



Quarterly Summary Report Fecal Indicator Bacteria and Source Specific Monitoring – August, September, and October 2021

Billy Creek and Manuel Branch

City of Fort Myers, Florida

29 October 2021

→ The Power of Commitment



Our ref: 11135752

29 October 2021

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South District Office
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**Quarterly Summary Report
Fecal Indicator Bacteria and Source Specific Monitoring – August, September, and October 2021**

Dear Ms. Carpenter

GHD Services Inc. (GHD), on behalf of the City of Fort Myers (City), is submitting this quarterly report of results for the August, September, and October 2021 monitoring events that we performed for the above-referenced project.

1. Purpose

The intent of the August, September, and October sampling events is to partially satisfy Condition 5(G) of the Consent Order between DEP and the City of Fort Myers (OGC No. 20-0851), effective date February 23, 2021. Per Condition No. 5(G) of the Consent Order, the City is required to “*Conduct and submit a minimum of quarterly sampling data for untreated human waste indicators (HF-183 and acetaminophen at a minimum) for at least 4 quarters to the Department for the watersheds referenced in subparagraph 5(F) above (minimum 2 stations per watershed). If untreated human waste indicators persist, quarterly source specific monitoring shall continue until clear for at least two consecutive quarters. Deadline: April 30, 2021; July 31, 2021; October 31, 2021*” and continue until no untreated human waste indicators are detected for at least two consecutive quarters. The City has expanded the sampling program beyond the minimum identified in 5(G). This report summarizes the field and analytical results for samples GHD collected at select locations within the Billy Creek and Manuel Branch watersheds in August, September, and October 2021.

2. Sample Collection

Trained sampling personnel collected surface water samples at locations along Billy Creek and tributaries, and along Manuel Branch (see attached **Figures 1, 2, and 3**). Sample locations included predetermined stormwater outfall areas, areas identified to further investigate/delineate prior sample results, and at areas of concern identified during the Maps on Table (MOT), Walk the Watershed (WTW) and internal reconnaissance events. Scattered nuisance trash/refuse was observed at some of the sample locations during the sampling events.

The sampling (by GHD) and laboratory analyses (by Benchmark Analytical Laboratories, North Port, Florida; Source Molecular, Miami Lakes, Florida; and, Eurofins Eaton Analytical in South Bend, Indiana) were performed in general conformance with the Florida Department of Environmental Protection field sampling and laboratory analysis quality assurance protocols codified in Chapter 62-160 FAC and described in Standard Operation Procedures for Field Activities (FDEP SOP-001/01).

Samples were placed in accredited laboratory-provided containers, uniquely labelled, and iced prior to being transported by GHD the day of collection to the accredited laboratories for analyses under documented legal chain

of custody. Monthly samples were analyzed for Escherichia coli (E. coli) by SM 9223B). Additionally, quarterly samples collected from select locations were analyzed for the presence of human genetic material (HF183 by quantitative Polymerase Chain Reaction (qPCR)) DNA analytical technology and of acetaminophen by EPA 1694, Personal Care Products.

Field parameters measured at the time of sample collection included temperature, specific conductance, dissolved oxygen (DO), pH and turbidity. Measuring these parameters and recording them validates the representativeness of the samples and the conditions under which they are collected. Copies of the field sampling documentation and the laboratory report are included as **Attachment 1. Table 1 and Figures 1, 2, and 3** summarize the August, September, and October 2021 individual laboratory results for all locations sampled.

2.1 August 2021 Sample Results

2.1.1 E. coli

In consideration of the Quarter 2 sample results, surface water samples were collected from thirty-four (34) locations on August 9, 10 and 11, 2021, with twenty-two (22) locations within the Billy Creek watershed, and twelve (12) locations along Manuel Branch. Additional sample locations were selected to further delineate an apparently ongoing point source that appears to be located between Manuel-2 and CFM along Manuel Branch. Samples were analyzed for the presence of E. coli by Benchmark Analytical Laboratories, North Port, Florida and results were compared to the following action trigger categories, as identified in the Florida Department of Environmental Protection's August 2018 *Restoring Bacteria-Impaired Waters, A Toolkit to Help Local Stakeholders Identify and Eliminate Potential Pathogen Problems (Toolkit)*, Version 3.0. According to the Toolkit, Course of Action Triggers and responses are as follows:

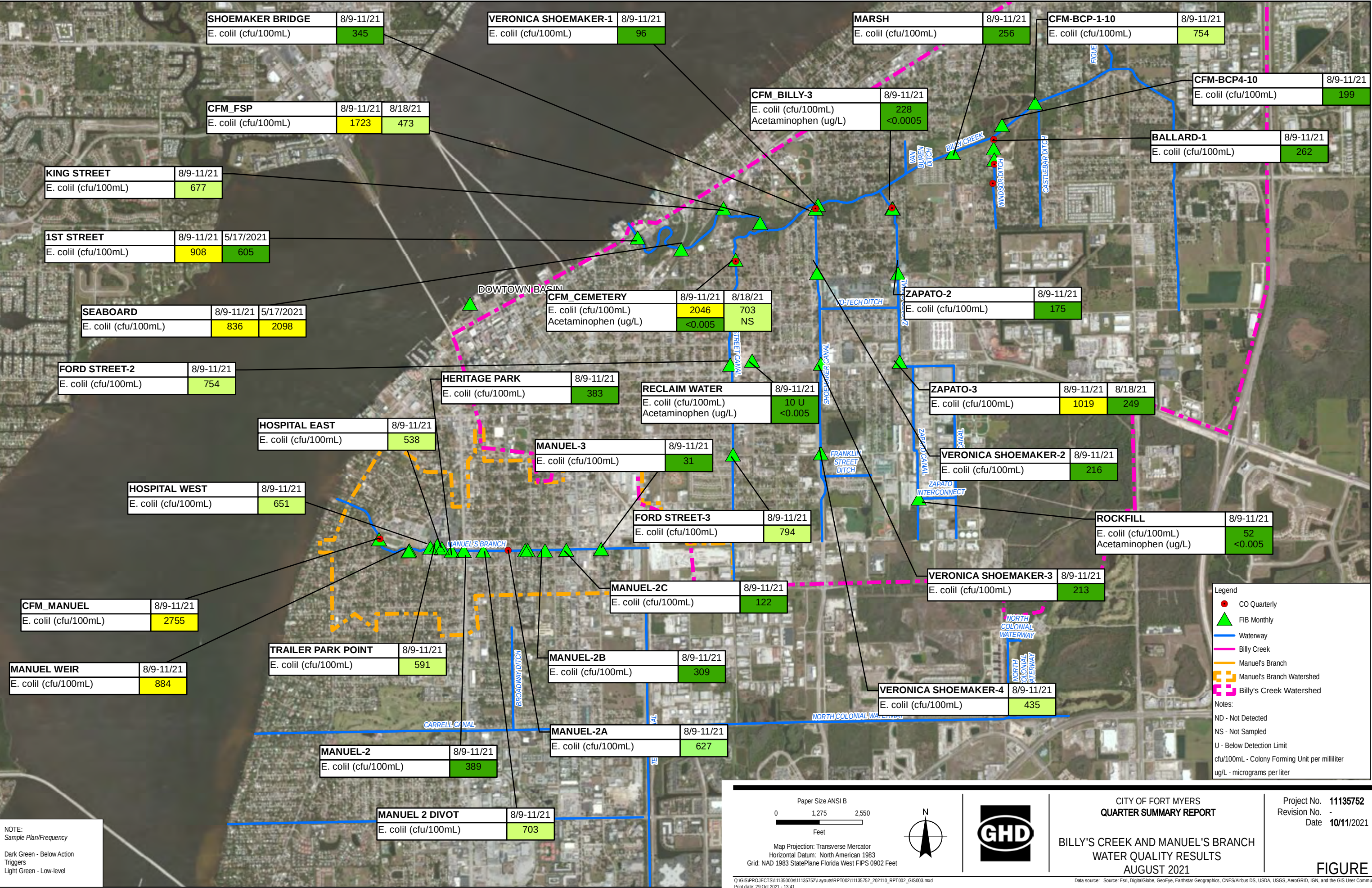
- Possible emergency: Results in the range of hundreds of thousands of colony forming units (cfu)/100 milliliter (mL). As interpreted by GHD for the purpose of these analyses, this category would result with any values of either E. coli or Enterococci counts greater than 100,000 cfu/100mL. Any stormwater or ambient water samples in this range, barring any inflation at the time of sampling (e.g., biofilm disturbance), should be immediately revisited. Any value above 100,000cfu/100mL is the first indication of a likely hot spot from one of the following: a potential sanitary sewer overflow (SSO); illegal dumping; an illicit connection; or a failing Onsite Sewage Treatment and Disposal Systems (OSTDS). It is recommended that a return trip to the site be accomplished as soon as possible to investigate the contributing area for signs of the potential source. Further, it is recommended that a resample at the original site be obtained and that samples be taken throughout the contributing area to narrow down the locational origin. Acetaminophen and HF183 analyses of the samples is recommended to confirm or deny the presence of an anthropogenic source.
- Very concerning level: Results in the range tens of thousands of cfu/100mL. As interpreted by GHD for the purpose of these analyses, this category would result with any values of either E. coli or Enterococci counts greater than or equal to 10,000 cfu/100mL but less than 100,000 cfu/100mL. If the actual count is what is confirmed after reviewing laboratory QA/QC and sample dilution information, and, barring any inflation at the time of sampling (e.g., biofilm disturbance), a result in the tens of thousands indicates a hot spot and the abovementioned protocol is recommended.
- Difficult to discern: Results in the range of high hundreds to low thousands of cfu/100mL. As interpreted by GHD for the purpose of these analyses, this category would result with any values of either E. coli or Enterococci counts greater than or equal to 800 cfu/100mL but less than 10,000 cfu/100mL. E. coli results in the high hundreds and low thousands do not warrant immediate action, but it is recommended that these be revisited areas after higher priority areas are remediated. It is further recommended that susceptible areas be sampled for source-specific indicators when trying to identify sources and their origins in waters where FIB results are common in this range.

