

# Scoping the distribution of Smallmouth Bass (*Micropterus dolomieu*) in the Miramichi River Watershed using environmental DNA, 2022-2024

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Watershed using environmental DNA, 2022-2024

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## ABSTRACT

Shaw-McDonald, S., LeBlanc, F., Aucoin, R and Irlich, U. 2025.  
Scoping the distribution of Smallmouth Bass (*Micropterus dolomieu*) in the Miramichi River Watershed using environmental DNA, 2022-2024. Can. Data Rep. Fish. Aquat. Sci. 1440: v + 23 p.

Following the detection of Smallmouth Bass (*Micropterus dolomieu*) in the Southwest Miramichi River (SWM River) in August 2019, assessments of Smallmouth Bass distribution in the Miramichi River Watershed (MRW) have been conducted on a yearly basis. One of the tools used to determine the extent of Smallmouth Bass spread within the MRW since 2019 is environmental DNA (eDNA) (LeBlanc et al., 2021; Irlich et al., 2022). In 2022, 2023 and 2024, eDNA sampling was again conducted throughout the MRW. Sampling efforts were guided by previous eDNA results and public reports of Smallmouth Bass captures and sightings between 2019 and 2024. In 2022, a total of 26 sites were sampled for SMB eDNA detection including two new sites to increase SMB distribution resolution. SMB eDNA was detected from 9 sites taken downstream of the McKiel stretch of the SWM River, including detections in Doaktown approximately 95 km downstream of Miramichi Lake. Two additional sites sampled within the Southwest branch of the river had inconclusive sample results. In 2023, sample collection took place at 31 sites including three new sites and three historical sites that had not been sampled since 2021. Detected results were found at 14 sites downstream of the McKiel stretch of the SWM River, including sites in the Blackville area approximately 140 km downstream of Miramichi Lake. An inconclusive result was found at one site 43 km downstream from Deersdale. In 2024, sample collection took place at 16 sites focusing on the tributaries surrounding the SWM River branch. No sites had detected SMB eDNA results, except for a site in Miramichi Lake, where SMB are known to be present. In conclusion, the 2022 and 2023 results did demonstrate some expansion of the detection of Smallmouth Bass DNA in the southwest branch of the Miramichi River, while the 2024 results suggest that expansion into the surrounding tributaries might be absent or minimal.

## RÉSUMÉ

Shaw-McDonald, S., LeBlanc, F., Aucoin, R. and Irlich, U. 2025.

Établissement de la distribution de l'achigan à petite bouche (*Micropterus dolomieu*) dans le bassin versant de la rivière Miramichi à l'aide de l'ADN environnemental, 2022-2024. Can. Data Rep. Fish. Aquat. Sci. 1440: v + 23 p.

À la suite de la détection de l'achigan à petite bouche (*Micropterus dolomieu*) dans la rivière Southwest Miramichi (rivière SWM) en août 2019, des évaluations de la répartition de l'achigan à petite bouche dans le bassin versant de la rivière Miramichi ont été effectuées sur une base annuelle. L'un des outils utilisés pour déterminer l'étendue de la répartition de l'achigan à petite bouche dans le bassin versant de la rivière Miramichi depuis 2019 est l'ADN environnemental (ADNe) (LeBlanc et al., 2021 ; Irlich et al., 2022). En 2022, 2023 et 2024, l'échantillonnage de l'ADNe a de nouveau été réalisé dans l'ensemble de la rivière SWM. Les efforts d'échantillonnage ont été guidés par les résultats précédents d'ADNe et les rapports publics de captures et d'observations d'achigan à petite bouche entre 2019 et 2024. En 2022, un total de 26 sites ont été échantillonnés pour la détection de l'ADNe de l'achigan à petite bouche, y compris deux nouveaux sites pour augmenter la résolution de la distribution de l'espèce. L'ADNe de l'achigan à petite bouche a été détecté dans neuf sites situés en aval de la « McKiel stretch » de la rivière SWM, y compris des détections à Doaktown, à environ 95 km en aval du lac Miramichi. Deux autres sites échantillonnés dans la rivière SWM ont donné des résultats non concluants. En 2023, des échantillons ont été prélevés à 31 sites, dont trois nouveaux sites et trois sites historiques qui n'avaient pas été échantillonnés depuis 2021. Des détections ont été obtenues à 14 sites échantillonnés en aval de la « McKiel stretch » de la rivière SWM, y compris des sites dans la région de Blackville à environ 140 km en aval du lac Miramichi. Un résultat non concluant a été obtenu à un site situé à 43 km en aval de Deersdale. En 2024, des échantillons ont été prélevés dans 16 sites, en particulier dans les affluents entourant la rivière SWM. Aucun site n'a eu de résultats détectés, à l'exception d'un site dans le lac Miramichi. En conclusion, les résultats de 2022 et 2023 ont démontré une certaine expansion de la détection de l'ADN de l'achigan à petite bouche dans la rivière SWM, tandis que les résultats de 2024 suggèrent que l'expansion dans les affluents environnants est possiblement absente ou minime.

## INTRODUCTION

In August 2019, Smallmouth Bass (*Micropterus dolomieu*) was reported and caught in the Southwest Miramichi River (SWM River), approximately 12 km downstream of Miramichi Lake. Since then, Fisheries and Oceans Canada (DFO) has been assessing the extent of the spread of Smallmouth Bass (SMB) in the Miramichi River Watershed (MRW). Environmental DNA (eDNA)-based detections of SMB have been a key tool in this assessment.

In 2019 and 2020, water samples were collected at 47 unique sites and analyzed for SMB DNA using a targeted qPCR approach (LeBlanc et al., 2021). SMB DNA was detected at multiple sites in a 3.5 km stretch of the SWM River encompassing McKiel Pond, where a total of 108 SMB were caught in 2019 and 2020. Furthermore, inconclusive results were obtained from some sites upstream of the confluence of Lake Brook and the SWM River, in McKiel Lake, McKiel Brook, as well as a few other sites in the SWM River between the outflow of McKiel Brook and Blackville (LeBlanc et al., 2021).

Efforts to characterize the SMB distribution in parts of the MRW using eDNA continued in 2021 at a selection of sites sampled in previous years in order to confirm and repeat some results, as well as at 16 new sites (Irlich et al., 2022). In 2022, Lake Brook and a 17 km portion of the SWM River, also known as the project area, were treated with rotenone in an effort to eradicate the river population of SMB. The 2022 eDNA sampling activities occurred prior to the rotenone application in September of that year.

eDNA sampling in 2022 and 2023 targeted areas where past results were inconclusive and also aimed to confirm and repeat some detected results. Sampling efforts also aimed to confirm angler reports of SMB captured within the SWM River between 2019 and 2023. In 2024, sampling focused on the tributaries surrounding the SWM River branch as well as included new sites in the Northwest Miramichi River (NWM River).

This data report serves to complement the previously published 2019, 2020 and 2021 eDNA-based SMB detection data (LeBlanc et al., 2021; Irlich et al., 2022) and to increase the understanding of SMB distribution in the MRW.

## MATERIALS AND METHODS

Unlike in 2019, 2020, and 2021, SMB eDNA sample collection for 2022-2024 within the MRW was conducted using OSMOS eDNA Samplers (Halltech Environmental and Aquatic Research Inc., ON, Canada) and 47 mm 1.2 µm Whatman GF/C Glass Microfiber filters (GE Healthcare, IL, USA). Triplicate water samples were filtered at each site using the OSMOS filtration system. Filters were preserved in non-denatured 95 % ethyl alcohol and kept on ice before being transferred to the eDNA lab for analysis. Five liters were collected for each sample when possible, with some variation due to water turbidity. Field blanks (tap water) were brought into the field during water sample collection and processed alongside field samples after every 9 samples (i.e., three sites). In 2022, eDNA sampling at four sites (sites 5, 10, 17, 29) was conducted using both the traditional “grab sample” method with approximately 1 L of water

collected in triplicate (LeBlanc et al., 2021; Irlich et al., 2022), and by using the OSMOS eDNA samplers with approximately 5L of water. This was done to compare the results obtained between the two methods (see Table 5). Despite the use of 0.8 µm nylon filters with grab samples in previous years, both filtration methods used 1.2 µm glass fiber filters for this comparison. Both 0.8 µm nylon filters and 1.2 µm glass fiber filters perform quite similarly in terms of eDNA capture (data not shown), but higher filtration volumes can be obtained with 1.2 µm glass fiber filters which is advantageous to increase detection probability.

In 2022, eDNA samples were collected from a total of 26 sites, including two new sites to increase resolution of possible SMB distribution in those areas. The first new site was selected approximately 43 km downstream from Deersdale and Miramichi Lake (site 20A) and the second new site was located close to Blackville (Site 65). Sampling in 2022 took place July 13<sup>th</sup>, July 15<sup>th</sup> and July 19-20<sup>th</sup>.

The sampling focused primarily on areas downstream of the rotenone treatment project area in the main stem of the SWM River. Sampling was also repeated in McKiel Brook (site 25 and 26) and in the main stem of the SWM River upstream of the confluence of Lake Brook and the SWM River (sites 10, 29 and 31).

Site 10 was located upstream of the project area towards Half Moon Pit, approximately 18 km upstream from Slate Island. For sites downstream of Slate Island, sampling was completed to approximately 4 km downstream of Blackville in the SWM River (sites 13, 14, 15, 16, 17, 18, 18A, 19, 19A, 20, 20A). This included sites near the Doaktown area (sites 37, 62 and 63) and Blackville area (sites 39, 55, 56, 57 and 65) and also included the Bartholomew River site (site 40) sampled in previous years.

Site 5, which is situated immediately downstream of McKiel Pond, was once again used as a reference site in 2022. This site has been used as a reference site since 2019 and was selected for this purpose due to the known presence of SMB in McKiel Pond (i.e., removal of a total of 108 fish in 2019 and 2020, 4 young of the year in 2021, and 13 juvenile and adult SMB in 2022).

In 2023, eDNA sampling was conducted at 31 sites including three new sites and three sites that had not been sampled since 2021. These new or revisited sites were selected to confirm public reports of SMB having been captured in the area. One of the new sites (site 62A) was selected approximately one kilometer upstream of a detection of SMB eDNA in Doaktown during the 2022 sampling season. Other locations were selected from previously sampled sites which had inconclusive results in previous years, to re-assess and monitor SMB spread. Sampling in 2023 took place July 18-19<sup>th</sup>, 25-27<sup>th</sup> and August 30<sup>th</sup>.

Due to the fact that rotenone was applied in 2022 to the portion of the SWM River where SMB were known to be present, in 2023 a new eDNA site was added in Miramichi Lake (Site 66) to be used as the positive reference site. Site 5, the reference site used in 2019-2022, is within the treated area of the SWM River and it was unclear if there would still be SMB present in that area post-treatment. The new site in Miramichi Lake was chosen as the new positive reference site as there is an established population of SMB present within the lake.

Although Site 5 was no longer the reference site, it was still resampled in 2023, along with two sites in McKiel Brook (Site 25 and 26).

Sites 29 and 31 near Deersdale were resampled, as well as site 10 which was located upstream of the project area. For sites downstream of Slate Island, sampling was done at similar sites to 2022 (Sites 13, 14, 15, 16, 17, 18, 18A, 19, 19A, 20, 20A, 60, 37, 62, 63, 39, 40, 55, 56 and 57). Sites sampled in 2023 that had not been visited since 2021 included sites near Renous at Doyle’s Brook (sites 58 and 59) and site 60 upstream of Boiestown. A new site at the McNamee-Priceville Footbridge (site 61A) where anecdotal reports of SMB captures had been submitted by anglers was added for 2023, as well as site 62A situated 1 km upstream of site 62 in Doaktown where SMB eDNA sampling produced a detected result the year prior.

In 2024, eDNA sampling was conducted at 16 sites including 5 new sites within the Little Southwest branch (site 70), Upper Northwest Miramichi River Branch (site 69), Taxis River (site 67), Dungarvon River (site 72) and Cains River (site 71). There were also two lake sites added (site 68 in Napadogan Lake and site 73 in Nashwaak Lake) within the Saint John River Watershed due to their proximity to the SWM River. The sampling focused on tributaries of the SWM River and also included a site that had not been visited since 2020 (site 49 in Cassilis). Other sites revisited were McKiel Brook (site 25 and 26), Deersdale (site 29), Bartholomew River (site 40A, near site 40 but farther upstream of this tributary), Renous River (site 41 and 43), Barnaby River (site 47) and Miramichi Lake as a control site again (site 66).

**Table 2:** List of new sites added in 2022, 2023 and 2024 with a brief description of why they were sampled.

<b>New Site</b>	<b>Year Added</b>	<b>Close to Site</b>	<b>Reason for adding</b>
Site 20A	2022	Between sites 19 and 20	2021 results for Site 19 were inconclusive but not at Site 20. A new site was selected between these sites to add resolution
Site 65	2022	Between sites 39 and 55	2021 results for Sites 39 and 55 were inconclusive. A new site was selected to add resolution between these sites, near Blackville.
Miramichi Lake	2023	Close to Site 5, source of SMB introduction into that portion of the river	Added as the positive reference site in 2023 after the rotenone treatment was applied to Site 5 (previous reference site) in 2022
58	2023	Downstream of Site 57	Public report of SMB in the area of Doyle’s Brook. Revisiting a 2021 site not visited in 2022
59	2023	Downstream of Site 57	Public report of SMB in the area of Doyle’s Brook. Revisiting a 2021 site not visited in 2022
60	2023	Upstream of Boiestown	Not sampled since 2021
61A	2023	Downstream of Site 60	Located at McNamee-Priceville Footbridge, downstream of Boiestown. Public report of SMB in the area

62A	2023	Site 62	1km upstream of a detected result in 2022 near Doaktown.
67	2024	Taxis River	Focus on tributaries connected to the SWM River to evaluate spread of SMB
68	2024	Napadogan Lake	Lake environment in close proximity to SWMR, High risk of SMB introduction
69	2024	Upper branch of the Northwest Miramichi River	Focus on tributaries connected to the SWM River to evaluate spread of SMB, Priority site for indigenous partners
70	2024	The Oxbow, Little Southwest Miramichi River	Focus on tributaries connected to the SWM River to evaluate spread of SMB, Priority site for indigenous partners
71	2024	Cains River	Focus on tributaries connected to the SWM River to evaluate spread of SMB
72	2024	Dungarvon River	Focus on tributaries connected to the SWM River to evaluate spread of SMB
73	2024	Nashwaak Lake	Lake environment in close proximity to SWMR, High risk of SMB introduction

Lab sample processing, including DNA extraction and qPCR testing was completed as outlined in Irlich et al. (2022).

