission	hâr hâr	0.050	\	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
hiophanate-methyl	μgl	0.050	\	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
H-allate Nation for	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
	µgt uat	0.050	}	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fiaulfuron	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fi arophos	μgl	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fibenuron-methyl	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fidosin	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.100	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 <0.050	<0.05
Figdatole	μgt	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fiftospulfuron-sodium	μgt	0.050	Ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fiffusulfuron-methyl	µgt.	0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Fiticonwole	µgt.	0.050	ļ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Pidoram (W-PBLM \$0.4 Method)	μgt		L	<0.050		L	<0.050	<0.050		İ	<0.050	<0.050	L		<0.05
Plators (W-PEMS 4 Method)  Top op gata non-edum (W-PEMS 4 Method)  Inned 3 is tatablem benames (M1)  Inned 3 is tatablem benames (M1)  Inned 4 isomen DDI (M1)  Inned 4 isomen DDI (M1)	μgt	0.0150 0.020 0.020 0.030		<0.050		ļ	<0.050	<0.050			<0.050	<0.050			<0.01
kmof 3 tetrahlombenzenes (M1)	µgt.	0.0150			<0.0150	ļ			<0.0150				<0.0150		ļi
Senal 4 James DDI (M1)	hâr	0.020		·	<0.020	†			<0.020	·			<0.020	·····	
										,					

Comments

Comments

WWWE Water, GTV - Instand - Source: Instand GTVs 2016

WWWE Water, Aquatic Toxicity - Instand - Freshwater - Source: SEPA WAT-SGCS Fresh ECS - AA - 2015