Low-level exceedances: Mid-hundreds of cfu/100mL. As interpreted by GHD for the purpose of these analyses, this category would result with any values of either E. coli or Enterococci counts greater than or equal to 410 cfu/100mL and less than 800 cfu/100mL. FIB results in the mid-hundreds are not usually associated with persistent contributions of untreated human waste and don't warrant immediate action, however, similar to the above category, it is suggested that a plan to reassess and address these locations be implemented after higher priority areas are remediated. It is further recommended that susceptible areas be sampled for source-specific indicators when trying to identify sources and their origins in waters where FIB results are common in this range.

Table 1 Billy Creek and Manuel Branch

Sample Location	April 2021 E. coli	May 2021 E. coli	Follow-up May 2021 E. coli	June 2021 E. coli	June 2021 HF 183	June 2021 Acetaminophen	July 2021 E. coli	August 2021 E. coli	August 2021 E. Coli Resample	August 2021 Acetaminophen	September 2021 E. coli	September 2021 HF 183	September 2021 Acetaminophen	October 2021 E. coli
	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	GEU/100mL	ug/L	cfu/100mL	cfu/100mL	cfu/100mL	ug/L	cfu/100mL	GEU/100mL	ug/L	cfu/100ml
1ST STREET	132	275	NS	109	NS	NS	146	908	605	NS	160	NS	NS	20
SEABOARD	118	24196	432	231	NS	NS	121	836	2098	NS	512	NS	NS	158
KING STREET	187	309	NS	86	NS	NS	135	677	NS	NS	359	NS	NS	379
SHOEMAKER BRIDGE	327	175	NS	279	NS	NS	318	345	NS	NS	481	NS	NS	327
MARSH	1145	110	NS	NS	NS	NS	63	256	NS	NS	84	NS	NS	135
CFM-BCP4-10	20	10	NS	20	NS	NS	121	199	NS	NS	30	NS	NS	<10
CFM-BCP1-10	20	10	NS	156	NS	NS	1354	754	NS	NS	759	NS	NS	417
CFM_BILLY-3	279	520	NS	529	ND	0.007	327	228	NS	<0.005	309	ND	<0.0049	51
ZAPATO-2	63	727	NS	135	NS	NS	73	175	NS	NS	262	NS	NS	31
ZAPATO-3	52	109	NS	160	NS	NS	52	1019	249	NS	62	NS	NS	52
ZAPATO-4		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VERONICA SHOEMAKER-1	10	75	NS	41	ND	ND (<0.005)	10	96	NS	NS	10	ND	<0.0049	96
VERONICA SHOEMAKER-2	350	789	NS	408	NS	NS	110	216	NS	NS	241	NS	NS	169
VERONICA SHOEMAKER-3	52	63	NS	318	NS	NS	98	213	NS	NS	171	NS	NS	75
VERONICA SHOEMAKER-4	20	10	NS	110	NS	NS	183	435	NS	NS	148	NS	NS	20
CFM_FSP	135	1090	NS	487	NS	NS	161	1723	473	NS	288	NS	NS	235
CFM_CEMETERY	697	24196	602	697	ND	0.01	578	2046	703	<0.005	794	ND	<0.0049	391
FORD STREET-2	733	10462	862	663	NS	NS	1119	754	NS	NS	473	NS	NS	402
FORD STREET-3	932	249	NS	295	NS	NS	496	794	NS	NS	738	NS	NS	318
RECLAIM WATER		NS	NS	NS	NS	NS	10U	10 U	NS	<0.005	NS	NS	NS	NS
BALLARD-1	NS	2014	NS	231	NS	NS	148	262	NS	NS	160	NS	NS	NS
BALLARD-1A	NS	NS	NS	323	NS	NS	NS	NS	NS	NS	NS	NS	NS	41
BALLARD-1B	NS	NS	NS	359	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
BALLARD-2	NS	839	NS	393	NS	NS	75	NS	NS	NS	NS	NS	NS	NS
BALLARD-3	NS	63	NS	323	NS	NS	146	NS	NS	NS	NS	NS	NS	NS
ROCKFILL	NS	NS	NS	563	ND	0.025	30	52	NS	<0.005	160	DNQ	NS	30
CFM_MANUEL	1989	3873	NS	882	1,270	0.045	1291	2755	NS	NS	1723	4,430	0.0055	1597
MANUEL WEIR	NS	NS	NS	3654	2,580	0.093	2143	884	NS	NS	2613	4,460	0.0079	3044
HOSPITAL WEST	NS	NS	NS	NS	NS	NS	NS	651	NS	NS	1835	NS	NS	2282
TRAILER PARK POINT	NS	NS	NS	NS	NS	NS	NS	591	NS	NS	1187	NS	NS	1334
HOSPITAL EAST	NS	NS	NS	NS	NS	NS	NS	538	NS	NS	1860	NS	NS	1576
HERITAGE PARK	NS	NS	NS	NS	NS	NS	NS	383	NS	NS	428	NS	NS	759
MANUEL 2 DIVOT	NS	NS	NS	NS	NS	NS	NS	703	NS	NS	359	NS	NS	269
MANUEL-2	4106	275	NS	452	23,100	0.005	602	389	NS	NS	620	3,010	NS	488
MANUEL-2A	NS	759	NS	446	NS	NS	NS	627	NS	NS	1723	NS	NS	471
MANUEL PC DOWNSTREAM	NS	NS	NS	650	NS	NS	462	NS	NS	NS	NS	NS	NS	NS
MANUEL PC UPSTREAM	NS	NS	NS	703	NS	NS	487	NS	NS	NS	NS	NS	NS	NS
MANUEL-2B	NS	295	NS	789	NS	NS	NS	309	NS	NS	798	NS	NS	233