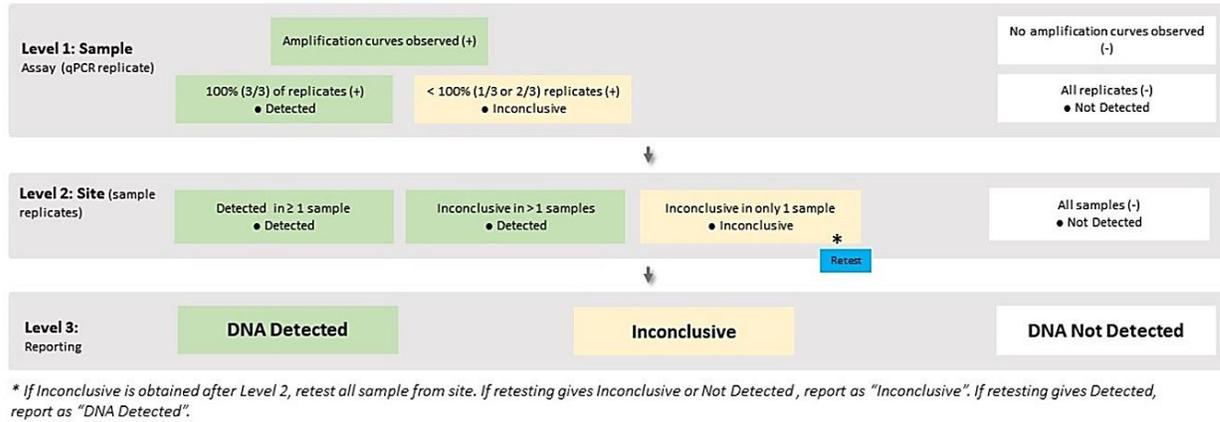
For quality control purposes, in-field filtration blanks (tap water) were included and processed (ratio of one for every 9 field samples from each sampling event) alongside field samples, as well as DNA extraction blanks and qPCR negative controls.

For this report, a new classification system was utilized for determining sample and site results. The data for 2022, 2023 and 2024 are presented in this new format.

With the previous classification framework used in LeBlanc et al. 2021 and Irlich et al. 2022, not detected indicated that no samples collected at that site had detectable levels of SMB DNA in any of the qPCR replicates, inconclusive meant that samples had a detectable level of SMB DNA (i.e., PCR amplification) in only 1 of 3 qPCR replicates, suspected meant that samples had PCR amplification in 2 or 3 of 3 qPCR replicates but below the limit of detection and detected meant that samples had PCR amplification above the limit of detection in all 3 qPCR replicates.

For the new classification system, the result of suspected has been removed along with changes to the criteria for the detected and inconclusive results (Figure 1). Detected now means repeatable DNA detection at either the qPCR or sample level has occurred (i.e., 100 % of qPCR replicates within a sample, or >1 sample replicates within a site). Inconclusive is now defined as non-repeatable DNA detection in any of the levels (i.e., <100 % of qPCR replicates within a sample, in only 1 sample replicate within a site). Not detected remains the same, where DNA is not detected in any of the levels (qPCR, sample, site). An updated table with results from 2019 to 2024 with the new and old classification system is available in Appendix 1.

**Targeted qPCR Detection of Aquatic Species results interpretation framework:**  
*To be used if all process controls (IPC, positive and negative controls) are as expected.*



**Figure 1:** New targeted qPCR detection decision framework used to classify results.

## RESULTS

All site results from the 2022 sampling events are depicted in Figure 2 and listed in Table 2. All results from the 2023 sampling events are depicted in Figure 3 and listed in Table 3. All results from the 2024 sampling events are depicted in Figure 4 and listed in Table 4. SMB eDNA detections and public reports of captures are compared in Figure 5.

In 2022, 26 sites were sampled across the SWM River and its tributaries. Samples from 9 sites (sites 13, 16, 17, 18, 18A, 20A, 62, 37 and 55) collected downstream of the McKiel stretch of the SWM River had detected levels of SMB eDNA, including detections in Doaktown (sites 62 and 37) approximately 95 km downstream of Miramichi Lake. Two additional sites (sites 14 and 20) sampled within the Southwest branch of the river had inconclusive sample results. Samples collected at site 5, the positive reference site, yielded detected results during both sampling events on July 19<sup>th</sup> and 20<sup>th</sup>. Similar to 2021, the sites sampled in McKiel Brook (sites 25 and 26) were both classified as not detected. Site 31, which is located upstream of the McKiel stretch towards Juniper was not detected. The site sampled in the Bartholomew River (site 40) was not detected.

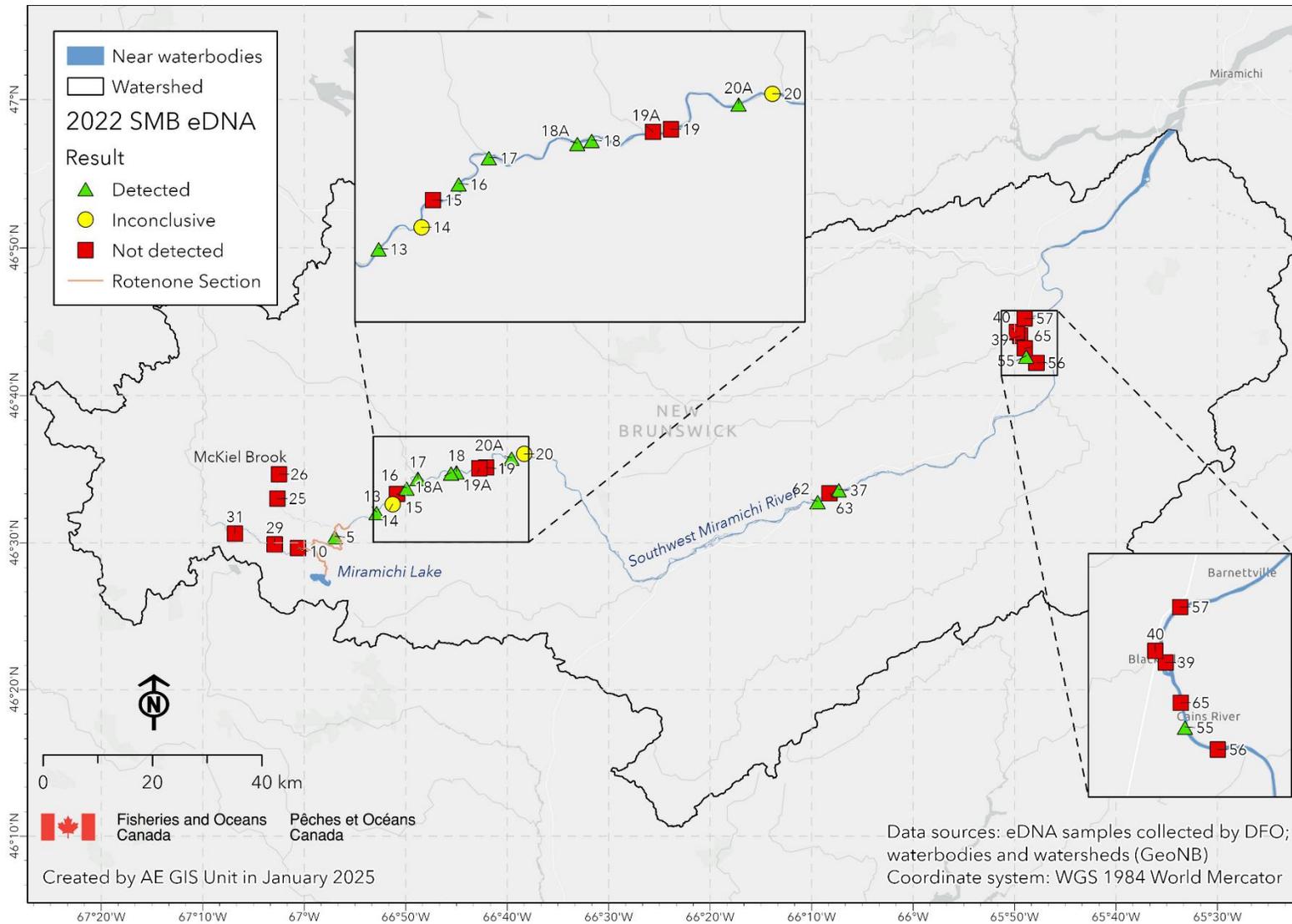
Table 5 contains a comparison between OSMOS filtered sample and grab sample performance. The 2022 OSMOS and grab samples had almost identical performance (i.e., proportion of detected qPCR replicates, eDNA concentrations, final result) despite the different volumes filtered.

In 2023, 31 sites were sampled across the SWM River and its tributaries. The new positive reference site in Miramichi Lake had detected results as expected and a new detection was seen in site 61A upstream of site 62 in Doaktown which was detected in 2022. Like in 2022, the sites sampled in McKiel Brook (site 25 and 26) were both classified as not detected along with sites 57 in Underhill, and sites 58 and 59 near Quarryville. Downstream of Slate Island, detections for

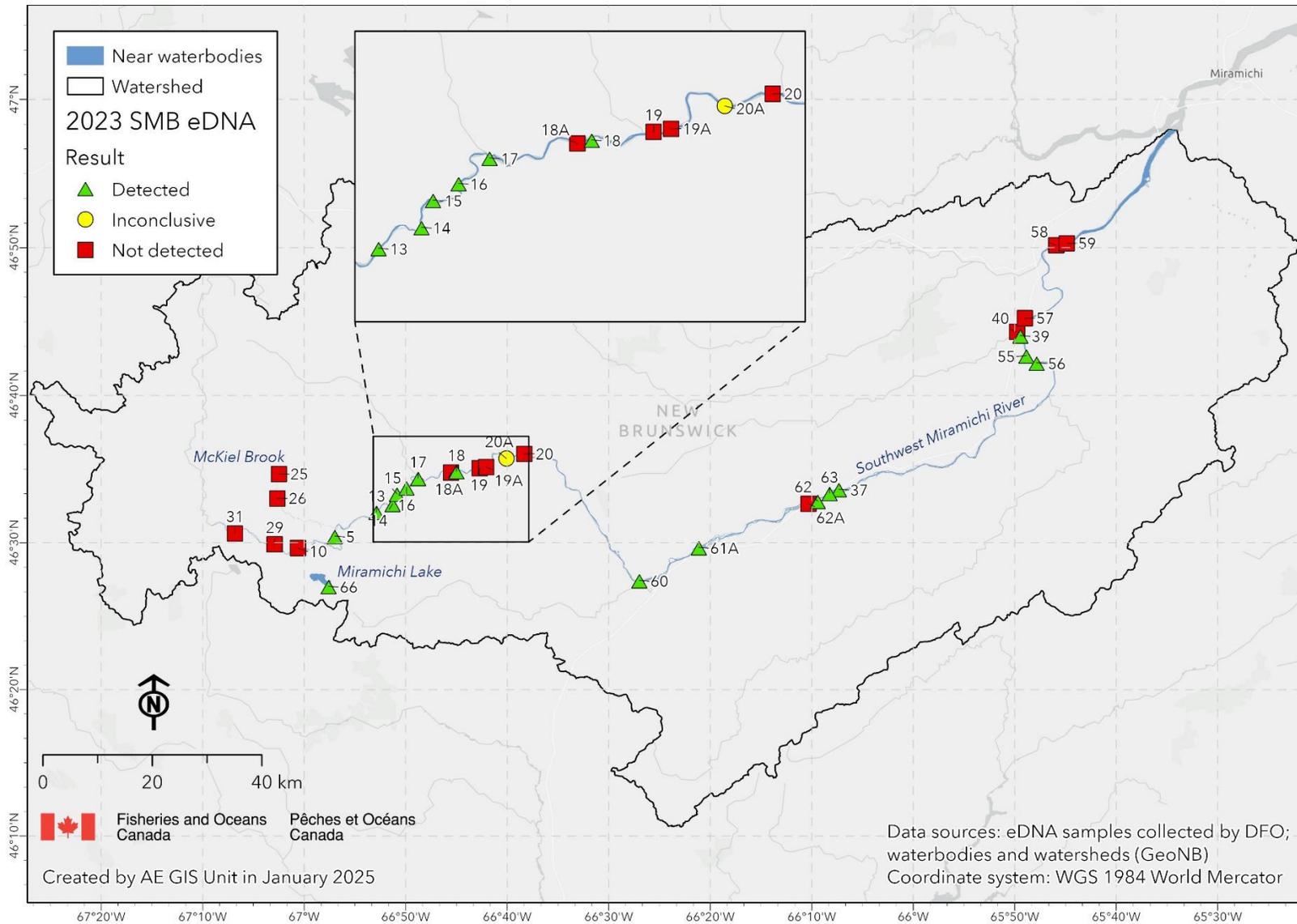
SMB eDNA were obtained at sites 13, 14, 15, 16, 17, and 18. Detections were also found at sites 5, 60, 61A, 62, 37, 39, 55 and 56. Some changes in the level of detection were observed at site 18A upstream of Snake Brook, Site 20 at Rocky Brook Lodge and 20A compared to 2022 results potentially due to excessive rainfall that occurred before the collection date in 2023. Sites 18A and 20 were not detected and site 20A was inconclusive compared to being detected (site 18A and 20A) and inconclusive (site 20) in 2022. Like in 2022, site 31 upstream of the McKiel stretch towards Juniper was not detected, along with sites 25 and 26 in McKiel Brook. Once again, the site sampled in the Bartholomew River (site 40) was not detected.