**AECOM** 

	Sample ID Rinsate	QC101 DI Water	QC101 DI Water	QC101 DI Water	QC201 DI Water
Appendix C - Table 6A: QA/QC Rinsate (Pesticide		Van Veen			DI Water Van Veen
Results)	Media	Sampler	Bailer	Bailer	Sampler
	Lab Sample ID	PR2155273038	PR2183443055	PR21B7695001	PR21834430
	Sample Date	08/06/2021	26/08/2021	01/12/2021	27/08/202
Pesticides	µg/L		<0.050	<0.050	
1-(3.4-Dichlorophenyl) urea (DCPU)	µg/L		<0.600	<0.500	
2,3,6-Trichlorbenzoic acid	µg/L		<0.050	<0.050	
2-Chloro-2.6-diethylacetanilide	µg/L		<0.050 <0.050	<0.050 <0.050	
2-Methylsulfonyl-4-trifluoromethyl benzoic acid 2-amino-N-(isopropyl)benzamide	µg/L	<0.050		<0.050 <0.050	
2.4-D	µg/L µg/L		<0.050	<0.050	
2.4-DB	µg/L	<0.050		<0.050	
2.4-DP (isomers)	µg/L		<0.050	<0.050	
2.4.5-T	µg/L	< 0.050	<0.050	<0.050	<0.050
2.4.5-TP	µg/L	< 0.050	<0.050	<0.050	
4-CPP	µg/L			<0.050	
6-Chloroquinoxaline-2,3-diol	µg/L		<0.050	<0.050	
Acetamiprid	μg/L		<0.050	<0.050 <0.050	
Acetochior	µg/L		<0.050		
Acibenzolar-S-methyl Acifluorfen	µg/L µg/L		<0.050 <0.050	<0.050 <0.050	
Acionifen	µg/L µg/L		<0.050	<0.050	
Alachior	µg/L µg/L	101000	<0.050	<0.050	
Aldicarb	µg/L	<0.050		<0.050	
Aldicarb sulfone	µg/L	<0.050		<0.050	
Ametryn	μg/L	<0.050		<0.050	
Amidosulfuron	μg/L		<0.050	<0.050	
Aminopyralid	µg/L		<0.050	<0.050	
Atraton	µg/L		<0.050	<0.050	
Atrazine	μg/L		<0.050	<0.050	
Atrazine-2-hydroxy Atrazine-des ethyl	μg/L μg/L	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	
Atrazine-desis opropyl	µg/L		<0.050	<0.050	
Azinphos-ethyl	µg/L	<0.050		<0.050	
Azinphos-methyl	µg/L	<0.050	<0.050	<0.050	< 0.050
Azoxys trobin	µg/L	<0.050	<0.050	<0.050	< 0.050
BAM	µg/L	< 0.050	<0.050	<0.050	<0.050
BEMC	µg/L		<0.050	<0.050	
Benalaxyl	µg/L		<0.050	<0.050	
Benazolin	μg/L		<0.050	<0.050	
Bendiocarb Bentazone	µg/L		<0.050 <0.050	<0.050 <0.050	
Bentazone methyl	µg/L µg/L	<0.050		<0.050	
Bilenox	µg/L	<0.050		<0.050	
Bitertanol	µg/L		<0.050	<0.050	
Boscalid	µg/L	<0.050	<0.050	<0.050	
Bromacil	µg/L		<0.050	<0.050	
Bromophos-ethyl	µg/L	<0.050	<0.050	<0.050	
Bromoxynil	µg/L		<0.050	<0.050	
Cadus afos	µg/L		<0.050	<0.050	
Carbaryl	μg/L	<0.050		<0.050	
Carbendazim	µg/L	<0.050 <0.050	<0.050	<0.050 <0.050	
Carbetamide Carbofuran	µg/L µg/L		<0.050	<0.050 <0.050	
Carbofuran-3-hydroxy	µg/L µg/L	10.000	<0.050	<0.050	
Carboxin	µg/L	<0.050		<0.050	
Carfentrazone-ethyl	µg/L	<0.050		<0.050	
Chlorbromuron	μg/L	<0.050		<0.050	
Chlorfenvinphos	μg/L		<0.050	<0.050	
Chloridazon	µg/L		<0.050	<0.050	
Chloridaz on des phenyl	μg/L	<0.050 <0.050	<0.050	<0.050	
Chlorotoluron Chlorotoluron des methyl	µg/L µg/L		<0.050 <0.050	<0.050 <0.050	
Chlorotoluron-des methyl Chloroxuron	µg/L µg/L		<0.050	<0.050	
Chlorpropham	µg/L		<0.0500	<0.0500	
Chlorpyrifos	µg/L		<0.050	<0.050	
Chlorpyrifos-methyl	µg/L	<0.050	<0.050	<0.050	< 0.050
Chlorsulfuron	μg/L		<0.050	<0.050	
Clodinatop	µg/L		<0.050	<0.050	
Clomazone	µg/L		<0.050	<0.050	
Clomeprop	µg/L		<0.050	<0.050	
Clopyralid	µg/L	<0.050		<0.050	
Clothianidin	µg/L	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	
Courrephos	μg/L μg/L	<0.050 <0.050		<0.050 <0.050	
Cyanazine	µg/L	<0.050		<0.050	
Cybutryne (Irgarol)	µg/L		<0.050	<0.050	
Cymoxanil	µg/L	<0.050		<0.050	
Cyprazine	µg/L	<0.050	<0.050	<0.050	<0.050
Cyproconazole	µg/L	< 0.050	<0.050	<0.050	< 0.050