Sample Location	April 2021 E. coli	May 2021 E. coli	Follow-up May 2021 E. coli	June 2021 E. coli	June 2021 HF 183	June 2021 Acetaminophen	July 2021 E. coli	August 2021 E. coli	August 2021 E. Coli Resample	August 2021 Acetaminophen	September 2021 E. coli	September 2021 HF 183	September 2021 Acetaminophen	October 2021 E. coli
MANUEL-2C	NS	256	NS	717	NS	NS	NS	122	NS	NS	860	NS	NS	110
MANUEL-3	285	201	NS	63	NS	NS	156	31	NS	NS	187	NS	NS	98
cfu/100mL = Colony forming units per 100 milliliters GEU/100mL = Genomic editing units per 100 milliliters ug/L = Micrograms per liter NS = Not sampled ND = Not detected														
	Possible emergency Very concerning level Difficult to discern Low-level exceedances Below action trigger category threshold													



NOTE:
Sample Plan/Frequency

Dark Green - Below Action
Triggers

Light Green - Low-level

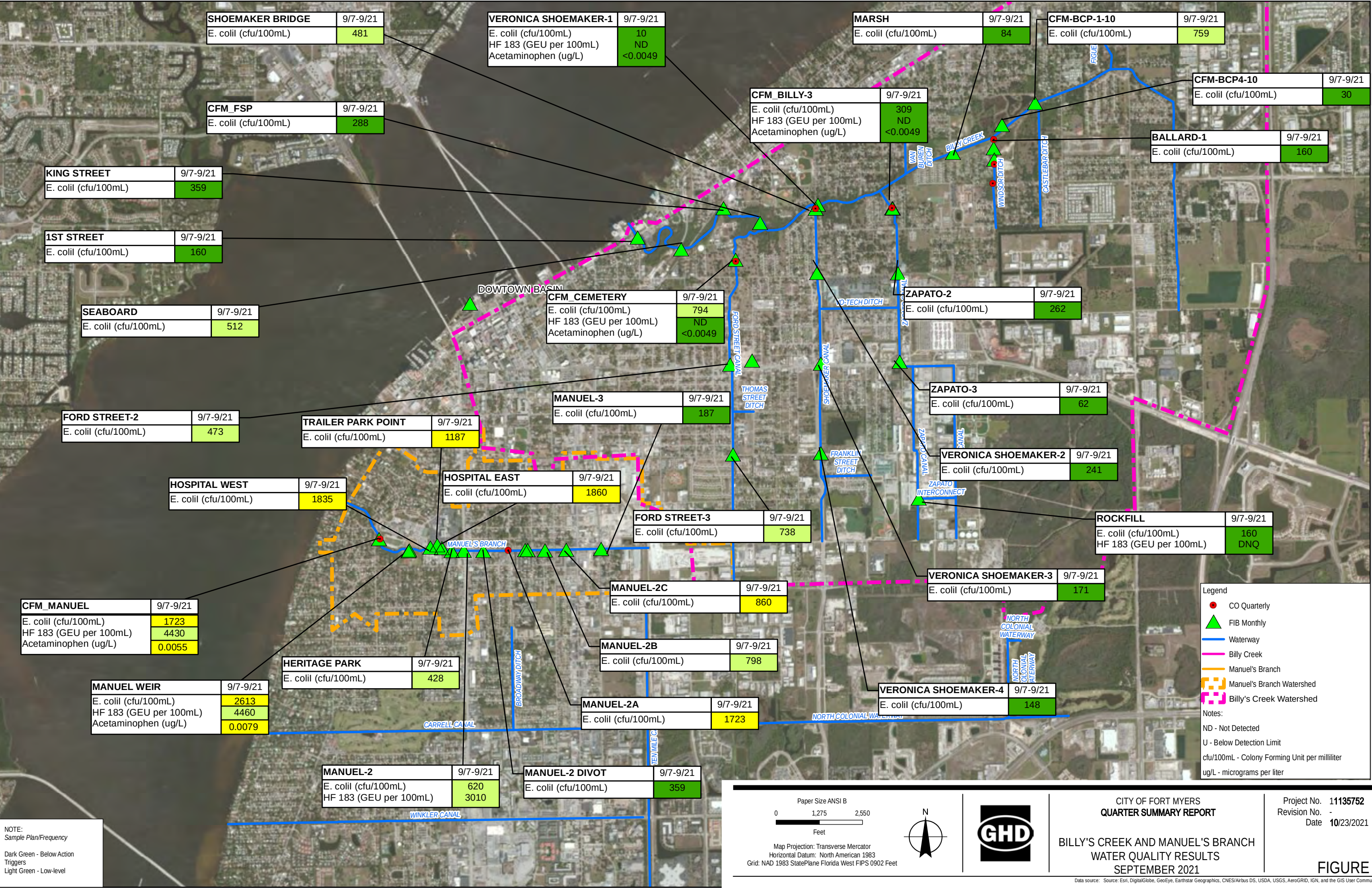
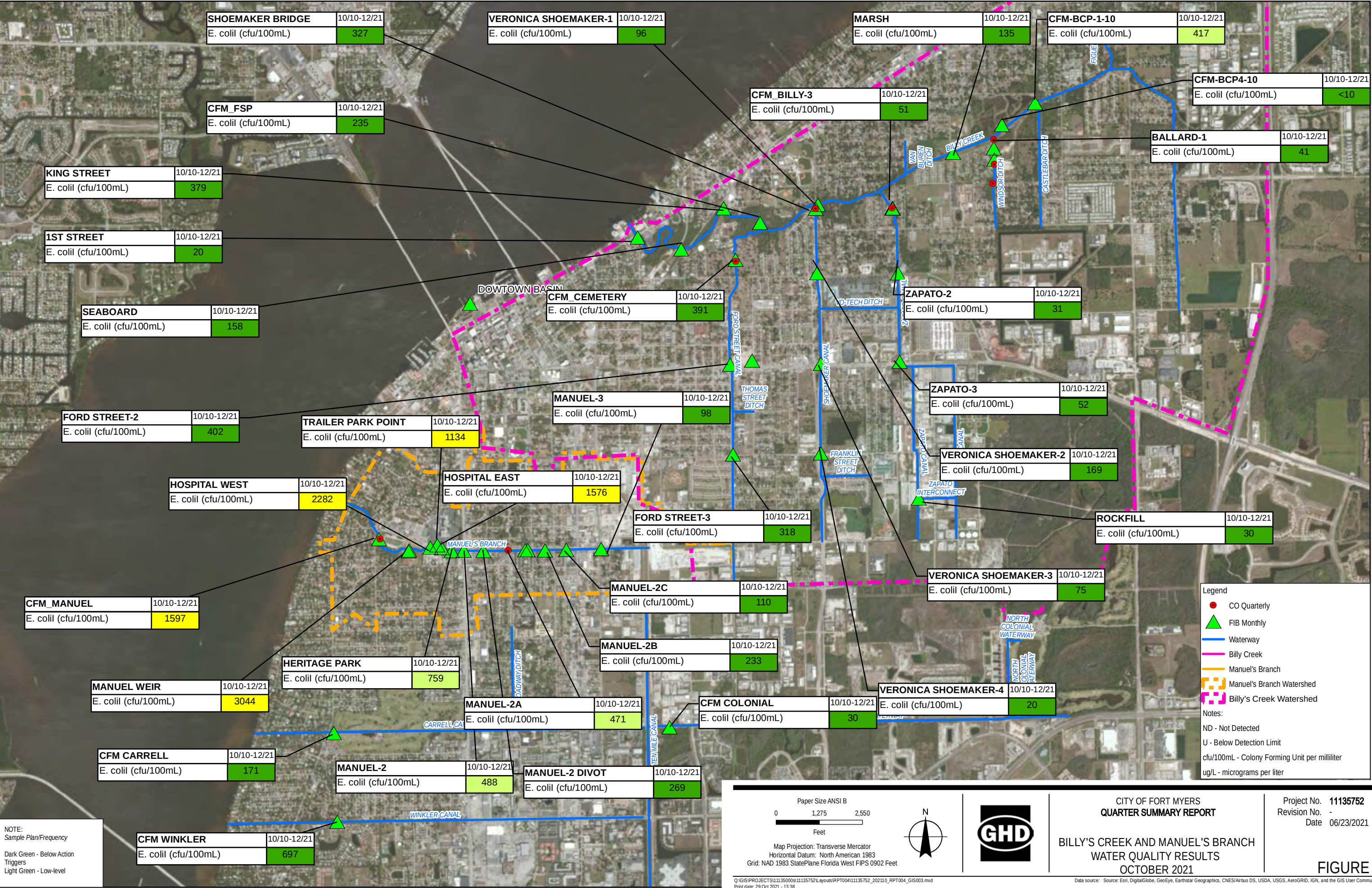