In 2024, 16 sites were sampled with the focus on the tributaries connected to the SWM River as well as nearby lakes. The Miramichi Lake reference site (site 66) was detected as expected. All other sites sampled in 2024 were not detected.

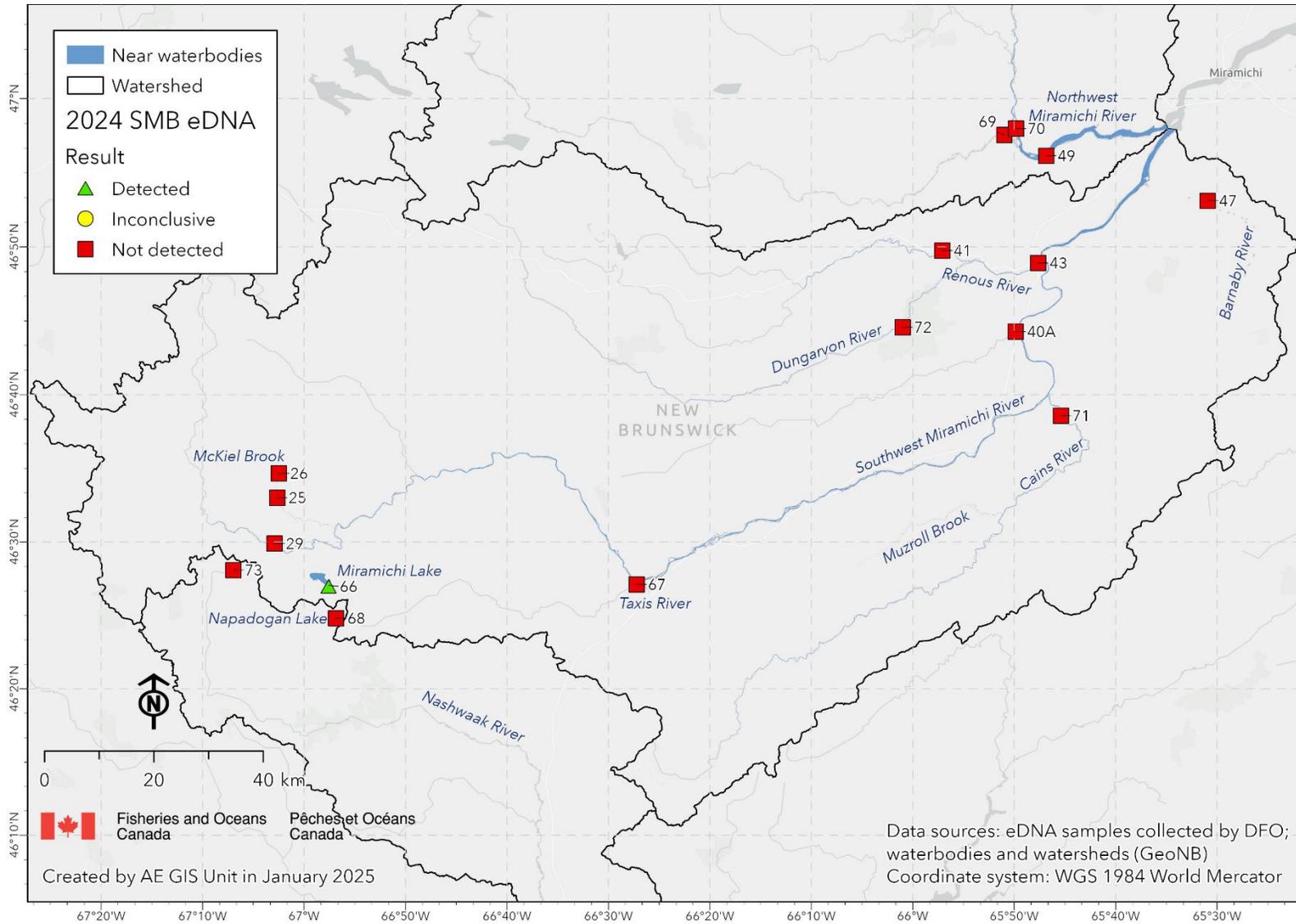
No contaminations were observed in any of the blanks or negative controls in 2022, 2023 or 2024.



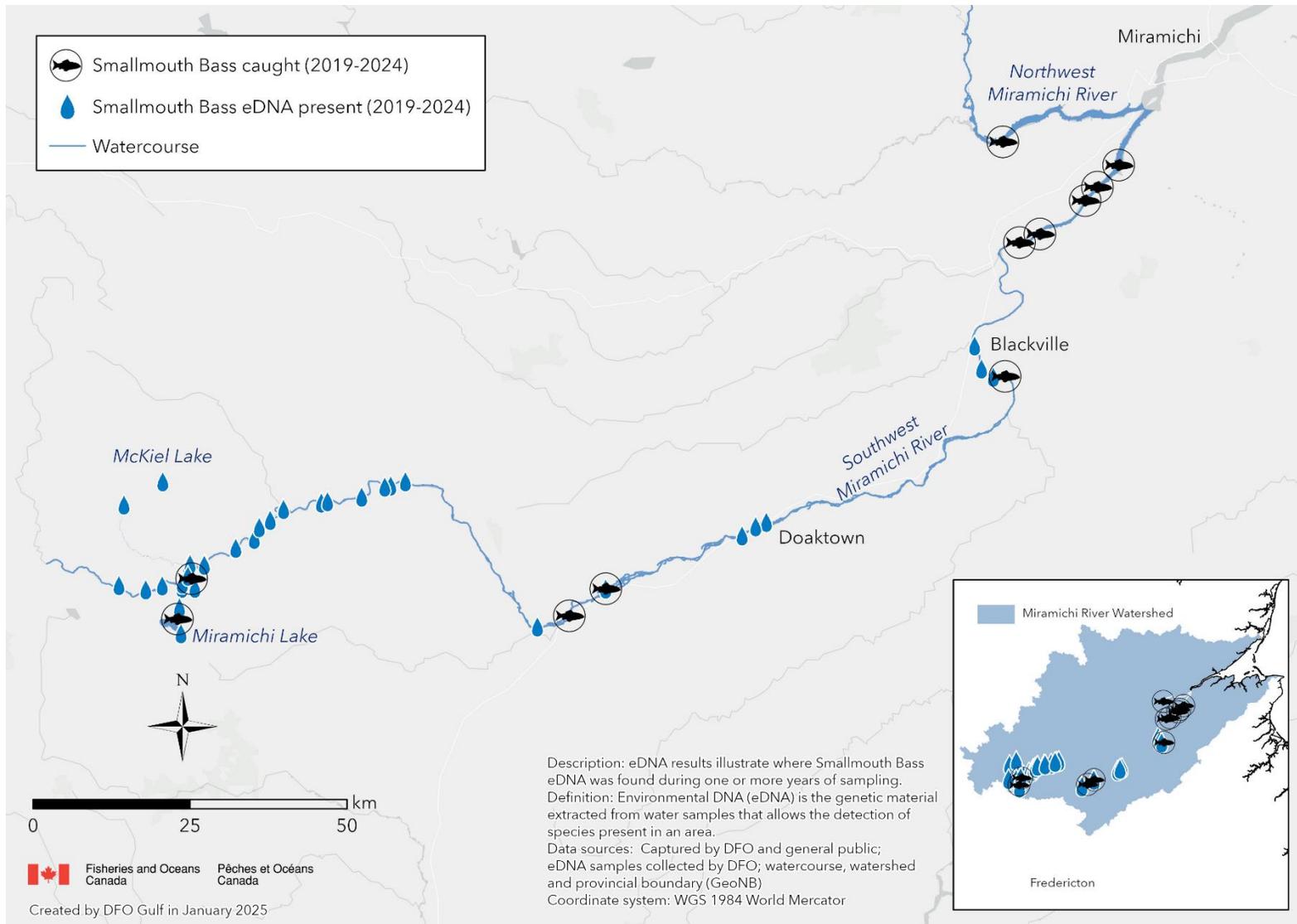
**Figure 2:** Results from surveys for SMB eDNA in the Miramichi River Watershed for the 2022 field season. The area of application for the rotenone project is indicated in orange for the segment of Lake Brook and the Miramichi River.



**Figure 3:** Results from surveys for SMB eDNA in the Miramichi River Watershed for the 2023 field season.



**Figure 4:** Results from surveys for SMB eDNA in the Miramichi River Watershed for the 2024 field season.



**Figure 5:** Comparison of SMB captures and eDNA detections from 2019 to 2024 for the Miramichi River Watershed.

**Table 2:** List of sites and sampling events in 2022 and SMB qPCR results. \* Indicates re-sampling with a grab sample for filtration method comparison experiment.

Site ID	Date Sampled	Latitude (°N)	Longitude (°W)	Site Result
Site 19	7/13/2022	46.58554	-66.70118	Not detected
Site 19A	7/13/2022	46.58444	-66.71226	Not detected
Site 20A	7/13/2022	46.59647	-66.65959	Detected
Site 20	7/13/2022	46.60063	-66.63863	Inconclusive
Site 62	7/13/2022	46.54727	-66.15685	Detected
Site 63	7/15/2022	46.55625	-66.13745	Not detected
Site 37	7/15/2022	46.56064	-66.1221	Detected
Site 55	7/15/2022	46.71168	-65.81432	Detected
Site 65	7/15/2022	46.72013	-65.81649	Not detected
Site 56	7/15/2022	46.70361	-65.79745	Not detected
Site 39	7/15/2022	46.73431	-65.82416	Not detected
Site 40	7/15/2022	46.73844	-65.82952	Not detected
Site 57	7/15/2022	46.75384	-65.81673	Not detected
Site 26	7/19/2022	46.57771	-67.04132	Not detected
Site 25	7/19/2022	46.55011	-67.04399	Not detected
Site 16	7/19/2022	46.56257	-66.832	Detected
Site 15	7/19/2022	46.55547	-66.84771	Not detected
Site 14	7/19/2022	46.54391	-66.85485	Inconclusive
Site 13	7/19/2022	46.53503	-66.88127	Detected
Site 5	7/19/2022	46.50753	-66.94977	Detected
Site 18	7/20/2022	46.58102	-66.75007	Detected
Site 18A	7/20/2022	46.5797	-66.75891	Detected
Site 17	7/20/2022	46.5737	-66.81342	Detected
Site 31	7/20/2022	46.51053	-67.1137	Not detected
Site 29	7/20/2022	46.49828	-67.0485	Not detected
Site 10	7/20/2022	46.49411	-67.0101	Not detected
Site 5	7/20/2022	46.50753	-66.94977	Detected
Site 17	7/20/2022	46.5737	-66.81342	Detected
Site 29	7/20/2022	46.49828	-67.0485	Not detected
Site 17*	7/20/2022	46.5737	-66.81342	Detected
Site 29*	7/20/2022	46.49828	-67.0485	Not detected
Site 10*	7/20/2022	46.49411	-67.0101	Not detected
Site 5*	7/20/2022	46.50753	-66.94977	Detected

**Table 3:** List of sites and sampling events in 2023 and SMB qPCR results.

Site ID	Date Sampled	Latitude (°N)	Longitude (°W)	Site Result
Site 18	7/18/2023	46.58102	-66.75007	Detected
Site 18A	7/18/2023	46.579474	-66.758832	Not detected
Site 17	7/18/2023	46.573364	-66.812947	Detected
Site 19	7/19/2023	46.5844	-66.711993	Not detected
Site 19A	7/19/2023	46.58566	-66.701176	Not detected
Site 20A	7/19/2023	46.595409	-66.668123	Inconclusive
Site 20	7/19/2023	46.600539	-66.638587	Not detected
Site 16	7/18/2023	46.56257	-66.832	Detected
Site 15	7/18/2023	46.55547	-66.84771	Detected
Site 14	7/18/2023	46.54391	-66.85485	Detected
Site 13	7/18/2023	46.53503	-66.88127	Detected
Site 31	7/19/2023	46.51053	-67.1137	Not detected
Site 29	7/19/2023	46.49828	-67.0485	Not detected
Site 10	7/19/2023	46.49392	-67.01024	Not detected
Site 5	7/19/2023	46.50753	-66.94977	Detected
Site 60	7/25/2023	46.457414	-66.449737	Detected
Site 62A	7/25/2023	46.544083	-66.171835	Not detected
Site 61A	7/26/2023	46.494856	-66.352052	Detected
Site 62	7/26/2023	46.54727	-66.15685	Detected
Site 63	7/26/2023	46.55625	-66.13745	Detected
Site 37	7/26/2023	46.56064	-66.1221	Detected
Site 40	7/26/2023	46.73844	-65.82952	Not detected
Site 39	7/26/2023	46.73431	-65.82416	Detected
Site 55	7/27/2023	46.71168	-65.81432	Detected
Site 56	7/27/2023	46.70361	-65.79745	Detected
Site 57	7/27/2023	46.75384	-65.81673	Not detected
Site 58	7/27/2023	46.83605	-65.76528	Not detected
Site 59	7/27/2023	46.83822	-65.748	Not detected
Site 26	8/30/2023	46.55011	-67.04399	Not detected
Site 25	8/30/2023	46.57771	-67.04132	Not detected
Site 66	8/30/2023	46.450717	-66.959951	Detected

**Table 4:** List of sites and sampling events in 2024 and SMB qPCR results.

Site ID	Date Sampled	Latitude (°N)	Longitude (°W)	Site Result
Site 29	7/17/2024	46.49828	-67.0485	Not detected
Site 68	7/17/2024	46.413393	-66.94737	Not detected
Site 67	7/17/2024	46.451789	-66.45346	Not detected
Site 49	7/23/2024	46.935797	-65.78069	Not detected
Site 69	7/23/2024	46.966509	-65.83023	Not detected
Site 70	7/23/2024	46.966509	-65.83023	Not detected
Site 47	7/23/2024	46.885233	-65.51533	Not detected
Site 71	7/24/2024	46.642879	-65.75655	Not detected
Site 72	7/24/2024	46.742732	-66.01647	Not detected
Site 40A	7/24/2024	46.737822	-65.83078	Not detected
Site 41	7/25/2024	46.829142	-65.95141	Not detected
Site 43	7/25/2024	46.815242	-65.79379	Not detected
Site 25	8/8/2024	46.55011	-67.04399	Not detected
Site 26	8/8/2024	46.57771	-67.04132	Not detected
Site 66	9/20/2024	46.450734	-66.959753	Detected
Site 73	9/20/2024	46.468048	-66.11604	Not detected

**Table 5:** Comparison of OSMOS samples and traditional grab sample water collection method results from 2022. OSMOS and grab samples were collected at the same time and both filtered on 1.2 µm glass fiber filters. Generally, grab samples were approximately 1L collected in triplicate for each site and OSMOS samples were approximately 5L.