	Sample ID	QC101	QC101	QC101	QC201
Appendix C - Table 6A: QA/QC Rinsate (Pesticide	Rinsate	DI Water Van Veen	DI Water	DI Water	DI Water Van Veen
Results)	Media	Van Veen Sampler	Bailer	Bailer	Van Veen Sampler
	Lab Sample ID	PR2155273038	PR2183443055	PR21B7695001	PR218344306
	Sample Date	08/06/2021	26/08/2021	01/12/2021	27/08/2021
Cyprodinil	µg/L	<0.050	<0.050	<0.050	< 0.050
Cyromazine	µg/L		<0.050	<0.050	
DNOC	µg/L		<0.050	<0.050	<0.050
Desmetryn	µg/L	< 0.050	<0.050	<0.050	< 0.050
Diazinon	μg/L		<0.050	<0.050	< 0.050
Dicamba	µg/L		<0.050	<0.050	
Dichlofenthion	µg/L		<0.050	<0.050	
Dichlormid	μg/L		<0.050	<0.050	
Dichlorvos	µg/L		<0.050	<0.050	<0.050
Diclofop	µg/L		<0.050	<0.050	<0.050
Dicrotophos	μg/L		<0.050 <0.050	<0.050	
Diethofencarb	µg/L	101000		<0.050 <0.050	
Difenacoum	µg/L µg/L				
Difenoxuron	µg/L		<0.050 <0.050	<0.050 <0.050	-0.050
Diflubenzuron	µg/L		<0.050	<0.050	<0.050
Diffusenican	µg/L		<0.050	<0.050	
Dimefuron	µg/L	101000	<0.050	<0.050	
Dimethachlor	µg/L		<0.050	<0.050	
Dimethenamid	μg/L		<0.050	<0.050	< 0.050
Dimethoate	μg/L	<0.050	<0.050	<0.050	
Dimethomorph	µg/L		<0.050	<0.050	
Dinoseb	μg/L		<0.050	<0.150	
Dinoterb	µg/L		<0.050	<0.050	
Diuron	µg/L		<0.050	<0.050	<0.050
Diuron desmethyl (DCPMU)	μg/L		<0.050	<0.050	
EPTC	µg/L		<0.050	<0.050	
Epoxiconazole	µg/L		<0.050	<0.050	
Ethiofencarb	μg/L		<0.050	<0.050	
Ethion Ethofumes ate	μg/L μg/L		<0.050 <0.050	<0.050 <0.050	
Ethoprophos Ethoprophos	µg/L µg/L	101000	<0.050	<0.050 <0.050	
Emoproprios Fenamiphos	µg/L µg/L	10.000	<0.050	<0.050	
Fenarimol	µg/L		<0.050	<0.050	
Fenhexamid	µg/L		<0.050	<0.050	
Fenoxaprop	µg/L		<0.050	<0.050	
Fenoxycarb	µg/L		<0.050	<0.050	
Fenpropidin	µg/L		<0.050	<0.050	
Fenpropimorph	µg/L		<0.050	<0.050	
Fensulfothion	µg/L	< 0.050	<0.050	< 0.050	< 0.050
Fenuron	µg/L	<0.050	<0.050	<0.050	< 0.050
Fipronil	µg/L	<0.050	<0.050	<0.050	< 0.050
Florasulam	µg/L		<0.050	<0.050	
Fluazifop	µg/L		<0.050	<0.050	
Fluazifop-butyl (isomers)	µg/L		<0.050	<0.050	
Fluroxypyr	µg/L		<0.050	<0.050	
Flusilazole	µg/L		<0.050	<0.050	
Flutolanil	µg/L	101000	<0.050 <0.050	<0.050 <0.050	
Fonofos Forams ulfuron	µg/L		<0.050 <0.050	<0.050 <0.050	
Foramsulturon Furathiocarb	µg/L µg/L		<0.050	<0.050 <0.050	
Haloxyfop	µg/L µg/L	101000	<0.050	<0.050	
Haloxylop methyl (isomers)	µg/L		<0.050	<0.050	
Hexaconazole	µg/L		<0.050	<0.050	
Hexazinone	µg/L		<0.050	<0.050	
Hexythiazox	µg/L		<0.050	<0.050	
lmazalil	µg/L		<0.050	<0.050	
Imazamethabenz-methyl	µg/L	< 0.050	<0.050	<0.050	<0.050
lmazamox	µg/L	<0.050	<0.050	<0.050	<0.050
lmazethapyr	µg/L		<0.050	<0.050	
Imidacloprid	µg/L		<0.050	<0.050	
Indoxacarb	µg/L		<0.050	<0.050	
lloxynil	µg/L		<0.050	<0.050	
prodione	µg/L		<0.050	<0.050	
Iprovalicarb	µg/L		<0.050	<0.050	
Isoproturon	µg/L		<0.050	<0.050 <0.050	
is oproturon des methyl	µg/L				
Is oproturon monodes methyl	µg/L		<0.050 <0.500	<0.050 <0.050	<0.050
ls opyraz am Kres oxim methyl	µg/L µg/L		<0.050	<0.050 <0.050	<0.050
kiesokim-meinyi Lenacil	µg/L µg/L		<0.050	<0.050	
Linuron	µg/L µg/L		<0.050	<0.050	<0.050
MDPA	µg/L		<0.050	<0.050	
MCPB	µg/L		<0.050	<0.050	<0.050
	µg/L		<0.050	<0.050	