FIGURE 4

Data source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



For the purpose of this study, concentrations of fecal coliform or E. coli of 410 cfu/100mL or greater are considered an exceedance and are assigned to an action trigger category.

Concentrations of E. coli in the August 2021 samples ranged from 31 cfu/100 mL at MANUEL-3 to 2,755 cfu/100mL at the CFM_MANUEL sample location. Concentrations of E. coli in samples collected at the 1st STREET, SEABOARD, ZAPATO-3, CFM_FSP, CFM_CEMETARY, CFM_MANUEL, and MANUEL WEIR were within the “Difficult to Discern” category. “Low Level Exceedances” were detected at the KING STREET, CFM_BILLY-3, VERONICA SHOEMAKER-4, FORD STREET-2, FORD STREET-3, HOSPITAL WEST, TRAILER PARK POINT, HOSPITAL EAST, MANUEL 2 DIVOT, and MANUEL-2A locations. The remaining concentrations were below the action trigger category threshold of 410 cfu/100mL.

In a review of historical data, the concentrations in the “Difficult to Discern” category identified in the Billy Creek watershed were noticeably above results from June and July, so those locations were selected for resampling. Confirmatory samples were collected on August 18, 2021. While the concentration of E. coli at the SEABOARD location remained in the “Difficult to Discern” category, concentrations at the 1ST STREET, CFM_FSP, and CFM_CEMETERY decreased to the “Low Level Exceedance” category, and the concentration at the ZAPATO-3 location decreased to below the action trigger category threshold.

2.1.2 Acetaminophen

Confirmation samples, collected at locations where prior detections were identified along Billy Creek during Quarter 2, were analyzed for the presence of acetaminophen. The pharmaceutical acetaminophen is a chemical marker that is used as a human waste indicator in microbial source tracing. Reported concentrations of acetaminophen were compared to levels cited in a study conducted in Lexington, Kentucky that compared the concentration of acetaminophen before and after wastewater treatment. Influent concentrations to the wastewater treatment plant (untreated sewage) were in the range of 78 – 122 micrograms per liter (ug/L) while concentrations in effluent (treated sewage) were below 0.1 ug/L. Confirmation samples collected in August 2021 at locations with prior detections within the Billy Creek watershed were all below the laboratory method detection limit (MDL) of 0.005 ug/L during the August sampling event.

2.2 September 2021 Sample Results

Surface water samples were collected from thirty-four (34) locations on September 8, 9, and 10, 2021, with twenty-two (22) locations within the Billy Creek watershed, and twelve (12) locations along Manuel Branch. Samples were analyzed for the presence of E. coli. Additional sample locations were selected to establish trends and further delineate an ongoing point source that appears to be located between Manuel-2 and CFM along Manuel Branch.

Quarterly sampling for human indicators (HF183 and acetaminophen) were collected from four (4) locations within the Billy Creek watershed and three (3) locations within Manuel Branch.

2.2.1 E. Coli

E. coli results were assigned to the aforementioned action trigger categories. Concentrations of E. coli in the September 2021 samples ranged from not detected with an MDL of 10 cfu/100 mL at VERONICA SHOEMAKER-1 up to 2,613 cfu/100mL at MANUEL WEIR. Individual concentrations of E. coli in samples collected during the September 2021 event at CFM MANUEL, MANUEL WEIR, HOSPITAL WEST, TRAILER PARK POINT, HOSPITAL EAST, MANUEL-2A and MANUEL 2C were within the “Difficult to Discern” category. Samples collected from the SEABOARD, SHOEMAKER BRIDGE, CFM BCP1-10, CFM_CEMETERY, FORD STREET-2, FORD STREET-3, HERITAGE PARK, MANUEL 2 DIVOT and MANUEL-2B were within the “Low-level exceedances” category, and the remaining results were below the action trigger category threshold.

2.2.2 HF-183

Concentrations of HF183 were compared to guidance provided in a 2016 FDEP presentation entitled Microbial source tracking: interpretation of qPCR results, which reports that GEU/100 mL detection in the millions can be considered a “high” signal, above ten thousand GEU/100 mL as a “moderate” signal, and less than ten thousand GEU/100 mL can be interpreted as a “low” signal. HF 183 was not detected in the samples collected from

CFM_CEMETERY, VERONICA SHOEMAKER-1, and CFM BILLY-3 locations, and was detected but not quantifiable at the ROCKFILL location. HF183 values were reported as 4,430 GEU per 100mL, 4,600 GEU per 100mL, and 3,010 GEU per 100mL at CFM_MANUEL, MANUEL WEIR and MANUEL-2, respectively. The detected concentrations of HF183 were noted as a “low signal”.

2.2.3 Acetaminophen

Reported concentrations of acetaminophen were compared to levels as contained in the aforementioned study that compared the concentration of acetaminophen before and after wastewater treatment. Concentrations of acetaminophen were not detected at the CFM_BILLY-3, VERONICA SHOEMAKER-1, and CFM_CEMETERY. Concentrations of acetaminophen at the CFM_MANUEL and MANUEL_WEIR were below the above-referenced concentrations in treated effluent of 0.1 ug/L at each of the subject study sample locations.