Location	Criteria	Grab Sample	OSMOS
Site 5	Amplified qPCR Replicates eDNA Concentration Range (Pg/L) Sample Results	8/9 0.0 – 59.8 Inconclusive (1/3) and Detected (2/3)	12/12 3.3 – 14.1 Detected (4/4)
Site 10	Amplified qPCR Replicates eDNA Concentration Range (Pg/L) Sample Results	0/9 0.0 Not detected (3/3)	0/9 0.0 Not detected (3/3)
Site 17	Amplified qPCR Replicates eDNA Concentration Range (Pg/L) Sample Results	5/9 0.0 – 31.5 Inconclusive (3/3)	5/9 1.0 – 11.9 Inconclusive (3/3)
Site 29	Amplified qPCR Replicates eDNA Concentration Range (Pg/L) Sample Results	0/9 0.0 Not detected (3/3)	0/9 0.0 Not detected (3/3)

## DISCUSSION

The 2022 and 2023 sampling years saw a greater number of detections for SMB eDNA in the Southwest Miramichi River compared to previous years' sampling results. This was evident even with the adjustment to the new classification system, which eliminated the "suspected" level of detection and reclassified a number of 2019 – 2021 sites to detected with the new criteria.

In 2022, samples from 9 sites taken downstream of the McKiel stretch of the SWM River had detected levels of SMB eDNA. This included site 62 and site 37 in Doaktown, approximately 95 km downstream of Miramichi Lake. Two additional sites sampled within the Southwest branch of the river had inconclusive sample results. In 2023, SMB eDNA was detected at 14 sites, including sites in the Blackville area approximately 140 km downstream of Miramichi Lake. An inconclusive result was found at one location 43 km downstream from Deersdale. Numerous changes were observed in the results for both 2022 and 2023 compared to previous years. These data suggest a range expansion of SMB within the Miramichi River Watershed.

For the sites where detection decreased from 2022 to 2023, the weather did pose some challenges and may have impacted the level of detection at some of the 2023 sites. Excessive rainfall was observed in the days leading up to the field collection on July 18<sup>th</sup> 2023 as well as higher water levels than was typically seen at that time of year. Water level monitoring conducted at the Blackville station for the months of July and August indicated that the highest water levels of the summer on that portion of the SWM River were July 18 and 19<sup>th</sup> (ECCC, 2023). This coincided with some of the collection dates and may have impacted the level of detection observed.

In 2023, SMB eDNA was detected in samples collected at site 5. Since site 5 is within the area that was treated with rotenone in 2022, this suggests that SMB may have recolonized the project area since the rotenone treatment, or that the treatment was not successful in eradicating the species from the treated area. The eDNA result from site 5 and elsewhere in the MRW indicates that SMB remain present. This was later confirmed by multiple captures of SMB within the rotenone-treated area. SMB were captured in 2024 in areas of the SWMR from McKiel Pond to Barnaby Island, and also near Casillis in the NWM River. These captures were reported by anglers and DFO staff.

The 2024 sampling season explored the surrounding tributaries of the SWM River and revisited older sites that had not been sampled in the last four years. Priority sites were shifted that year to include lake sites, such as Napadogan and Nashwaak Lakes, that could have higher risks of introduction of SMB. SMB eDNA was not detected in these lakes and branches.

Public reports of SMB catches in the SWM River were important elements in the selection of new and revisited sites for eDNA collection in 2022, 2023 and 2024. The new site 61A near Priceville was selected based on a report of a SMB capture in the area, which did in fact have a detection of SMB eDNA in 2023. In 2024, a SMB capture was reported in Cassilis after the eDNA sampling season, which will inform future sampling intensity within the Northwest branch of the river. These anecdotal reports are valuable pieces of information when provided to Fisheries and Oceans Canada and shows the value of public engagement and education on how members of the public can assist the government in the early detection of AIS.

In conclusion, the 2022 and 2023 eDNA results presented in this report illustrate the continued spread in distribution of SMB within the Miramichi River Watershed, while the 2024 data suggests that colonization is low as of yet in the surrounding tributaries.

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## APPENDIX

**Appendix 1:** SMB eDNA sample detection results from 2019 to 2024 in the Miramichi River Watershed and surrounding tributaries presented with both the old and the new classification systems. All samples collected in 2019 – 2021 were filtered with 0.8 µm nylon filters, and samples collected in 2022 – 2024 were filtered on 1.2 µm glass fiber filters. Sample blank types are abbreviated to LB (Lab Blank), FB (Field Blank) and EB (DNA Extraction Blank)

Sample type	Site	Sample Date	Latitude (°N)	Longitude (°W)	Volume Filtered (mL)	Sample Result-Old System	Sample Result-New System
Sample	5	8/27/2019	46.50799	-66.94947	1000	Suspected	Inconclusive
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	5	8/27/2019	46.50798	-66.94944	1000	Suspected	Inconclusive
Sample	6	8/27/2019	46.51599	-66.94915	1000	Suspected	Detected
Sample	6	8/27/2019	46.51599	-66.9491	1000	Suspected	Inconclusive
Sample	6	8/27/2019	46.516	-66.94906	1000	Suspected	Inconclusive
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	7	8/27/2019	46.51666	-66.95041	1000	Not detected	Not detected
Sample	7	8/27/2019	46.51664	-66.9504	1000	Not detected	Not detected
Sample	7	8/27/2019	46.51661	-66.9504	1000	Not detected	Not detected
Sample	8	8/27/2019	46.51831	-66.94831	1000	Not detected	Not detected
Sample	8	8/27/2019	46.5183	-66.94826	1000	Suspected	Detected
Sample	8	8/27/2019	46.51828	-66.9482	1000	Inconclusive	Inconclusive
Sample	9	8/27/2019	46.51916	-66.94681	1000	Suspected	Inconclusive
Sample	9	8/27/2019	46.51906	-66.94672	1000	Suspected	Inconclusive
Sample	9	8/27/2019	46.51896	-66.94663	1000	Suspected	Inconclusive
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	10	8/28/2019	46.49392	-67.01024	1000	Not detected	Not detected
Sample	10	8/28/2019	46.49411	-67.0101	1000	Not detected	Not detected
Sample	10	8/28/2019	46.49407	-67.01006	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	25	9/6/2019	46.55018	-67.04403	1000	Not detected	Not detected
Sample	25	9/6/2019	46.55018	-67.04403	1000	Not detected	Not detected
Sample	25	9/6/2019	46.55018	-67.04403	1000	Not detected	Not detected
Sample	26	9/6/2019	46.57771	-67.04132	1000	Not detected	Not detected
Sample	26	9/6/2019	46.57771	-67.04132	1000	Inconclusive	Inconclusive
Sample	27	9/6/2019	46.60067	-66.98572	550	Not detected	Not detected

Sample	26	9/6/2019	46.57771	-67.04132	1000	Not detected	Not detected
Sample	27	9/6/2019	46.60067	-66.98572	525	Inconclusive	Inconclusive
Sample	27	9/6/2019	46.60067	-66.98572	500	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	14	8/28/2019	46.54418	-66.85125	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	13	9/12/2019	46.53652	-66.87909	1000	Not detected	Not detected
Sample	13	9/12/2019	46.53652	-66.87909	1000	Not detected	Not detected
Sample	13	9/12/2019	46.53503	-66.88127	1000	Not detected	Not detected
Sample	13	9/12/2019	46.53508	-66.88129	1000	Not detected	Not detected
Sample	11	9/12/2019	46.51914	-66.92581	1000	Not detected	Not detected
Sample	11	9/12/2019	46.51838	-66.92639	1000	Suspected	Detected
Sample	11	9/12/2019	46.51838	-66.92639	1000	Not detected	Not detected
Sample	8	9/12/2019	46.5172	-66.94911	1000	Suspected	Inconclusive
Sample	11	9/12/2019	46.51914	-66.92581	1000	Inconclusive	Inconclusive
Sample	8	9/12/2019	46.5172	-66.94911	1000	Not detected	Not detected
Sample	8	9/12/2019	46.51639	-66.9497	1000	Suspected	Detected
Sample	5	9/12/2019	46.50753	-66.94977	1000	Suspected	Detected
Sample	25	9/12/2019	46.55011	-67.04399	1000	Not detected	Not detected
Sample	25	9/12/2019	46.55011	-67.04399	1000	Not detected	Not detected
Sample	5	9/12/2019	46.50753	-66.94977	1000	Suspected	Inconclusive
Sample	5	9/12/2019	46.50809	-66.94965	1000	Suspected	Inconclusive
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	24	9/12/2019	46.4541	-66.42307	1000	Not detected	Not detected
Sample	24	9/12/2019	46.45406	-66.42301	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	24	9/12/2019	46.45404	-66.42295	1000	Not detected	Not detected
Sample	23	9/12/2019	46.48196	-66.4797	1000	Not detected	Not detected
Sample	23	9/12/2019	46.48188	-66.47978	1000	Not detected	Not detected
Sample	23	9/12/2019	46.48183	-66.47985	1000	Not detected	Not detected
Sample	22	9/12/2019	46.51649	-66.51611	1000	Not detected	Not detected
Sample	22	9/12/2019	46.51649	-66.51594	1000	Not detected	Not detected
Sample	22	9/12/2019	46.51649	-66.51587	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	21	9/12/2019	46.56018	-66.55818	1000	Not detected	Not detected
Sample	21	9/12/2019	46.56006	-66.55818	1000	Not detected	Not detected
Sample	21	9/12/2019	46.55979	-66.5582	1000	Not detected	Not detected

Sample	20	9/12/2019	46.60068	-66.63867	1000	Not detected	Not detected
Sample	20	9/12/2019	46.60063	-66.63863	1000	Not detected	Not detected
Sample	20	9/12/2019	46.60059	-66.63861	1000	Not detected	Not detected
Sample	19	9/12/2019	46.58557	-66.70121	1000	Not detected	Not detected
Sample	19	9/12/2019	46.58554	-66.70118	1000	Not detected	Not detected
Sample	19	9/12/2019	46.58557	-66.70119	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	13	10/3/2019	46.53456	-66.88125	1000	Not detected	Not detected
Sample	13	10/3/2019	46.53477	-66.88146	1000	Inconclusive	Inconclusive
Sample	13	10/3/2019	46.53499	-66.88155	1000	Not detected	Not detected
Sample	26	10/3/2019	46.57803	-67.04152	1000	Not detected	Not detected
Sample	26	10/3/2019	46.57803	-67.04152	1000	Not detected	Not detected
Sample	5	10/3/2019	46.50642	-66.95071	1000	Not detected	Not detected
Sample	5	10/3/2019	46.50642	-66.95071	1000	Not detected	Not detected
Sample	5	10/3/2019	46.50642	-66.95071	1000	Not detected	Not detected
Sample	26	10/3/2019	46.57803	-67.04152	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	5	10/10/2019	46.50754	-66.94977	1000	Not detected	Not detected
Sample	27	10/10/2019	46.60062	-66.9858	800	Not detected	Not detected
Sample	27	10/10/2019	46.60062	-66.9858	775	Not detected	Not detected
Sample	27	10/10/2019	46.60062	-66.9858	775	Not detected	Not detected
Sample	26	10/10/2019	46.57803	-67.04152	1000	Not detected	Not detected
Sample	26	10/10/2019	46.57803	-67.04152	1000	Not detected	Not detected
Sample	15	10/10/2019	46.55547	-66.84771	1000	Not detected	Not detected
Sample	26	10/10/2019	46.57803	-67.04152	1000	Not detected	Not detected
Sample	15	10/10/2019	46.55547	-66.84771	1000	Not detected	Not detected
Sample	15	10/10/2019	46.55547	-66.84771	1000	Not detected	Not detected
Sample	14	10/10/2019	46.54391	-66.85485	1000	Not detected	Not detected
Sample	14	10/10/2019	46.54391	-66.85485	1000	Not detected	Not detected
Sample	14	10/10/2019	46.54391	-66.85485	1000	Not detected	Not detected
Sample	17	10/10/2019	46.5737	-66.81342	1000	Not detected	Not detected
Sample	17	10/10/2019	46.5737	-66.81342	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	17	10/10/2019	46.5737	-66.81342	1000	Not detected	Not detected