	Sample ID	QC101	QC101	QC101	QC201	
Appendix C - Table 6A: QA/QC Rinsate (Pesticide	Rinsate	DI Water Van Veen	DI Water	DI Water	DI Water Van Veen	
Results)	Media	Sampler	Bailer	Bailer	Sampler	
	Lab Sample ID	PR2155273038	PR2183443055	PR21B7695001	PR2183443069	
	Sample Date	08/06/2021	26/08/2021	01/12/2021	27/08/2021	
Malaoxon	µg/L		<0.050	<0.050		
Malathion Mandipropamid	µg/L µg/L		<0.050 <0.050	<0.050 <0.050		
Mecarbam	µg/L	<0.050	<0.050	<0.050		
Mefenpyr-diethyl	µg/L	<0.050	<0.050	<0.050		
Mes os ulfuron methyl	µg/L		<0.050	<0.050		
Mesotrione	µg/L	<0.050	<0.050	<0.050	<0.050	
Metalaxyl (isomers)	µg/L		<0.050	<0.050		
Metamitron	µg/L	<0.050	<0.050	<0.050	<0.050	
Metazachlor	µg/L		<0.050	<0.050		
Metconazole	µg/L		<0.050	<0.050		
Methabenz thiazuron	µg/L	<0.050	<0.050 <0.050	<0.050 <0.050		
Methamidophos Methidathion	µg/L µg/L		<0.050	<0.050		
Methiocarb	pg/L pg/L		<0.050	<0.050		
Methomyl	µg/L		<0.050	<0.050		
Methoxyfenozide	µg/L		<0.050	<0.050		
Metobromuron	μg/L	<0.050	<0.050	<0.050	<0.050	
Metolachlor (isomers)	µg/L		<0.050	<0.050		
Metoxuron	µg/L		<0.050	<0.050		
Metribuzin	µg/L		<0.050	<0.050		
Metribuz in desamino	µg/L		<0.050	<0.050		
Metribuz in-des amino diketo	µg/L		<0.050 <0.050	<0.050		
Metribuzin-diketo	µg/L			<0.050 <0.050		
Mets ul furon methyl Molinate	µg/L µg/L	<0.050		<0.050 <0.050		
Monocrotophos	µg/L	<0.050	<0.050	<0.050		
Monolinuron	ua/L	<0.050	<0.050	<0.050		
Monuron	µg/L		<0.050	<0.050		
Napropamide	µg/L	<0.050	<0.050	<0.050	<0.050	
Naptalam	µg/L		<0.050	<0.050		
Neburon	µg/L	<0.050	<0.050	<0.050	<0.050	
Nicosulfuron	μg/L		<0.050	<0.050		
Nuarimol	µg/L		<0.050	<0.050		
Dmethoate	µg/L	<0.050		<0.050		
Dxadixyl	µg/L		<0.050	<0.050 <0.050		
Dxamyl Paclobutrazol	µg/L µg/L		<0.050 <0.050	<0.050		
Paraoxon-ethyl	µg/L	10.000	<0.050	<0.050		
Paraoxon-methyl	µg/L		<0.050	<0.050		
Parathion ethyl	µg/L		<0.050	<0.050		
Penconazole	μg/L		<0.050	<0.050		
Pencycuron	µg/L	<0.050	<0.050	<0.050	<0.050	
Pendimethalin	µg/L	<0.050	<0.050	<0.050		
Phorate	µg/L		<0.050	<0.050		
Phosalone	µg/L	<0.050		<0.050		
Phosmet	µg/L		<0.050	<0.050		
Phosphamidon	µg/L		<0.050	<0.050		
Pictoram Necessar Medica	µg/L	<0.050	<0.050	<0.050		
Picoxys trobin Pirlmicarb	µg/L µg/L	<0.050	<0.050	<0.050 <0.050		
Pirlmiphos-ethyl	µg/L		<0.050	<0.050		
Pirimiphos-methyl	µg/L		<0.050	<0.050		
Pretilachior	µg/L		<0.050	<0.050		
Primisul furon methyl	μg/L		<0.050	<0.050		
Prochloraz	µg/L		<0.050	<0.050	<0.050	
Prodiamine	µg/L		<0.050	<0.050		
Profenofos	µg/L		<0.050	<0.050		
Promecarb Prometon	µg/L		<0.050 <0.050	<0.050 <0.050		
Prometon Prometryn	µg/L µg/L		<0.050 <0.050	<0.050 <0.050		
Propachlor	pg/L pg/L		<0.050	<0.050		
Propamocarb	µg/L		<0.050	<0.050		
Propanil	µg/L		<0.050	<0.050		
Propaguizafop	µg/L	<0.050		<0.050	<0.050	
Propazine	μg/L		<0.050	<0.050	<0.050	
Propham	µg/L		<0.050	<0.050		
Propiconazole	µg/L	<0.050	<0.050	<0.050	<0.050	
Propoxur	µg/L		<0.050	<0.050		
Propoxycarbazone-sodium	µg/L		<0.050	<0.050		
Propyzamide	µg/L		<0.050	<0.050		
Prosulfocarb	µg/L	<0.050		<0.050		
Prothioconazole	µg/L		<0.050 <0.050	<0.050 <0.050		
Pyribenzoxim	µq/L					