2.3 October 2021 Sample Results

Samples were collected from thirty-two (32) locations on October 11, 12, and 13, 2021, with twenty (22) locations within the Billy Creek watershed, and twelve (12) locations along Manuel Branch. Sample locations included areas selected to further establish a trend and delineate an apparently ongoing point source that appears to be located between Manuel-2 and CFM_MANUEL. All collected samples were analyzed for the presence of E. coli.

Concentrations of E. coli in the October 2021 samples ranged from below 10 cfu/100 mL at CFM_BCP4-10 location to 3,044 cfu/100mL at the MANUEL_WEIR sample location. Concentrations of E. coli in samples collected at the CFM_MANUEL, MANUEL WEIR, HOSPITAL WEST, TRAILER PARK POINT, and HOSPITAL EAST were within the “Difficult to Discern” category. Concentrations at the CFM-BCP1-10, MANUEL-2 DIVOT, MANUEL-2A, and MANUEL PC DOWNSTREAM locations were in the “Low Level Exceedance” category. The remaining concentrations were below the action trigger category threshold.

To further delineate/investigate a suspected point source that appears to be associated with the Tropical Trailer Park, GHD staff collected four (4) soil samples near the discharge point of a wet-weather swale located along the eastern boundary of the property, which were submitted for laboratory analysis to Benchmark for the presence of Fecal Coliform using Method SM9221E. During sample collection, it was noted that lava rock had been added in the swale near the discharge point. Samples were collected above the high-water mark to avoid any interference from Manuel Branch. Photographs of the sample area are included as **Attachment 2**.

Based on the results of the sampling event, concentrations of Fecal Coliform were detected in soils ranging from 27.3 Most Probable Number/gram (MPN/g) to greater than 199 MPN/g. The concentration of fecal coliform in two of the samples collected were qualified as *Too many colonies were present (TNTC). The numeric value represents the filtration volume.*

The city will be investigating the east swale and take appropriate action to begin remediation of the existing problem and potential additional sources.

3. Quarterly Summary

Sample results for August, September, and October indicate decreasing concentrations of E. coli in Billy Creek to below the action trigger categories, with concentrations below 410 cfu/100mL. While initial samples collected from 1st STREET, SEABOARD, ZAPATO-3, CFM_FSP, and CFM_CEMETARY were within the “Difficult to Discern” category., follow-up samples generally were within the “Low level exceedance” category. Notable decreases in concentration from August to October 2021 were observed at the 1ST STREET, SEABOARD, CFM-BCP 4-10, ZAPATO-2, ZAPATO-3, CFM_CEMETARY, FORD STREET-2, and FORD STREET-3 locations. No significant increases were identified. Concentrations of acetaminophen were non-detect, and concentrations of HF-183 were either non-detect or were below quantifiable levels.

Concentrations of E. coli in samples collected in Manuel Branch remained elevated during the August, September, and October sampling events, with concentrations in the “Difficult to Discern” category at CFM_MANUEL and MANUEL_WEIR in August, September, and October, and at the HOSPITAL WEST, TRAILER PARK POINT, and HOSPITAL EAST locations in September and October. Elevated concentrations were also identified at the

MANUEL-2A and MANUEL-2C locations in September; however, October sampling indicated a decreasing trend. Low levels of acetaminophen and “low signal” detections of HF-183 were identified during the quarter were either non-detect or were below concentrations of concern.

4. Quarterly Reduction Strategy Actions

Status updates, as listed in **Table 2** below, are provided in the summary below.

Table 2 *Status Updates*

Potential Source	Actions	Timing	Entity Performing Action	Follow-up Actions	Reporting
Sanitary Sewer Lines	Cleaning	As needed	City	NA	Quarterly updates
	Maintenance	As needed	City	NA	Quarterly updates
	Repairs	As needed	City	NA	Quarterly updates
	Utility Master Plan	Planned 2022	City	NA	December 2022
	Improvements	As planned	City	NA	Quarterly updates
City Lift Stations	Inspections	2-3 times per week	City	Repairs as needed	Quarterly updates
Private Lift Stations	Visual inspections	Monthly	GHD	Coordinate with private entity	Quarterly updates
OSTDS	Visual inspections	Monthly	GHD	Coordinate with FDOH for follow-up inspection	Quarterly updates
Private Property Illicit Connections	Visual inspections	Monthly	GHD	Coordinate with Code Enforcement for follow-up inspection	Quarterly updates
Commercial/Industrial Waste	Visual inspections	Monthly	GHD	Coordinate with Code Enforcement for follow-up inspection	Quarterly updates
Trash	Inventory of potential trash disposal areas	Fall 2021	GHD	NA	Winter 2021
	Installation of trash disposal containers	2022	City	NA	2022
	Trash clean-up events	Quarterly	City	NA	Quarterly updates
Pet Waste	Inventory of high traffic areas	Fall 2021	GHD	NA	Winter 2021
	Installation of pet waste stations	2022	City	NA	2022
Homeless Activity	Visual inspections	Monthly	GHD	Coordinate with Lee County Department of Human and Veteran Services	Quarterly updates
Natural Sources	Visual inspections	Monthly	GHD	NA	Quarterly updates
Stormwater	Stormwater Master Plan	2022	City	NA	2022
	Billy Creek dredging and restoration project	Late 2021	City	NA	2022
	City-wide armoring of canals	2022	City	NA	2022

4.1 Watershed Survey

As discussed in the July 2021 Pollutant Reduction Plan, GHD is conducting regular reconnaissance of the watershed utilizing a pre-prepared checklist of visual inspection items and completing follow-up action items by coordinating with the appropriate regulatory or government agency for corrective action (i.e., Code Enforcement, Department of Business and Professional Regulation, Department of Human and Veterans Affairs, Lee County, etc.), as identified in **Table 3** below, which was initiated in Quarter 3.

Table 3 Watershed Survey

Type	Point ID	Name	Description	August Observation	September Observation	October Observation	Follow-up Action
Lift Station (Private)	LS003	Heritage Park	Lift Station	Private lift station in trailer park. No signs of stained soil, depression or leaking	No signs of stained soil, depression or leaking	No signs of stained soil, depression or leaking	N/A
	LS002	Off Hanson St	Lift Station	Private lift station, two major depressions just south of the station, 1-2 ft holes, 3 feet in diameter	Two major depressions just south of the station, 1-2 ft holes, 3 feet in diameter	Two major depressions just south of the station, 1-2 ft holes, 3 feet in diameter	Find and contact owner
	LS001	Billy Creek	Lift Station	Private lift station. No evidence of leaking or staining	No evidence of leaking or staining	No evidence of leaking or staining	N/A
	PLS004	4840 Laredo	Lift Station	Private lift station. No evidence of leaking or staining	No evidence of leaking or staining	No evidence of leaking or staining	N/A
	PLS036	Alpha off Ballard	Lift Station	Private lift station. No evidence of leaking or staining	No evidence of leaking or staining	No evidence of leaking or staining	N/A
	PLS001	660 Nuna	Lift Station	Private lift station. No evidence of leaking or staining	No evidence of leaking or staining	No evidence of leaking or staining	N/A
Lift Station (Lee County)	LS004	Alpha St	Lift Station	Lift station on Alpha St. No evidence of leaks or depressions	No evidence of leaks or depressions	No evidence of leaks or depressions	N/A
OSTDS Area	N/A	1263 Golden Lake Road	Lazy Js	No concerns observed	No concerns observed	No concerns observed	N/A
	N/A	Gibson Circle	Unnamed	No concerns observed	No concerns observed	No concerns observed	N/A
	N/A	1825 Linhart Avenue	Unnamed (S of Lee Mem. Hospital)	No concerns observed	No concerns observed	No concerns observed	N/A
Observed Illicit Connection	No concerns observed						
Commercial/Industrial Property	10196166	Page Park	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10185675	C S L & G	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10184553	Palmlee Park	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10185380	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10185380	N/A	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10184553	Palmlee Park	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10185393	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10185814	N/A	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10184643	Palmlee Park	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10185380	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10174663	Tamiami Park	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A