Sample	29	10/10/2019	46.49828	-67.0485	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	12	10/10/2019	46.52954	-66.90152	1000	Not detected	Not detected
Sample	29	10/10/2019	46.49828	-67.0485	1000	Not detected	Not detected
Sample	12	10/10/2019	46.52954	-66.90152	1000	Not detected	Not detected
Sample	12	10/10/2019	46.52954	-66.90152	1000	Not detected	Not detected
Sample	18	10/10/2019	46.58102	-66.75007	1000	Not detected	Not detected
Sample	5	10/10/2019	46.50754	-66.94977	1000	Not detected	Not detected
Sample	16	10/10/2019	46.56257	-66.832	1000	Not detected	Not detected
Sample	16	10/10/2019	46.56257	-66.832	1000	Not detected	Not detected
Sample	18	10/10/2019	46.58102	-66.75007	1000	Inconclusive	Inconclusive
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	16	10/10/2019	46.56257	-66.832	1000	Not detected	Not detected
Sample	18	10/10/2019	46.58142	-66.7502	1000	Not detected	Not detected
Sample	29	10/10/2019	46.49828	-67.0485	1000	Not detected	Not detected
Sample	5	10/10/2019	46.50754	-66.94977	1000	Not detected	Not detected
Field blank	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	5	8/26/2020	46.50753	-66.94977	1000	Suspected	Inconclusive
Sample	5	8/26/2020	46.50753	-66.94977	1000	Suspected	Inconclusive
Sample	5	8/26/2020	46.50753	-66.94977	1000	Suspected	Inconclusive
Sample	14	8/26/2020	46.54391	-66.85485	1000	Not detected	Not detected
Sample	14	8/26/2020	46.54391	-66.85485	1000	Inconclusive	Inconclusive
FB	NA	NA	NA	NA	1000	Inconclusive	Inconclusive
Sample	14	8/26/2020	46.54391	-66.85485	1000	Not detected	Not detected
Sample	15	8/26/2020	46.55547	-66.84771	1000	Not detected	Not detected
Sample	15	8/26/2020	46.55547	-66.84771	1000	Not detected	Not detected
Sample	16	8/26/2020	46.56257	-66.832	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	15	8/26/2020	46.55547	-66.84771	750	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	16	8/26/2020	46.56257	-66.832	1000	Not detected	Not detected
Sample	16	8/26/2020	46.56257	-66.832	1000	Not detected	Not detected
Sample	13	8/26/2020	46.53503	-66.88127	1000	Inconclusive	Inconclusive
Sample	13	8/26/2020	46.53503	-66.88127	1000	Inconclusive	Inconclusive
Sample	13	8/26/2020	46.53503	-66.88127	1000	Not detected	Not detected
Sample	50	8/26/2020	46.52097	-67.33674	100	Not detected	Not detected

Sample	50	8/26/2020	46.52097	-67.33674	100	Not detected	Not detected
Sample	50	8/26/2020	46.52097	-67.33674	150	Not detected	Not detected
Sample	51	8/26/2020	46.52128	-67.33706	100	Not detected	Not detected
Sample	51	8/26/2020	46.52128	-67.33706	100	Not detected	Not detected
Sample	51	8/26/2020	46.52128	-67.33706	200	Not detected	Not detected
Sample	31	8/26/2020	46.51053	-67.1137	600	Not detected	Not detected
FB3	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	31	8/26/2020	46.51053	-67.1137	700	Not detected	Not detected
Sample	31	8/26/2020	46.51053	-67.1137	700	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	25	8/19/2020	46.55011	-67.04399	1000	Not detected	Not detected
Sample	25	8/19/2020	46.55011	-67.04399	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	26	8/19/2020	46.57771	-67.04132	1000	Not detected	Not detected
Sample	26	8/19/2020	46.57771	-67.04132	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	27	8/19/2020	46.60062	-66.9858	250	Inconclusive	Inconclusive
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	29	8/19/2020	46.49828	-67.0485	1000	Not detected	Not detected
Sample	29	8/19/2020	46.49828	-67.0485	1000	Not detected	Not detected
Sample	29	8/19/2020	46.49828	-67.0485	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	30	8/19/2020	46.51033	-67.08379	1000	Not detected	Not detected
Sample	30	8/19/2020	46.51033	-67.08379	1000	Not detected	Not detected
Sample	30	8/19/2020	46.51033	-67.08379	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	31	8/19/2020	46.51054	-67.1137	1000	Not detected	Not detected
Sample	31	8/19/2020	46.51054	-67.1137	1000	Not detected	Not detected
Sample	31	8/19/2020	46.51054	-67.1137	1000	Not detected	Not detected
Sample	31	8/19/2020	46.51984	-67.14979	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	32	8/19/2020	46.51984	-67.14979	1000	Not detected	Not detected
Sample	32	8/19/2020	46.51984	-67.14979	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	1	8/20/2020	46.50335	-66.9651	150	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	33	8/20/2020	46.49801	-66.98654	1000	Not detected	Not detected

Sample	33	8/20/2020	46.49801	-66.98654	1000	Inconclusive	Inconclusive
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	2	8/20/2020	46.49891	-66.95677	1000	Suspected	Detected
Sample	2	8/20/2020	46.49891	-66.95677	1000	Suspected	Detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	2	8/20/2020	46.49891	-66.95677	1000	Suspected	Detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	3	8/20/2020	46.49565	-66.95817	1000	Not detected	Not detected
Sample	3	8/20/2020	46.49565	-66.95817	1000	Inconclusive	Inconclusive
Sample	3	8/20/2020	46.49565	-66.95817	1000	Inconclusive	Inconclusive
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	4	8/20/2020	46.49565	-66.93987	1000	Inconclusive	Not detected
Sample	4	8/20/2020	46.49565	-66.93987	1000	Suspected	Detected
Sample	4	8/20/2020	46.49565	-66.93987	1000	Suspected	Detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	5	8/20/2020	46.50753	-66.94977	1000	Suspected	Detected
Sample	5	8/20/2020	46.50753	-66.94977	750	Suspected	Detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	5	8/20/2020	46.50753	-66.94977	1000	Suspected	Detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	10	8/20/2020	46.49411	-67.0101	1000	Inconclusive	Inconclusive
Sample	10	8/20/2020	46.49411	-67.0101	1000	Not detected	Not detected
Sample	10	8/20/2020	46.49411	-67.0101	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	18	9/1/2020	46.58102	-66.75007	1000	Not detected	Not detected
Sample	18	9/1/2020	46.58102	-66.75007	1000	Not detected	Not detected
Sample	18	9/1/2020	46.58102	-66.75007	1000	Not detected	Not detected
Sample	17	9/1/2020	46.5737	-66.81342	1000	Not detected	Not detected
Sample	17	9/1/2020	46.5737	-66.81342	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	17	9/1/2020	46.5737	-66.81342	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	5	9/1/2020	46.50753	-66.94977	1000	Suspected	Detected
Sample	5	9/1/2020	46.50753	-66.94977	1000	Not detected	Not detected
Sample	5	9/1/2020	46.50753	-66.94977	1000	Suspected	Detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	31	9/1/2020	46.51053	-67.1137	1000	Not detected	Not detected

Sample	31	9/1/2020	46.51053	-67.1137	1000	Not detected	Not detected
Sample	31	9/1/2020	46.51053	-67.1137	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
LB2	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	24	9/2/2020	46.45406	-66.42301	1000	Not detected	Not detected
Sample	24	9/2/2020	46.45406	-66.42301	1000	Not detected	Not detected
Sample	24	9/2/2020	46.45406	-66.42301	1000	Not detected	Not detected
Sample	23	9/2/2020	46.48188	-66.47978	1000	Not detected	Not detected
Sample	23	9/2/2020	46.48188	-66.47978	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	23	9/2/2020	46.48188	-66.47978	1000	Not detected	Not detected
Sample	22	9/2/2020	46.51649	-66.51611	1000	Not detected	Not detected
Sample	22	9/2/2020	46.51649	-66.51611	1000	Not detected	Not detected
Sample	22	9/2/2020	46.51649	-66.51611	1000	Not detected	Not detected
Sample	21	9/2/2020	46.56006	-66.55818	1000	Not detected	Not detected
Sample	21	9/2/2020	46.56006	-66.55818	1000	Not detected	Not detected
Sample	21	9/2/2020	46.56006	-66.55818	1000	Not detected	Not detected
Sample	20	9/2/2020	46.60063	-66.63863	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	20	9/2/2020	46.60063	-66.63863	1000	Not detected	Not detected
Sample	20	9/2/2020	46.60063	-66.63863	1000	Not detected	Not detected
Sample	19	9/2/2020	46.58554	-66.70118	1000	Not detected	Not detected
Sample	19	9/2/2020	46.58554	-66.70118	1000	Inconclusive	Inconclusive
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	19	9/2/2020	46.58554	-66.70118	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	37	9/2/2020	46.56064	-66.1221	1000	Not detected	Not detected
Sample	37	9/2/2020	46.56064	-66.1221	1000	Inconclusive	Inconclusive
Sample	37	9/2/2020	46.56064	-66.1221	1000	Not detected	Not detected
Sample	38	9/2/2020	46.61789	-65.87861	1000	Not detected	Not detected
Sample	38	9/2/2020	46.61789	-65.87861	1000	Not detected	Not detected
Sample	38	9/2/2020	46.61789	-65.87861	1000	Not detected	Not detected
Sample	39	9/2/2020	46.73431	-65.82416	1000	Not detected	Not detected
Sample	39	9/2/2020	46.73431	-65.82416	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	39	9/2/2020	46.73431	-65.82416	1000	Not detected	Not detected
Sample	40	9/2/2020	46.73844	-65.82952	1000	Not detected	Not detected

FB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	40	9/2/2020	46.73844	-65.82952	1000	Not detected	Not detected
Sample	40	9/2/2020	46.73844	-65.82952	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	13	9/10/2020	46.53503	-66.88127	1000	Not detected	Not detected
Sample	13	9/10/2020	46.53503	-66.88127	1000	Inconclusive	Inconclusive
Sample	13	9/10/2020	46.53503	-66.88127	1000	Not detected	Not detected
Sample	11	9/10/2020	46.51838	-66.92639	1000	Not detected	Not detected
Sample	11	9/10/2020	46.51838	-66.92639	1000	Inconclusive	Inconclusive
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	11	9/10/2020	46.51838	-66.92639	1000	Not detected	Not detected
Sample	7	9/10/2020	46.51664	-66.9504	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	7	9/10/2020	46.51664	-66.9504	1000	Not detected	Not detected
Sample	7	9/10/2020	46.51664	-66.9504	1000	Not detected	Not detected
Sample	9	9/10/2020	46.51906	-66.94672	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	9	9/10/2020	46.51906	-66.94672	1000	Suspected	Detected
Sample	9	9/10/2020	46.51906	-66.94672	1000	Suspected	Detected
Sample	8	9/10/2020	46.5172	-66.94911	1000	Not detected	Not detected
Sample	8	9/10/2020	46.5172	-66.94911	1000	Suspected	Detected
Sample	8	9/10/2020	46.5172	-66.94911	1000	Suspected	Detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	6	9/10/2020	46.51599	-66.9491	1000	Suspected	Detected
Sample	6	9/10/2020	46.51599	-66.9491	1000	Suspected	Detected
Sample	6	9/10/2020	46.51599	-66.9491	1000	Suspected	Detected
Sample	5	9/10/2020	46.50753	-66.94977	1000	Suspected	Detected
Sample	5	9/10/2020	46.50753	-66.94977	1000	Inconclusive	Inconclusive
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	5	9/10/2020	46.50753	-66.94977	1000	Suspected	Detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	37	9/21/2020	46.56064	-66.1221	1000	Not detected	Not detected
Sample	37	9/21/2020	46.56064	-66.1221	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	37	9/21/2020	46.56064	-66.1221	1000	Not detected	Not detected
Sample	39	9/21/2020	46.73431	-65.82416	1000	Inconclusive	Inconclusive