	Sample ID	QC101	QC101	QC101	QC201
Appendix C - Table 6A: QA/QC Rinsate (Pesticide	Rinsate	DI Water	DI Water	DI Water	DI Water
Results)	Media	VanVeen	Bailer	Bailer	Van Veen
		Sampler			Sampler
	Lab Sample ID	PR2155273038 08/06/2021	PR2183443055 26/08/2021	PR21B7695001	PR218344306
	Sample Date		201 001 2021	01/12/2021	211 001 202
Pyriproxifen	µg/L		<0.050	<0.050	
Quinclorac	µg/L		<0.050	<0.050 <0.050	
	µg/L				101000
Quinoxyfen	µg/L		•		
Quizalofop	µg/L		<0.050	<0.050 <0.050	
	µg/L	101000	•		
Sebuthylazine	µg/L		•		
Secbumeton	µg/L		<0.050	<0.050	
Sethoxydim	µg/L	<0.050	•	<0.050	
Simazine	µg/L		<0.050	<0.050	
Simazine-2-hydroxy	µg/L		<0.050	<0.050	
Simetryn	µg/L		<0.050	<0.050	
Spiroxamine	µg/L		<0.050	<0.050	
Sulfosulfuron	µg/L	<0.050		<0.050	
Tebuconazole	µg/L	<0.050	•	<0.050	
Tebuthiuron	µg/L		<0.050	<0.050	
Teflubenzuron	µg/L	<0.050		<0.050	
Terbuthylazine	µg/L		<0.050	<0.050	
Terbuthylazine-desethyl	µg/L		<0.050	<0.050	
Terbuthylazine-desethyl-2-hydroxy	µg/L		<0.050	<0.050	
Terbuthylazine-hydroxy	µg/L		<0.050	<0.050	
Terbultyn	µg/L	<0.050		<0.050	
Thiabendazole	µg/L	<0.050	•	<0.050	
Thiamethoxam	µg/L		<0.050	<0.050	
Thifensulfuron-methyl	µg/L		<0.050	<0.050	
Thiobencarb	µg/L		<0.050	<0.050	
Thiophanate-methyl	µg/L		<0.050	<0.050	
Tri-allate	μg/L		<0.050	<0.050	
Triadimefon	µg/L		<0.050	<0.050	
Triadimenol	μg/L	<0.050	•	<0.050	
Triasulfuron	µg/L		<0.050	<0.050	
Triaz ophos	µg/L		<0.050	<0.050	
Tribenuron-methyl	μg/L	<0.050		<0.050	
Triclopyr	µg/L		<0.050	<0.050	
Triclosan	µg/L		<0.050	<0.050	
Tricyclazole	µg/L		<0.050	<0.050	
Trifloxysulfuron-sodium	µg/L		<0.050	<0.050	
Triflusulfuronmethyl	µg/L	<0.050		<0.050	
Triforine	µg/L		<0.050	<0.050	
Triticonazole	µg/L				
Picloram (W-PESLMS04 Method)	µg/L				
Propoxycarbazone-sodium (W-PESLMS04 Method)	µg/L		•		
Sum of 3 tetrachlorobenzenes (M1)	µg/L		<0.020		
Sum of 4 hexachlorocyclohexanes (M1)	µg/L				
Sum of 4 isomers DDT (M1) Sum of 6 isomers DDT (M1)	µg/L µg/L		<0.030		< 0.030