Type	Point ID	Name	Description	August Observation	September Observation	October Observation	Follow-up Action
	10175019	East Stadler Farms	Utilities	No concerns observed	No concerns observed	No concerns observed	N/A
	10175017	East Stadler Farms	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10174193	James Holmes Division	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10185807	N/A	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10185811	Southside Business Park	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10185628	N/A	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10185675	C S L & G	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10186120	N/A	Utilities	No concerns observed	No concerns observed	No concerns observed	N/A
	10175394	James Holmes	Car Wash	No concerns observed	No concerns observed	No concerns observed	N/A
	10186394	N/A	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10184727	N/A	Restaurant - Fast Food	No concerns observed	No concerns observed	No concerns observed	N/A
	10186132	Colonial South	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10185384	N/A	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10186846	Page Plaza Amended	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10251441	Sunnycrest	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10251401	Cox J B	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10250335	Sunnyside Farms	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10252107	Carver Park	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10252588	Hansons Highland Subd	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10253214	Franklin Park	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10254364	East Stradler Farms	Utilities	No concerns observed	No concerns observed	No concerns observed	N/A
	10254903	N/A	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10251429	Sunnycrest	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10251191	N/A	Mortuary/Funeral Homes	No concerns observed	No concerns observed	No concerns observed	N/A
	10252083	Carver Park	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10252836	Schoolview Homes	Mortuary/Funeral Homes	No concerns observed	No concerns observed	No concerns observed	N/A
	10257663	O'mara Industrial	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10251402	Cox J B	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10254468	East Stradler Farms	Utilities	No concerns observed	No concerns observed	No concerns observed	N/A
	10173933	Jeffcotts Wm. Add	Car Wash	No concerns observed	No concerns observed	No concerns observed	N/A
	10175018	East Stadler Farms	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10257540	Metro 88	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10247925	Campbell Acres	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10184555	Palmlee Park	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A

Type	Point ID	Name	Description	August Observation	September Observation	October Observation	Follow-up Action
	10186093	N/A	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10186097	N/A	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10185380	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10185830	Winkler Park S/D	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10186387	N/A	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10185675	C S L & G	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10250550	N/A	Metal Retail	No concerns observed	No concerns observed	No concerns observed	N/A
	10253488	Lincoln Park	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10519176	South Cleveland Ave Land Condo	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10255514	N/A	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10186097	N/A	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10186103	N/A	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10185675	C S L & G	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10575927	East Stradler Farms	Utilities	No concerns observed	No concerns observed	No concerns observed	N/A
	10185886	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10490227	Metro 88	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10186387	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10186387	N/A	Shopping Center - Community	No concerns observed	No concerns observed	No concerns observed	N/A
	10185862	Concord Business Park	Car Wash	No concerns observed	No concerns observed	No concerns observed	N/A
	10174658	Tamiami Park	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10579058	Sunnyside Farms	Restaurant	No concerns observed	No concerns observed	No concerns observed	N/A
	10579823	N/A	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10579816	Page Park	Supermarket	No concerns observed	No concerns observed	No concerns observed	N/A
	10582406	Grand Central	Shopping Center - Neighborhood	No concerns observed	No concerns observed	No concerns observed	N/A
	10582405	Grand Central	Restaurant - Fast Food	No concerns observed	No concerns observed	No concerns observed	N/A
	10185837	Common Cents Business Park	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10184699	Grove City Park	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10184641	Palmlee Park	Nightclub/Bar	No concerns observed	No concerns observed	No concerns observed	N/A
	10261055	N/A	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10185892	N/A	Convenience Store	No concerns observed	No concerns observed	No concerns observed	N/A
	10253997	N/A	Utilities	No concerns observed	No concerns observed	No concerns observed	N/A
	10194836	Pine Manor Unit 1	Supermarket	No concerns observed	No concerns observed	No concerns observed	N/A

Type	Point ID	Name	Description	August Observation	September Observation	October Observation	Follow-up Action
Dumpsters	D001	Manuel	Dumpsters	Open dumpster near manuel 2, about 100 feet from the canal	Open dumpster	Open dumpster	N/A
	D002	Manuel	Dumpsters	Closed and clean dumpster by Manuel 2 divot	Closed and clean dumpster	Closed and clean dumpster	N/A
	D006	N/A	Dumpsters	Dumpster with open lid. No evidence of leaking or trash	Dumpster with open lid. No evidence of leaking or trash	Dumpster with open lid. No evidence of leaking or trash	N/A
	D007	Heritage Park	Dumpsters	Dumpsters in area. No signs of leaking noticed, but lid off	Dumpsters in area. No signs of leaking noticed, but lid off	Open dumpsters. No signs of leaking noticed	N/A
	D006	Manuel	Dumpsters	Green slime in dumpster. Detergent? laundromat 50 ft away	Green slime in dumpster. Detergent? Laundromat 50 ft away. No exterior staining	No exterior staining	N/A
	D005	Manuel	Dumpsters	Unconsolidated trash pile	Unconsolidated trash pile	Trash on ground	N/A
	D004	Montclair	Dumpsters	Dumpster in apartment complex. No signs of leaking or exposure	Dumpster in apartment complex. No signs of leaking or exposure	No signs of leaking	No
	D003	Lee Memorial Manuel Branch	Dumpsters	Dumpster and staging area at lee memorial hospital about 50 ft north of manuels branch	Dumpster and staging area at lee memorial hospital about 50 ft north of Manuels branch	No signs of leaking	N/A
Homeless Activity	No concerns observed						
Wildlife	No concerns observed						
Other	Pond 001	N/A	Pooled water	Pooled translucent grey water	Pooled translucent grey water		Call Code Enforcement
	GT002	Zapato	Grease Trap	Grease trap in decent condition. No evidence of leaks or staining	No evidence of leaks or staining	No evidence of leaks or staining	N/A
	GT001	Ford St	Grease Trap	Used cooking oil container outside with stains on side and ground	Stains on side and ground	Stains on side and ground	N/A

4.2 Sanitary Sewer

4.2.1 Discharges

A Wastewater Malfunction/Abnormal Event Report was submitted by the City to the FDEP on August 16, 2021 after approximately 250 gallons of untreated/raw sewage discharged from a sanitary sewer manhole due to a blockage of Fats, Oils, or Grease (FOG). According to the report, the spill, which occurred at 4333 New York Avenue, was remediated by disinfection through the placement of hydrated lime. The blockage that caused the discharge was promptly cleared. The spill discharged sewage to a roadside drainage swale that drains to Billy Creek. Follow-up surface samples were collected, which are detailed in **Table 4**.