Sample	39	9/21/2020	46.73431	-65.82416	1000	Not detected	Not detected
Sample	39	9/21/2020	46.73431	-65.82416	1000	Not detected	Not detected
Sample	40	9/21/2020	46.73844	-65.82952	1000	Not detected	Not detected
Sample	40	9/21/2020	46.73844	-65.82952	1000	Not detected	Not detected
Sample	40	9/21/2020	46.73844	-65.82952	1000	Not detected	Not detected
Sample	42	9/21/2020	46.81429	-65.91673	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	42	9/21/2020	46.81429	-65.91673	1000	Not detected	Not detected
Sample	42	9/21/2020	46.81429	-65.91673	1000	Not detected	Not detected
Sample	41	9/21/2020	46.82914	-65.95141	1000	Not detected	Not detected
Sample	41	9/21/2020	46.82914	-65.95141	1000	Not detected	Not detected
Sample	41	9/21/2020	46.82914	-65.95141	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	43	9/21/2020	46.81524	-65.79379	1000	Not detected	Not detected
Sample	43	9/21/2020	46.81524	-65.79379	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	43	9/21/2020	46.81524	-65.79379	1000	Not detected	Not detected
Sample	44	9/21/2020	46.82956	-65.78744	1000	Not detected	Not detected
Sample	44	9/21/2020	46.82956	-65.78744	1000	Not detected	Not detected
Sample	44	9/21/2020	46.82956	-65.78744	1000	Not detected	Not detected
Sample	47	9/21/2020	46.88523	-65.51533	1000	Not detected	Not detected
Sample	47	9/21/2020	46.88523	-65.51533	1000	Not detected	Not detected
Sample	47	9/21/2020	46.88523	-65.51533	1000	Not detected	Not detected
Sample	46	9/21/2020	46.859	-65.44416	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	46	9/21/2020	46.859	-65.44416	1000	Not detected	Not detected
Sample	46	9/21/2020	46.859	-65.44416	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	45	9/21/2020	46.80176	-65.45304	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	45	9/21/2020	46.80176	-65.45304	1000	Not detected	Not detected
Sample	45	9/21/2020	46.80176	-65.45304	1000	Not detected	Not detected
Sample	48	9/21/2020	46.87695	-65.66472	1000	Not detected	Not detected
Sample	48	9/21/2020	46.87695	-65.66472	1000	Not detected	Not detected
Sample	48	9/21/2020	46.87626	-65.66438	1000	Not detected	Not detected
Sample	48	9/21/2020	46.87626	-65.66438	1000	Not detected	Not detected
Sample	48	9/21/2020	46.87562	-65.66363	1000	Not detected	Not detected

LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	48	9/21/2020	46.87562	-65.66363	1000	Not detected	Not detected
Sample	49	9/21/2020	46.93532	-65.78738	1000	Not detected	Not detected
Sample	49	9/21/2020	46.93532	-65.78738	1000	Not detected	Not detected
Sample	49	9/21/2020	46.9345	-65.78671	1000	Not detected	Not detected
Sample	49	9/21/2020	46.9345	-65.78671	1000	Not detected	Not detected
FB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	49	9/21/2020	46.93371	-65.78579	1000	Not detected	Not detected
Sample	49	9/21/2020	46.93371	-65.78579	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	52	6/22/2021	46.58815	-66.97387	375	Not detected	Not detected
Sample	52	6/22/2021	46.58815	-66.97387	375	Not detected	Not detected
Sample	52	6/22/2021	46.58815	-66.97387	400	Not detected	Not detected
FB	NA	6/22/2021	NA	NA	950	Not detected	Not detected
Sample	27A	6/22/2021	46.60005	-66.98332	325	Not detected	Not detected
Sample	27A	6/22/2021	46.60005	-66.98332	325	Not detected	Not detected
Sample	27A	6/22/2021	46.60005	-66.98332	400	Not detected	Not detected
LB	NA	6/23/2021	NA	NA	1000	Not detected	Not detected
Sample	53	6/22/2021	46.5957	-66.97599	450	Not detected	Not detected
Sample	53	6/22/2021	46.5957	-66.97599	425	Not detected	Not detected
Sample	53	6/22/2021	46.5957	-66.97599	425	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	25	6/22/2021	46.55011	-67.04399	1050	Not detected	Not detected
Sample	25	6/22/2021	46.55011	-67.04399	1050	Not detected	Not detected
Sample	25	6/22/2021	46.55011	-67.04399	1075	Not detected	Not detected
FB	NA	6/22/2021	NA	NA	975	Not detected	Not detected
Sample	26	6/22/2021	46.57771	-67.04132	1050	Not detected	Not detected
Sample	26	6/22/2021	46.57771	-67.04132	1025	Not detected	Not detected
Sample	26	6/22/2021	46.57771	-67.04132	1050	Not detected	Not detected
LB	NA	6/23/2021	NA	NA	1000	Not detected	Not detected
Sample	5	6/22/2021	46.50753	-66.94977	1025	Suspected	Inconclusive
Sample	5	6/22/2021	46.50753	-66.94977	1050	Suspected	Inconclusive
Sample	5	6/22/2021	46.50753	-66.94977	1025	Inconclusive	Inconclusive
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	16	7/7/2021	46.56257	-66.832	1100	Inconclusive	Inconclusive
Sample	16	7/7/2021	46.56257	-66.832	1050	Not detected	Not detected
Sample	16	7/7/2021	46.56257	-66.832	1075	Not detected	Not detected

LB	NA	7/8/2021	NA	NA	950	Not detected	Not detected
Sample	15	7/7/2021	46.55547	-66.84771	1050	Inconclusive	Inconclusive
Sample	15	7/7/2021	46.55547	-66.84771	1075	Inconclusive	Inconclusive
Sample	15	7/7/2021	46.55547	-66.84771	1100	Not detected	Not detected
FB	NA	7/7/2021	NA	NA	1050	Not detected	Not detected
Sample	14	7/7/2021	46.54391	-66.85485	1100	Not detected	Not detected
Sample	14	7/7/2021	46.54391	-66.85485	1050	Not detected	Not detected
Sample	14	7/7/2021	46.54391	-66.85485	1050	Inconclusive	Inconclusive
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	5	7/7/2021	46.50753	-66.94977	1075	Suspected	Inconclusive
Sample	5	7/7/2021	46.50753	-66.94977	1000	Suspected	Inconclusive
Sample	5	7/7/2021	46.50753	-66.94977	1050	Suspected	Detected
FB	NA	7/7/2021	NA	NA	1050	Not detected	Not detected
Sample	29	7/7/2021	46.49828	-67.0485	850	Inconclusive	Inconclusive
Sample	29	7/7/2021	46.49828	-67.0485	1025	Not detected	Not detected
Sample	29	7/7/2021	46.49828	-67.0485	1050	Not detected	Not detected
LB	NA	7/8/2021	NA	NA	1000	Not detected	Not detected
Sample	31	7/7/2021	46.51053	-67.1137	1025	Not detected	Not detected
Sample	31	7/7/2021	46.51053	-67.1137	1025	Not detected	Not detected
Sample	31	7/7/2021	46.51053	-67.1137	1075	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	18	7/19/2021	46.58102	-66.75007	1050	Not detected	Not detected
Sample	18	7/19/2021	46.58102	-66.75007	1100	Not detected	Not detected
Sample	18	7/19/2021	46.58102	-66.75007	1100	Inconclusive	Inconclusive
FB	NA	7/19/2021	NA	NA	1025	Not detected	Not detected
Sample	18A	7/19/2021	46.5797	-66.75891	1075	Not detected	Not detected
Sample	18A	7/19/2021	46.5797	-66.75891	1025	Not detected	Not detected
Sample	18A	7/19/2021	46.5797	-66.75891	1050	Not detected	Not detected
LB	NA	7/20/2021	NA	NA	1025	Not detected	Not detected
Sample	17	7/19/2021	46.5737	-66.81342	1025	Not detected	Not detected
Sample	17	7/19/2021	46.5737	-66.81342	1075	Not detected	Not detected
Sample	17	7/19/2021	46.5737	-66.81342	1050	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	29	7/19/2021	46.49828	-67.0485	1025	Not detected	Not detected
Sample	29	7/19/2021	46.49828	-67.0485	1075	Not detected	Not detected
Sample	29	7/19/2021	46.49828	-67.0485	1050	Not detected	Not detected
FB	NA	7/19/2021	NA	NA	1000	Not detected	Not detected
Sample	30	7/19/2021	46.50981	-67.08282	1000	Not detected	Not detected

Sample	30	7/19/2021	46.50981	-67.08282	1075	Not detected	Not detected
Sample	30	7/19/2021	46.50981	-67.08282	1075	Not detected	Not detected
Sample	5	7/19/2021	46.50753	-66.94977	1050	Inconclusive	Inconclusive
Sample	5	7/19/2021	46.50753	-66.94977	1050	Suspected	Inconclusive
Sample	5	7/19/2021	46.50753	-66.94977	1075	Suspected	Inconclusive
LB	NA	7/20/2021	NA	NA	1025	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	2	7/19/2021	46.49976	-66.95794	550	Inconclusive	Inconclusive
Sample	2	7/19/2021	46.49976	-66.95794	550	Inconclusive	Inconclusive
Sample	2	7/19/2021	46.49976	-66.95794	550	Suspected	Inconclusive
FB	NA	7/19/2021	NA	NA	1000	Not detected	Not detected
Sample	54	7/19/2021	46.50257	-66.96341	325	Not detected	Not detected
Sample	54	7/19/2021	46.50257	-66.96341	300	Not detected	Not detected
Sample	54	7/19/2021	46.50257	-66.96341	300	Not detected	Not detected
LB	NA	7/20/2021	NA	NA	1025	Not detected	Not detected
Sample	1	7/19/2021	46.50327	-66.96548	300	Not detected	Not detected
Sample	1	7/19/2021	46.50327	-66.96548	300	Not detected	Not detected
Sample	1	7/19/2021	46.50327	-66.96548	300	Not detected	Not detected
Sample	38	7/20/2021	46.61789	-65.87861	1100	Not detected	Not detected
Sample	38	7/20/2021	46.61789	-65.87861	1075	Not detected	Not detected
Sample	38	7/20/2021	46.61789	-65.87861	1075	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	55	7/20/2021	46.71168	-65.81432	1050	Not detected	Not detected
Sample	55	7/20/2021	46.71168	-65.81432	1000	Inconclusive	Inconclusive
Sample	55	7/20/2021	46.71168	-65.81432	1025	Not detected	Not detected
Sample	56	7/20/2021	46.70361	-65.79745	1100	Not detected	Not detected
Sample	56	7/20/2021	46.70361	-65.79745	1075	Not detected	Not detected
Sample	56	7/20/2021	46.70361	-65.79745	1000	Not detected	Not detected
FB	NA	7/20/2021	NA	NA	1000	Not detected	Not detected
Sample	39	7/20/2021	46.73431	-65.82416	1000	Not detected	Not detected
Sample	39	7/20/2021	46.73431	-65.82416	1075	Not detected	Not detected
Sample	39	7/20/2021	46.73431	-65.82416	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1025	Not detected	Not detected
Sample	40	7/20/2021	46.73844	-65.82952	1000	Not detected	Not detected
Sample	40	7/20/2021	46.73844	-65.82952	1000	Not detected	Not detected
Sample	40	7/20/2021	46.73844	-65.82952	1000	Not detected	Not detected
Sample	57	7/20/2021	46.75384	-65.81673	1075	Not detected	Not detected

EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	57	7/20/2021	46.75384	-65.81673	1000	Not detected	Not detected
Sample	57	7/20/2021	46.75384	-65.81673	1025	Not detected	Not detected
FB	NA	7/20/2021	NA	NA	975	Not detected	Not detected
Sample	41	7/20/2021	46.82914	-65.95141	1025	Not detected	Not detected
Sample	41	7/20/2021	46.82914	-65.95141	1025	Not detected	Not detected
Sample	41	7/20/2021	46.82914	-65.95141	1050	Not detected	Not detected
LB	NA	NA	NA	NA	1075	Not detected	Not detected
Sample	42	7/20/2021	46.81429	-65.91673	1000	Not detected	Not detected
Sample	42	7/20/2021	46.81429	-65.91673	1050	Not detected	Not detected
Sample	42	7/20/2021	46.81429	-65.91673	1050	Not detected	Not detected
Sample	43	7/20/2021	46.81524	-65.79379	1050	Not detected	Not detected
Sample	43	7/20/2021	46.81524	-65.79379	1025	Not detected	Not detected
Sample	43	7/20/2021	46.81524	-65.79379	1075	Not detected	Not detected
LB	NA	NA	NA	NA	1050	Not detected	Not detected
Sample	44	7/20/2021	46.82956	-65.78744	1050	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	44	7/20/2021	46.82956	-65.78744	1075	Not detected	Not detected
Sample	44	7/20/2021	46.82956	-65.78744	1050	Not detected	Not detected
Sample	58	7/20/2021	46.83605	-65.76528	1075	Not detected	Not detected
Sample	58	7/20/2021	46.83605	-65.76528	1100	Not detected	Not detected
Sample	58	7/20/2021	46.83605	-65.76528	1075	Not detected	Not detected
FB	NA	7/20/2021	NA	NA	1000	Not detected	Not detected
Sample	59	7/20/2021	46.83822	-65.748	1050	Not detected	Not detected
Sample	59	7/20/2021	46.83822	-65.748	1050	Not detected	Not detected
Sample	59	7/20/2021	46.83822	-65.748	1100	Not detected	Not detected
Sample	47	7/20/2021	46.88523	-65.51533	350	Not detected	Not detected
Sample	47	7/20/2021	46.88523	-65.51533	350	Not detected	Not detected
Sample	47	7/20/2021	46.88523	-65.51533	350	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
FB	NA	7/20/2021	NA	NA	1000	Not detected	Not detected
Sample	46	7/20/2021	46.859	-65.44416	750	Not detected	Not detected
Sample	46	7/20/2021	46.859	-65.44416	1000	Not detected	Not detected
Sample	46	7/20/2021	46.859	-65.44416	1000	Not detected	Not detected
LB	NA	NA	NA	NA	1025	Not detected	Not detected
Sample	45	7/20/2021	46.80176	-65.45304	775	Not detected	Not detected
Sample	45	7/20/2021	46.80176	-65.45304	900	Not detected	Not detected
Sample	45	7/20/2021	46.80176	-65.45304	900	Not detected	Not detected