<u> </u>		QC101	QC101	QC101	QC102	QC101	QC101	QC101	QC101
<u> </u>	Rinsate	DI Water	DI Water	DI Water	DI Water	DI Water	DI Water	DI Water	DI Water
Appendix C - Table 6B: QA/QC Rinsate (PFAS Results)	Media	Van Veen Sampler	Bailer	Bailer	Van Veen Sampler	Bailer	Bailer	Bailer	Van Veen Sampler
	Laboratory Sample ID	PR2155273016	PR2183443040	PR2183443064	PR2183443068	PR21B7051016	PR21B7676003	PR2217901016	PR2217901041
	Sample Date	09/06/2021	26/08	/2021	27/08/2021	23/11	1/2021	22/02/2022	23/02/2022
	Sample Location	RS_SW05	RS_S	W01	RB_SW06	RS_S	SW04	RS_SW04	RB_SW06
Perfluorinated Compounds									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	μg/L	0.011	< 0.010	<0.010	<0.010	<0.010	<0.010	< 0.010	<0.010
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	μg/L	< 0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	< 0.010	<0.010
Perfluorobutane sulfonic acid (PFBS)	μg/L	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorobutanoic acid (PFBA)	μg/L	<0.010	< 0.020	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010
Perfluorodecane sulfonic acid (PFDS)	μg/L	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorodecanoic acid (PFDA)	μg/L	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorododecanoic acid (PFDoDA)	μg/L	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluoroheptane sulfonic acid (PFHpS)	μg/L	< 0.010	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluoroheptanoic acid (PFHpA)	μg/L	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	<0.010
Perfluorohexane sulfonic acid (PFHxS)	μg/L	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010
Perfluorohexanoic acid (PFHxA)	μg/L	<0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010
Perfluorononanoic acid (PFNA)	μg/L	<0.010	< 0.010	<0.010	<0.010	<0.010	< 0.010	<0.010	<0.010
Perfluorooctane sulfonamide (FOSA)	μg/L	<0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	<0.010
Perfluorooctane sulfonic acid (PFOS)	μg/L	<0.0100	< 0.0100	0.0184	<0.0100	0.0332	<0.0100	< 0.0100	<0.0100
Perfluorooctanoic acid (PFOA)	μg/L	<0.0100	<0.0100	< 0.0100	<0.0100	<0.0100	<0.0100	< 0.0100	<0.0100
Perfluoropentanoic acid (PFPeA)	μg/L	<0.010	< 0.010	<0.010	<0.010	< 0.010	<0.010	<0.010	<0.010
Perfluoroundecanoic acid (PFUnDA)	μg/L	< 0.010	< 0.010	<0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010