Table 4 Post-Discharge Analytical Results

Sample ID	Date Collected	Time Collected	E.Coli Result (MPN/100mL)
New York @ dead end	8/16/2021	16:00	>200
Ohio @ dead end	8/16/2021	16:10	>200
Arlington @ dead end	8/16/2021	16:15	>200
New York @ dead end	8/17/2021	8:50	>200
Ohio @ dead end	8/17/2021	9:00	>200
Arlington @ dead end	8/17/2021	9:10	>200
Arlington @ dead end	8/18/2021	8:00	386
Ohio @ dead end	8/18/2021	8:00	470
New York @ dead end	8/18/2021	8:00	222
MPN = Most Probable Number			
 Possible emergency Very concerning level Difficult to discern Low-level exceedances Below action trigger category threshold			

Another Wastewater Malfunction/Abnormal Event Report was submitted by the City to the FDEP on October 8, 2021 after approximately 600 gallons of untreated/raw sewage discharged from a gravity manhole due to a blockage of grease. According to the report, which occurred at 3677 Michigan Avenue, 400 gallons were recovered, and the spill was then washed down and was remediated by disinfection through the placement of hydrated lime. The blockage that caused the discharge was promptly cleared. The spill discharged to Zapato Canal. Follow-up surface samples were reportedly collected.

The City's current policies regarding response and prevention of SSOs, specifically pertaining to response and communication to limit bacterial impacts to the watersheds during/following future discharges are summarized below and are included for reference in **Attachment 3**:

- **The City of Fort Myers Sewer Overflow Response Plan (SORP)** (amended April 1, 2020) – The objectives of the SORP are to protect personnel, the collection system, wastewater treatment facilities and appurtenances, and the private and public systems beyond. According to the SORP, the plan covers overflows that may be reported by City staff, other stakeholders, or the SCADA system that monitors the City's key lift stations. The City maintains a Public Work Dispatcher, an afterhours dispatcher, and an e-mail address for reporting. Following receipt of a report, the City prepares an Abnormal Events Report and a work order, and notifies the Operations Superintendent and the Director of Public Works. Sewer maintenance staff are then dispatched to the location to confirm the reported SSO. If confirmed, the FDEP is notified within 24 hours. Based on the size of the spill, additional notification is provided. According to the SORP, the following tasks are completed when arriving at the SSO:
 - Determine the cause
 - Identify and request additional assistance if needed
 - Take immediate steps to stop the flow

- Request additional expertise, personnel, material, supplies, etc. as needed to minimize impacts

Initial measures to recover sewage and minimize impacts are listed as follows:

- Determine destination of the overflow
- Identify and request methods, materials and equipment to contain/isolate overflow
- Take immediate steps to contain and remediate the overflow

Additionally, the SORP details steps to be taken in the event of a prolonged sewer line blockage/sewer line collapse, steps to be taken if chemical or environmentally friendly procedures can be taken, and steps for cleanup of the spill area. Appendix F of the SORP details measures to avoid sewer overflow.

- **Procedure 31.5 Infrastructure Condition:** According to the policy, “Infrastructure condition of the Wastewater facilities and components are routinely evaluated and recorded during equipment rounds and daily inspections by maintenance personnel. A computer-based maintenance and repair program is utilized to assist in scheduling and tracking timely maintenance and repair tasks to assure continuous successful operation of the Wastewater facilities and components and to maximize the life expectancy of the infrastructure.” Additionally, it is reported that “Condition assessments are achieved by smoke testing, visual inspections, and CCTV (Closed-circuit television) visuals.”
- **Procedure 31.9 Illicit Discharges:** The policy states “The City’s Code of Ordinances state that any dumping, spilling, or discharging of any non-stormwater material to any surface area of stormwater management system shall be prohibited, unless allowed by prior written approval from the stormwater utility director, or his designee.” Prohibited illicit discharges shall require spill response, spill control, and spill cleanup as designated and prescribed by the stormwater utility director.”
- **Procedure 31.12 Sanitary Sewer Overflows:** The policy dictates that “All Wastewater staff will comply with the Sewer Overflow Response Plan (SORP)”. The procedure sets forth the expectation that any and all overflow incident reports are immediately dispatched to the “appropriate” City Sewer Department staff. Prohibited illicit discharges shall require spill response, spill control, and spill cleanup as designated and prescribed by the stormwater utility director.”
- **Procedure 31.13 – Testing Alarms:** According to the policy, “The City of Fort Myers has a web-based alarm system on its lift stations for alarm notification. Currently, the City has 88 lift stations on Data Flow System SCADA (Supervisory Control and Data Acquisition).” The policy states that high level of wet well, low level of wet well, pump failure, power failure, and high-level float alarms associated with the lift stations. The alarms are reportedly tested monthly.

Per the protocols outlined in the policies and SORP, the above-referenced discharges were addressed.

Additionally, the City ensures that prompt and applicable interdepartmental communication occurs following SSO events.

4.2.2 Utility Master Plan Asset Management

On September 29, 2021, GHD moderated Workshop 1 for the City’s Water, Sewer, and Reuse Utility Master Plan. The purpose of Workshop 1 was to discuss the Asset Management Framework’s decision-making approach to identifying and assessing the consequence and risk associated with failure of the City’s infrastructure. The Workshop was attended by City of Fort Myers Public Works Staff, and GHD and AECOM specialists. City staff were able to provide input during an interactive session focused on addressing the City’s risk tolerances. As a result, a draft Consequence of Failure table was constructed.

4.2.3 Private Sanitary Sewer Line Replacement

A pipe crossing, extending from a multi-family housing development, Villa Capri, across Manuel Branch and downstream of the MANUEL-2 sampling location, was previously identified as a potential point source. The pipe was previously cleaned and videoed. The City coordinated with the property owner for replacement of the pipe, which was performed on September 2, 2021. A review of video of the pipe prior to replacement identified several breaches and/or offsets in the clay pipe. Although initial repairs were expected to be limited to lining only, it was determined that replacement of the pipe was necessary. Select photos of the interior of the pipe segment pre- and post-replacement are included as **Attachment 4**.

4.3 Trash and Pet Waste

4.3.1 Trash Cleanup

Beginning in August, the City coordinated with GHD and Keep Lee County Beautiful to organize a community clean-up event. Due to the prevalence of nuisance trash observed in Manuel Branch during the Walk the Watershed event and subsequent internal reconnaissance, the segment of Manuel Branch extending from Jackson Street westward to Manuels Branch Neighborhood Park was selected as the area of focus for the cleanup activities. On September 25, 2021, approximately 50 volunteers, including City, GHD, and Keep Lee County Beautiful staff, Florida Gulf Coast University (FGCU) and local high school students, and citizens arrived to remove trash and debris from the western portion of the Branch. Approximately 540 pounds of trash was collected from within the canal, along the banks and roadways, and in the adjoining Lee County Memorial parking lot, all of which was properly disposed by the City's solid waste team. While the event was a success, disposal of trash in and along the City's waterways appears to be a recurring issue. Future clean-ups will be scheduled as a means to engage the community and improve the water quality. Select photographs of the cleanup event are included as **Attachment 5**.

4.3.2 Adopt a Canal

The City has an established Adopt A Canal Program, wherein local stakeholders are encouraged to volunteer to perform regular cleanup events. The program is designed to decrease the amount of trash in the City's municipal separate storm sewer system (MS4) and has the following objectives:

- To increase community awareness of the positive effect that litter-free canals and ditches have on the environment and the local community image.
- To encourage the community to acknowledge litter as a problem requiring local solutions by involving community groups and organizations in the adoption of sections of canals and ditches.

The City is working to obtain new sponsors for unadopted canals and to reinvigorate the program by reaching out to local stakeholder groups. A copy of the Adopt A Canal contract is included as **Attachment 6**.