LB	NA	NA	NA	NA	1025	Not detected	Not detected
Sample	64	7/20/2021	46.47623	-66.96195	1025	Not detected	Not detected
Sample	64	7/20/2021	46.47623	-66.96195	1025	Suspected	Inconclusive
Sample	64	7/20/2021	46.47623	-66.96195	1050	Not detected	Not detected
FB	NA	NA	NA	NA	900	Not detected	Not detected
Sample	24	7/28/2021	46.45406	-66.42301	1050	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	24	7/28/2021	46.45406	-66.42301	1100	Not detected	Not detected
Sample	24	7/28/2021	46.45406	-66.42301	1100	Not detected	Not detected
LB	NA	NA	NA	NA	1050	Not detected	Not detected
Sample	23	7/28/2021	46.48188	-66.47978	1050	Not detected	Not detected
Sample	23	7/28/2021	46.48188	-66.47978	1050	Not detected	Not detected
Sample	23	7/28/2021	46.48188	-66.47978	1100	Not detected	Not detected
FB	NA	7/28/2021	NA	NA	1025	Not detected	Not detected
Sample	21	7/28/2021	46.56006	-66.55818	1075	Not detected	Not detected
Sample	21	7/28/2021	46.56006	-66.55818	1050	Not detected	Not detected
Sample	21	7/28/2021	46.56006	-66.55818	1000	Not detected	Not detected
Sample	20	7/28/2021	46.60063	-66.63863	1050	Not detected	Not detected
Sample	20	7/28/2021	46.60063	-66.63863	1050	Not detected	Not detected
Sample	20	7/28/2021	46.60063	-66.63863	1050	Not detected	Not detected
LB	NA	NA	NA	NA	1050	Not detected	Not detected
Sample	19	7/28/2021	46.58554	-66.70118	1050	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	19	7/28/2021	46.58554	-66.70118	1075	Not detected	Not detected
Sample	19	7/28/2021	46.58554	-66.70118	1075	Not detected	Not detected
Sample	19A	7/28/2021	46.58444	-66.71226	1075	Not detected	Not detected
Sample	19A	7/28/2021	46.58444	-66.71226	1050	Not detected	Not detected
Sample	19A	7/28/2021	46.58444	-66.71226	1050	Not detected	Not detected
FB	NA	7/28/2021	NA	NA	1000	Not detected	Not detected
Sample	22	7/28/2021	46.51649	-66.51611	1025	Not detected	Not detected
Sample	22	7/28/2021	46.51649	-66.51611	1050	Not detected	Not detected
Sample	22	7/28/2021	46.51649	-66.51611	1075	Not detected	Not detected
Sample	60	7/28/2021	46.4573	-66.45112	1100	Not detected	Not detected
Sample	60	7/28/2021	46.4573	-66.45112	1075	Not detected	Not detected
Sample	60	7/28/2021	46.4573	-66.45112	1050	Not detected	Not detected
LB	NA	NA	NA	NA	1025	Not detected	Not detected
Sample	61	7/28/2021	46.46809	-66.40372	1075	Not detected	Not detected
Sample	61	7/28/2021	46.46809	-66.40372	1075	Not detected	Not detected

EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	61	7/28/2021	46.46809	-66.40372	1100	Not detected	Not detected
Sample	62	7/28/2021	46.54727	-66.15685	1075	Not detected	Not detected
Sample	62	7/28/2021	46.54727	-66.15685	1050	Not detected	Not detected
Sample	62	7/28/2021	46.54727	-66.15685	1050	Not detected	Not detected
FB	NA	7/28/2021	NA	NA	1025	Not detected	Not detected
Sample	63	7/28/2021	46.55625	-66.13745	1075	Not detected	Not detected
Sample	63	7/28/2021	46.55625	-66.13745	1050	Not detected	Not detected
Sample	63	7/28/2021	46.55625	-66.13745	1075	Not detected	Not detected
LB	NA	NA	NA	NA	1050	Not detected	Not detected
Sample	37	7/28/2021	46.56064	-66.1221	1050	Not detected	Not detected
Sample	37	7/28/2021	46.56064	-66.1221	1050	Not detected	Not detected
Sample	37	7/28/2021	46.56064	-66.1221	1050	Not detected	Not detected
Sample	37	7/28/2021	46.56064	-66.1221	1075	Not detected	Not detected
FB	NA	7/28/2021	NA	NA	1075	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	19	7/13/2022	46.58554	-66.70118	4730	Not detected	Not detected
Sample	19	7/13/2022	46.58554	-66.70118	3660	Not detected	Not detected
Sample	19	7/13/2022	46.58554	-66.70118	4860	Not detected	Not detected
Sample	19A	7/13/2022	46.58444	-66.71226	4940	Not detected	Not detected
Sample	19A	7/13/2022	46.58444	-66.71226	2910	Not detected	Not detected
Sample	19A	7/13/2022	46.58444	-66.71226	5290	Not detected	Not detected
Sample	20A	7/13/2022	46.59647	-66.65959	5030	Inconclusive	Inconclusive
Sample	20A	7/13/2022	46.59647	-66.65959	5030	Not detected	Not detected
Sample	20A	7/13/2022	46.59647	-66.65959	5050	Inconclusive	Inconclusive
FB	NA	7/13/2022	NA	NA	1000	Not detected	Not detected
Sample	20	7/13/2022	46.60063	-66.63863	5040	Not detected	Not detected
Sample	20	7/13/2022	46.60063	-66.63863	5040	Inconclusive	Inconclusive
Sample	20	7/13/2022	46.60063	-66.63863	5060	Not detected	Not detected
Sample	62	7/13/2022	46.54727	-66.15685	5050	Suspected	Detected
Sample	62	7/13/2022	46.54727	-66.15685	5040	Suspected	Inconclusive
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	62	7/13/2022	46.54727	-66.15685	5050	Detected	Detected
FB	NA	7/13/2022	NA	NA	1000	Not detected	Not detected
Sample	63	7/15/2022	46.55625	-66.13745	5020	Not detected	Not detected
Sample	63	7/15/2022	46.55625	-66.13745	5050	Not detected	Not detected
Sample	63	7/15/2022	46.55625	-66.13745	4950	Not detected	Not detected
Sample	37	7/15/2022	46.56064	-66.1221	4810	Suspected	Inconclusive

Sample	37	7/15/2022	46.56064	-66.1221	5020	Not detected	Not detected
Sample	37	7/15/2022	46.56064	-66.1221	5010	Suspected	Inconclusive
Sample	55	7/15/2022	46.71168	-65.81432	4990	Not detected	Not detected
Sample	55	7/15/2022	46.71168	-65.81432	4880	Inconclusive	Inconclusive
Sample	55	7/15/2022	46.71168	-65.81432	5020	Inconclusive	Inconclusive
Sample	65	7/15/2022	46.72013	-65.81649	5000	Not detected	Not detected
Sample	65	7/15/2022	46.72013	-65.81649	4990	Not detected	Not detected
Sample	65	7/15/2022	46.72013	-65.81649	5060	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	56	7/15/2022	46.70361	-65.79745	5010	Not detected	Not detected
Sample	56	7/15/2022	46.70361	-65.79745	5020	Not detected	Not detected
Sample	56	7/15/2022	46.70361	-65.79745	5000	Not detected	Not detected
FB	NA	7/15/2022	NA	NA	1000	Not detected	Not detected
Sample	39	7/15/2022	46.73431	-65.82416	4980	Not detected	Not detected
Sample	39	7/15/2022	46.73431	-65.82416	5030	Not detected	Not detected
Sample	39	7/15/2022	46.73431	-65.82416	4590	Not detected	Not detected
Sample	40	7/15/2022	46.73844	-65.82952	5050	Not detected	Not detected
Sample	40	7/15/2022	46.73844	-65.82952	5020	Not detected	Not detected
Sample	40	7/15/2022	46.73844	-65.82952	4960	Not detected	Not detected
Sample	57	7/15/2022	46.75384	-65.81673	4960	Not detected	Not detected
Sample	57	7/15/2022	46.75384	-65.81673	2180	Not detected	Not detected
Sample	57	7/15/2022	46.75384	-65.81673	5020	Not detected	Not detected
Sample	57	7/15/2022	46.75384	-65.81673	4920	Not detected	Not detected
FB	NA	7/15/2022	NA	NA	1140	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	26	7/19/2022	46.57771	-67.04132	5030	Not detected	Not detected
Sample	26	7/19/2022	46.57771	-67.04132	4900	Not detected	Not detected
Sample	26	7/19/2022	46.57771	-67.04132	5050	Not detected	Not detected
Sample	25	7/19/2022	46.55011	-67.04399	1910	Not detected	Not detected
Sample	25	7/19/2022	46.55011	-67.04399	5040	Not detected	Not detected
Sample	25	7/19/2022	46.55011	-67.04399	5020	Not detected	Not detected
Sample	16	7/19/2022	46.56257	-66.832	5030	Inconclusive	Inconclusive
FB	NA	7/19/2022	NA	NA	1180	Not detected	Not detected
Sample	16	7/19/2022	46.56257	-66.832	5010	Not detected	Not detected
Sample	16	7/19/2022	46.56257	-66.832	5020	Inconclusive	Inconclusive
Sample	15	7/19/2022	46.55547	-66.84771	3670	Not detected	Not detected
Sample	15	7/19/2022	46.55547	-66.84771	5030	Not detected	Not detected
Sample	15	7/19/2022	46.55547	-66.84771	5060	Not detected	Not detected

Sample	14	7/19/2022	46.54391	-66.85485	5020	Not detected	Not detected
Sample	14	7/19/2022	46.54391	-66.85485	4920	Inconclusive	Inconclusive
Sample	14	7/19/2022	46.54391	-66.85485	5080	Not detected	Not detected
Sample	13	7/19/2022	46.53503	-66.88127	5050	Suspected	Inconclusive
Sample	13	7/19/2022	46.53503	-66.88127	5070	Suspected	Inconclusive
Sample	13	7/19/2022	46.53503	-66.88127	3360	Not detected	Not detected
FB	NA	7/19/2022	NA	NA	1250	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	5	7/19/2022	46.50753	-66.94977	5040	Detected	Detected
Sample	5	7/19/2022	46.50753	-66.94977	5050	Detected	Detected
Sample	5	7/19/2022	46.50753	-66.94977	5050	Detected	Detected
FB	NA	7/19/2022	NA	NA	1210	Not detected	Not detected
Sample	18	7/20/2022	46.58102	-66.75007	5080	Suspected	Inconclusive
Sample	18	7/20/2022	46.58102	-66.75007	5310	Suspected	Inconclusive
Sample	18	7/20/2022	46.58102	-66.75007	5050	Suspected	Inconclusive
Sample	18A	7/20/2022	46.5797	-66.75891	5070	Not detected	Not detected
Sample	18A	7/20/2022	46.5797	-66.75891	5170	Suspected	Inconclusive
Sample	18A	7/20/2022	46.5797	-66.75891	5010	Suspected	Detected
Sample	17	7/20/2022	46.5737	-66.81342	2050	Suspected	Inconclusive
Sample	17	7/20/2022	46.5737	-66.81342	4940	Suspected	Inconclusive
Sample	17	7/20/2022	46.5737	-66.81342	990	Inconclusive	Inconclusive
FB	NA	7/20/2022	NA	NA	1190	Not detected	Not detected
Sample	31	7/20/2022	46.51053	-67.1137	5070	Not detected	Not detected
Sample	31	7/20/2022	46.51053	-67.1137	4970	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	31	7/20/2022	46.51053	-67.1137	1650	Not detected	Not detected
Sample	31	7/20/2022	46.51053	-67.1137	3440	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	2330	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	5150	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	1050	Not detected	Not detected
Sample	10	7/20/2022	46.49411	-67.0101	5080	Not detected	Not detected
Sample	10	7/20/2022	46.49411	-67.0101	5080	Not detected	Not detected
Sample	10	7/20/2022	46.49411	-67.0101	510	Not detected	Not detected
FB	NA	7/20/2022	NA	NA	1150	Not detected	Not detected
Sample	5	7/20/2022	46.50753	-66.94977	3930	Suspected	Detected
Sample	5	7/20/2022	46.50753	-66.94977	2350	Suspected	Detected
Sample	5	7/20/2022	46.50753	-66.94977	5030	Detected	Detected
Sample	5	7/20/2022	46.50753	-66.94977	3560	Suspected	Detected

FB	NA	7/20/2022	NA	NA	NA	Not detected	Not detected
Sample	17	7/20/2022	46.5737	-66.81342	300	Inconclusive	Inconclusive
Sample	17	7/20/2022	46.5737	-66.81342	300	Inconclusive	Inconclusive
Sample	17	7/20/2022	46.5737	-66.81342	300	Suspected	Detected
FB	NA	7/20/2022	NA	NA	1000	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	300	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	300	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	17	7/20/2022	46.5737	-66.81342	700	Suspected	Inconclusive
Sample	17	7/20/2022	46.5737	-66.81342	700	Inconclusive	Inconclusive
Sample	17	7/20/2022	46.5737	-66.81342	700	Suspected	Inconclusive
Sample	29	7/20/2022	46.49828	-67.0485	700	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	700	Not detected	Not detected
LB	NA	NA	NA	NA	1000	Not detected	Not detected
Sample	29	7/20/2022	46.49828	-67.0485	1000	Not detected	Not detected
Sample	10	7/20/2022	46.49411	-67.0101	1000	Not detected	Not detected
Sample	10	7/20/2022	46.49411	-67.0101	1000	Not detected	Not detected
Sample	10	7/20/2022	46.49411	-67.0101	1000	Not detected	Not detected
Sample	5	7/20/2022	46.50753	-66.94977	1000	Suspected	Inconclusive
Sample	5	7/20/2022	46.50753	-66.94977	1000	Suspected	Detected
Sample	5	7/20/2022	46.50753	-66.94977	1000	Suspected	Detected
FB	NA	7/20/2022	NA	NA	1000	Not detected	Not detected
EB	NA	NA	NA	NA	NA	Not detected	Not detected
Sample	18	7/18/2023	46.58102	-66.75007	5000	NA	Inconclusive
Sample	18	7/18/2023	46.58102	-66.75007	5000	NA	Inconclusive
Sample	18	7/18/2023	46.58102	-66.75007	5000	NA	Inconclusive
Sample	18A	7/18/2023	46.579474	-66.758832	5000	NA	Not detected
Sample	18A	7/18/2023	46.579474	-66.758832	5000	NA	Not detected
Sample	18A	7/18/2023	46.579474	-66.758832	5000	NA	Not detected
Sample	17	7/18/2023	46.573364	-66.812947	5000	NA	Detected
Sample	17	7/18/2023	46.573364	-66.812947	5000	NA	Inconclusive
Sample	17	7/18/2023	46.573364	-66.812947	5000	NA	Inconclusive
FB	NA	7/18/2023	NA	NA	920	NA	Not detected
Sample	19	7/19/2023	46.5844	-66.711993	5000	NA	Not detected
Sample	19	7/19/2023	46.5844	-66.711993	5000	NA	Not detected
Sample	19	7/19/2023	46.5844	-66.711993	3130	NA	Not detected
Sample	19A	7/19/2023	46.58566	-66.701176	5000	NA	Not detected
Sample	19A	7/19/2023	46.58566	-66.701176	2710	NA	Not detected