		Ī	1					Diver Brene na DDD	Duplicate Analysis					
Appendix C - Table 7: QA/QC Duplicate PFAS Resul	ts		Secondary Sample RB_QC201	R8_QC201 R8_SW05		Secondary Sample RB_QC201	Primary Sample RB_SW06	RPD %	Secondary Sample RB_QC201	Primary Sample RB_SW03	RPD %	Secondary Sample RB_QC201	Primary Sample RB_SW06	RPD %
		Laboratory Sample ID Client Sampling Date	PR2155273015 PR2155273012 10/06/2021		RPD %	PR2183443039 27/06	PR2183443037		PR21B7051015	PR21B7051010		PR2217901015	PR2217901046 2/2022	
Parameter	Units	MDL MDL	10/00	9 2021	I	27/06	72021		24/1	17 202 1	I	2470.	2022	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	< 0.010	<0.010	N/A	< 0.010	<0.010	N/A
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorobutane sulfonic acid (PFBS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorobutanoic acid (PFBA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorodecane sulfonic acid (PFDS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorodecanoic acid (PFDA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorododecanoic acid (PFDoDA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluoroheptane sulfonic acid (PFHpS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluoroheptanoic acid (PFHpA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorohexane sulfonic acid (PFHxS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorohexanoic acid (PFHxA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorononanoic acid (PFNA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorooctane sulfonamide (FOSA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorooctane sulfonic acid (PFOS)	μg/L	0.0100	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A
Perfluorooctanoic acid (PFOA)	μg/L	0.0100	0.0315	0.0346	9.379727685	<0.0100	<0.0100	N/A	0.0131	0.0108	-19.24686192	<0.0100	<0.0100	N/A
Perfluoropentanoic acid (PFPeA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluoroundecanoic acid (PFU nDA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A

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								River Shannon RPE	Duplicate Analysis					
Appendix C - Table 7: QA/QC Duplicate PFAS Resu	its		Secondary Sample	Primary Sample		Secondary Sample	Primary Sample		Secondary Sample	Primary Sample		Secondary Sample	Primary Sample	
			RS_QC201	RS_SW04	RPD %	RS_QC201	RS_SW07	RPD %	RS_QC201	RS_SW07	RPD %	RS_QC201	RS_SW07	RPD %
		Laboratory Sample ID	PR2155273014	PR2155273004		PR2183443038	PR2183443042	]	PR21B7051014	PR21B7051053		PR2217901014	PR2217901047	
		Client Sampling Date	08/06	/2021		25/08	1/2021		23/1	/2021		22/02	2/2022	
Parameter	Units	MDL												
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorobutane sulfonic acid (PFBS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorobutanoic acid (PFBA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.020	<0.010	N/A	<0.010	<0.010	N/A
Perfluorodecane sulfonic acid (PFDS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorodecanoic acid (PFDA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorododecanoic acid (PFDoDA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluoroheptane sulfonic acid (PFHpS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluoroheptanoic acid (PFH pA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorohexane sulfonic acid (PFHxS)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorohexanoic acid (PFHxA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorononanoic acid (PFNA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorooctane sulfonamide (FOSA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluorooctane sulfonic acid (PFOS)	μg/L	0.0100	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A
Perfluorooctanoic acid (PFOA)	μg/L	0.0100	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A	<0.0100	<0.0100	N/A
Perfluoropentanoic acid (PFPeA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A
Perfluoroundecanoic acid (PFUnDA)	μg/L	0.010	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A	<0.010	<0.010	N/A

# **Appendix D Laboratory Certificates**

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