Sample	19A	7/19/2023	46.58566	-66.701176	2170	NA	Not detected
Sample	20A	7/19/2023	46.595409	-66.668123	5000	NA	Not detected
Sample	20A	7/19/2023	46.595409	-66.668123	5000	NA	Not detected
Sample	20A	7/19/2023	46.595409	-66.668123	5000	NA	Inconclusive
FB	NA	7/19/2023	NA	NA	1000	NA	Not detected
Sample	20	7/19/2023	46.600539	-66.638587	5000	NA	Not detected
Sample	20	7/19/2023	46.600539	-66.638587	5000	NA	Not detected
Sample	20	7/19/2023	46.600539	-66.638587	5000	NA	Not detected
FB	NA	7/19/2023	NA	NA	1000	NA	Not detected
Sample	16	7/18/2023	46.56257	-66.832	5000	NA	Inconclusive
Sample	16	7/18/2023	46.56257	-66.832	5000	NA	Not detected
Sample	16	7/18/2023	46.56257	-66.832	2000	NA	Detected
Sample	15	7/18/2023	46.55547	-66.84771	5000	NA	Not detected
Sample	15	7/18/2023	46.55547	-66.84771	3000	NA	Inconclusive
Sample	15	7/18/2023	46.55547	-66.84771	5000	NA	Inconclusive
Sample	14	7/18/2023	46.54391	-66.85485	2500	NA	Detected
Sample	14	7/18/2023	46.54391	-66.85485	5000	NA	Inconclusive
Sample	14	7/18/2023	46.54391	-66.85485	5000	NA	Inconclusive
FB	NA	7/18/2023	NA	NA	1000	NA	Not detected
Sample	13	7/18/2023	46.53503	-66.88127	5000	NA	Not detected
Sample	13	7/18/2023	46.53503	-66.88127	4500	NA	Inconclusive
Sample	13	7/18/2023	46.53503	-66.88127	3000	NA	Inconclusive
FB	NA	7/18/2023	NA	NA	1000	NA	Not detected
Sample	31	7/19/2023	46.51053	-67.1137	1300	NA	Not detected
Sample	31	7/19/2023	46.51053	-67.1137	1000	NA	Not detected
Sample	31	7/19/2023	46.51053	-67.1137	740	NA	Not detected
Sample	31	7/19/2023	46.51053	-67.1137	5000	NA	Not detected
Sample	29	7/19/2023	46.49828	-67.0485	5000	NA	Not detected
Sample	29	7/19/2023	46.49828	-67.0485	1060	NA	Not detected
Sample	29	7/19/2023	46.49828	-67.0485	5000	NA	Not detected
Sample	10	7/19/2023	46.49392	-67.01024	5000	NA	Not detected
Sample	10	7/19/2023	46.49392	-67.01024	1500	NA	Not detected
Sample	10	7/19/2023	46.49392	-67.01024	700	NA	Not detected
Sample	5	7/19/2023	46.50753	-66.94977	5000	NA	Inconclusive
Sample	5	7/19/2023	46.50753	-66.94977	5000	NA	Detected
Sample	5	7/19/2023	46.50753	-66.94977	5000	NA	Detected
FB	NA	7/19/2023	NA	NA	1000	NA	Not detected
Sample	60	7/25/2023	46.457414	-66.449737	5000	NA	Inconclusive

Sample	60	7/25/2023	46.457414	-66.449737	5000	NA	Detected
Sample	60	7/25/2023	46.457414	-66.449737	5000	NA	Not detected
Sample	62A	7/25/2023	46.544083	-66.171835	5000	NA	Not detected
Sample	62A	7/25/2023	46.544083	-66.171835	5000	NA	Not detected
Sample	62A	7/25/2023	46.544083	-66.171835	3000	NA	Not detected
Sample	61A	7/26/2023	46.494856	-66.352052	5000	NA	Inconclusive
Sample	61A	7/26/2023	46.494856	-66.352052	5000	NA	Inconclusive
Sample	61A	7/26/2023	46.494856	-66.352052	3740	NA	Detected
FB	NA	7/26/2023	NA	NA	1060	NA	Not detected
FB	NA	7/26/2023	NA	NA	1180	NA	Not detected
Sample	62	7/26/2023	46.54727	-66.15685	5000	NA	Inconclusive
Sample	62	7/26/2023	46.54727	-66.15685	5000	NA	Not detected
Sample	62	7/26/2023	46.54727	-66.15685	5000	NA	Inconclusive
Sample	63	7/26/2023	46.55625	-66.13745	5000	NA	Not detected
Sample	63	7/26/2023	46.55625	-66.13745	5000	NA	Detected
Sample	63	7/26/2023	46.55625	-66.13745	5000	NA	Detected
Sample	37	7/26/2023	46.56064	-66.1221	2600	NA	Detected
Sample	37	7/26/2023	46.56064	-66.1221	5000	NA	Detected
Sample	37	7/26/2023	46.56064	-66.1221	2800	NA	Detected
FB	NA	7/26/2023	NA	NA	1000	NA	Not detected
FB	NA	7/26/2023	NA	NA	1000	NA	Not detected
Sample	40	7/26/2023	46.73844	-65.82952		NA	Not detected
Sample	40	7/26/2023	46.73844	-65.82952	1580	NA	Not detected
Sample	40	7/26/2023	46.73844	-65.82952	5000	NA	Not detected
Sample	39	7/26/2023	46.73431	-65.82416	500	NA	Inconclusive
Sample	39	7/26/2023	46.73431	-65.82416	1055	NA	Not detected
Sample	39	7/26/2023	46.73431	-65.82416	5000	NA	Inconclusive
FB	NA	7/26/2023	NA	NA	1000	NA	Not detected
FB	NA	7/27/2023	NA	NA	1000	NA	Not detected
Sample	55	7/27/2023	46.71168	-65.81432	5000	NA	Inconclusive
Sample	55	7/27/2023	46.71168	-65.81432	5000	NA	Detected
Sample	55	7/27/2023	46.71168	-65.81432	5000	NA	Not detected
Sample	56	7/27/2023	46.70361	-65.79745	5000	NA	Inconclusive
Sample	56	7/27/2023	46.70361	-65.79745	5000	NA	Not detected
Sample	56	7/27/2023	46.70361	-65.79745	5000	NA	Inconclusive
Sample	57	7/27/2023	46.75384	-65.81673	5000	NA	Not detected
Sample	57	7/27/2023	46.75384	-65.81673	5000	NA	Not detected
Sample	57	7/27/2023	46.75384	-65.81673	5000	NA	Not detected

FB	NA	7/27/2023	NA	NA	1000	NA	Not detected
Sample	58	7/27/2023	46.83605	-65.76528	5000	NA	Not detected
Sample	58	7/27/2023	46.83605	-65.76528	5000	NA	Not detected
Sample	58	7/27/2023	46.83605	-65.76528	5000	NA	Not detected
Sample	59	7/27/2023	46.83822	-65.748	5000	NA	Not detected
Sample	59	7/27/2023	46.83822	-65.748	5000	NA	Not detected
Sample	59	7/27/2023	46.83822	-65.748	5000	NA	Not detected
FB	NA	7/27/2023	NA	NA	1000	NA	Not detected
Sample	26	8/30/2023	46.55011	-67.04399	1560	NA	Not detected
Sample	26	8/30/2023	46.55011	-67.04399	5000	NA	Not detected
Sample	26	8/30/2023	46.55011	-67.04399	5000	NA	Not detected
Sample	25	8/30/2023	46.57771	-67.04132	5000	NA	Not detected
Sample	25	8/30/2023	46.57771	-67.04132	1320	NA	Not detected
Sample	25	8/30/2023	46.57771	-67.04132	1650	NA	Not detected
Sample	ML	8/30/2023	46.450717	-66.959951	2270	NA	Detected
Sample	ML	8/30/2023	46.450717	-66.959951	5000	NA	Detected
Sample	ML	8/30/2023	46.450717	-66.959951	5000	NA	Detected
FB	NA	8/30/2023	NA	NA	1000	NA	Not detected
Sample	29	7/17/2024	46.49828	-67.0485	5000	NA	Not Detected
Sample	29	7/17/2024	46.49828	-67.0485	5000	NA	Not Detected
Sample	29	7/17/2024	46.49828	-67.0485	5000	NA	Not Detected
Sample	68	7/17/2024	46.413393	-66.94737	4500	NA	Not Detected
Sample	68	7/17/2024	46.413393	-66.94737	1960	NA	Not Detected
Sample	68	7/17/2024	46.413393	-66.94737	5000	NA	Not Detected
Sample	68	7/17/2024	46.413393	-66.94737	5000	NA	Not Detected
Sample	67	7/17/2024	46.451789	-66.45346	5000	NA	Not Detected
Sample	67	7/17/2024	46.451789	-66.45346	5000	NA	Not Detected
Sample	67	7/17/2024	46.451789	-66.45346	5000	NA	Not Detected
Sample	49	7/23/2024	46.935797	-65.78069	5000	NA	Not Detected
Sample	49	7/23/2024	46.935797	-65.78069	5000	NA	Not Detected
Sample	49	7/23/2024	46.935797	-65.78069	5000	NA	Not Detected
Sample	69	7/23/2024	46.965576	-65.828532	5000	NA	Not Detected
Sample	69	7/23/2024	46.965576	-65.828532	5000	NA	Not Detected
Sample	69	7/23/2024	46.965576	-65.828532	5000	NA	Not Detected
Sample	69	7/23/2024	46.965576	-65.828532	2250	NA	Not Detected
Sample	70	7/23/2024	46.95948900	-65.847364	5000	NA	Not Detected
Sample	70	7/23/2024	46.95948900	-65.847364	5000	NA	Not Detected
Sample	70	7/23/2024	46.95948900	-65.847364	5000	NA	Not Detected

Sample	47	7/23/2024	46.885233	-65.51533	5000	NA	Not Detected
Sample	47	7/23/2024	46.885233	-65.51533	2580	NA	Not Detected
Sample	47	7/23/2024	46.885233	-65.51533	5000	NA	Not Detected
Sample	47	7/23/2024	46.885233	-65.51533	1000	NA	Not Detected
Sample	71	7/24/2024	46.642879	-65.75655	2880	NA	Not Detected
Sample	71	7/24/2024	46.642879	-65.75655	5000	NA	Not Detected
Sample	71	7/24/2024	46.642879	-65.75655	5000	NA	Not Detected
Sample	72	7/24/2024	46.742732	-66.01647	5000	NA	Not Detected
Sample	72	7/24/2024	46.742732	-66.01647	5000	NA	Not Detected
Sample	72	7/24/2024	46.742732	-66.01647	2840	NA	Not Detected
Sample	40A	7/24/2024	46.737822	-65.83078	5000	NA	Not Detected
Sample	40A	7/24/2024	46.737822	-65.83078	4140	NA	Not Detected
Sample	40A	7/24/2024	46.737822	-65.83078	5000	NA	Not Detected
Sample	41	7/25/2024	46.829142	-65.95141	2220	NA	Not Detected
Sample	41	7/25/2024	46.829142	-65.95141	5000	NA	Not Detected
Sample	41	7/25/2024	46.829142	-65.95141	5000	NA	Not Detected
Sample	43	7/25/2024	46.815242	-65.79379	5000	NA	Not Detected
Sample	43	7/25/2024	46.815242	-65.79379	4740	NA	Not Detected
Sample	43	7/25/2024	46.815242	-65.79379	5000	NA	Not Detected
Sample	25	8/8/2024	46.55011	-67.04399	4500	NA	Not detected
Sample	25	8/8/2024	46.55011	-67.04399	3550	NA	Not detected
Sample	25	8/8/2024	46.55011	-67.04399	3350	NA	Not detected
Sample	26	8/8/2024	46.57771	-67.04132	3100	NA	Not detected
Sample	26	8/8/2024	46.57771	-67.04132	3600	NA	Not detected
Sample	26	8/8/2024	46.57771	-67.04132	3450	NA	Not Detected
Sample	66	9/20/2024	46.450734	-66.959753	5000	NA	Detected
Sample	66	9/20/2024	46.450734	-66.959753	5000	NA	Detected
Sample	66	9/20/2024	46.450734	-66.959753	5000	NA	Detected
Sample	73	9/20/2024	46.468048	-66.11604	1320	NA	Not Detected
Sample	73	9/20/2024	46.468048	-66.11604	480	NA	Not Detected
Sample	73	9/20/2024	46.468048	-66.11604	1230	NA	Not Detected