4.3.3 Trash Free Waters Grant

In August, the City submitted a grant application to the US Environmental Protection Agency (EPA) for the Healthy and Resilient Gulf of Mexico 2021 project for the City's Trash Free Waters Project. The City of Fort Myers Trash Free Waters Project is projected to take place over three years and complete the following two major goals:

- Coordinate with community partners to develop a comprehensive trash-reduction program over 12 months
- Implement the initial, 24-month coordinated community outreach program for trash and litter prevention.

The campaign preparation work will reportedly include:

- Developing the community outreach program's creative assets
- Designing and finalizing a dedicated Fort Myers Trash-Free Waters program website
- Developing educational curriculum for school age children
- Collaborating with area non-profits to prepare for coordinated garbage reduction activities
- Developing a for-profit business outreach education program.

Early in the first phase of the project, the City will create a program logo, program signage, program fact sheets, a program mascot design, a truck wrap design for four City of Fort Myers Public Works vehicles, and a truck wrap design for three City street sweepers and one City vac truck. The City's hope is that the creative design work will serve as a strong foundation for all future program communications and advertising collateral, and will support the program's early growth.

The first phase of the project will also include the design and development of a new Fort Myers Trash Free Waters Program website. The website will be designed with a wide variety of functions, including:

- A clear and attractive display of information on trash prevention and program news
- A "Waste Reduction Reporting" form and "Report a Problem" form

- A GIS map-based water quality dashboard with water quality data and advisories,
- Social media integration for program promotion and growth.

The City will also partner with local non-profit organizations, including Keep Lee County Beautiful, to develop the program's educational curriculum for school age children that will teach students about how littering affects local water ways. This curriculum will likely include school waste reduction pledges, student litter-free pledges, school and classroom waste audits, recycle challenges, waste reduction challenges, art contests, and other engaging programming.

The City also plans to collaborate with local non-profit organizations to prepare for a garbage reduction challenge competition. The City will provide recycling and garbage receptacles with educational signage to local non-profits and will reach out to corporate partners to secure prizes for the non-profit organizations that remove the greatest amount of trash and litter from the community.

Additionally, the City will develop an educational program designed for local businesses and restaurants to foster recycling, waste reduction, food waste reduction, and grease recycling programs. This outreach and education program will also include an online system of self-reporting of waste reduction, as well as a recognition program for businesses that participate and self-report.

The City plans to launch its Trash-Free Waters program during the summer of 2023, during which the program website will go live, the Fort Myers Public Works vehicle wraps will be installed, and outreach work will begin. Educational outreach activities will begin in area schools when the school year starts in August of 2023, and community education events will begin. The Fort Myers Trash Free Waters website will be regularly updated with information about the program and the City's progress trash reduction. The City plans on regularly reviewing program progress and will adjust the program as needed to ensure maximum impact of all program activities. Additionally, the City will utilize its existing trash removal program to identify changes in the composition of collected trash and litter from City waterways to make adjustments on trash prevention communications and outreach throughout the project period.

The City was notified by the EPA on Thursday October 21, 2021 that it was selected as an entity for award of the grant.

4.4 Public Engagement

City staff have been identified that will be integral in the development of a high-level narrative that will be used as a "starting point" for discussions with stakeholders. A kick-off meeting to develop messaging and identify external stakeholder is scheduled for early November 2021.

5. Conclusions and Future Actions

Based on the laboratory analytical results of the subject quarterly sampling events, the presence of E. Coli in Billy Creek generally appears to be trending downward. Continued monitoring will be performed at the same sample locations to further identify trends.

Concentrations of E.coli in the vicinity of the identified pipe crossing on Manuel Branch appear to be decreasing after replacement of the sanitary sewer line, which points to elimination of a point-source. Continued monitoring to confirm the trend will be performed.

Concentrations within Manuel Branch remain elevated at the CFM_MANUEL and MANUEL WEIR locations. Additional delineation sampling has identified a potential source at the Tropical Trailer Park that appears to be discharging to a wet-weather swale located along the east side of the property. Additional investigation of the source and coordination with the trailer park will be conducted.

As discussed in prior summaries, a sanitary sewer line trends parallel to the north bank of Manuel Branch between the Manuel-2 and Manuel-3 sample locations. As a part of the City Master Plan, GHD understands the portion of the sewer line segment between Evans and Central is slated for improvements. Although the general trend does not indicate that the sanitary sewer line is a significant point source of bacteria impacts to Manuel Branch, we understand the City plans to expedite construction of this project to resolve the potential problems associated with

the bacteria identified by the monitoring program. An updated timeframe for completion will be provided when available.

The City will continue to provide updates on the monthly Watershed Survey, on-going management actions and public engagement events.

If you require additional information or clarification, please feel free to contact Lori Coolidge at (813) 476-9940.

Sincerely,

GHD



Kenneth R. Caldwell, P.G.



Lori Coolidge, P.G.

Encl.

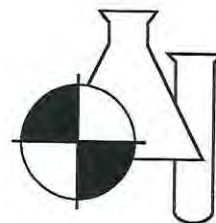
cc: Richard Thompson, City of Fort Myers
file

Attachments

Attachment 1

Field Sampling and Analytical Reports

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

**Submission
Number :**

S21080245

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CFM FIB

Date Received : 08/10/2021

Time Received : 13:58

Submission: S21080245

Sample Number: 001

Sample Date: 08/10/2021

Sample Time: 09:05

Sample Description: Manuel Weir

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	884	#/100 ML	10	10	SM9223B	08/10/2021	14:37	LG

Submission: S21080245

Sample Number: 002

Sample Date: 08/10/2021

Sample Time: 09:20

Sample Description: Hospital West

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	651	#/100 ML	10	10	SM9223B	08/10/2021	14:37	LG

Submission: S21080245

Sample Number: 003

Sample Date: 08/10/2021

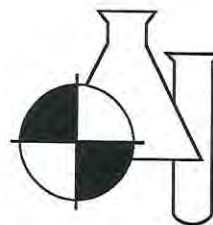
Sample Time: 09:35

Sample Description: Trailer Park Point

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	591	#/100 ML	10	10	SM9223B	08/10/2021	14:37	LG

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080245

Sample Number: 004

Sample Description: Hospital East

Sample Date: 08/10/2021

Sample Method: Grab

Sample Time: 09:45

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	538	#/100 ML	10	10	SM9223B	08/10/2021	14:37	LG

Submission: S21080245

Sample Number: 005

Sample Description: Heritage Park

Sample Date: 08/10/2021

Sample Method: Grab

Sample Time: 09:55

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	383	#/100 ML	10	10	SM9223B	08/10/2021	14:37	LG

Submission: S21080245

Sample Number: 006

Sample Description: Manuel 2

Sample Date: 08/10/2021

Sample Method: Grab

Sample Time: 10:15

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	389	#/100 ML	10	10	SM9223B	08/10/2021	14:37	LG

Submission: S21080245

Sample Number: 007

Sample Description: Manuel 2 Divet

Sample Date: 08/10/2021

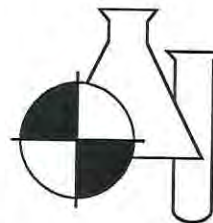
Sample Method: Grab

Sample Time: 10:35

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	703	#/100 ML	10	10	SM9223B	08/10/2021	15:08	LG

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080245

Sample Number: 008

Sample Date: 08/10/2021

Sample Time: 10:40

Sample Description: Manuel 2A

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	627	#/100 ML	10	10	SM9223B	08/10/2021	15:08	LG

Submission: S21080245

Sample Number: 009

Sample Date: 08/10/2021

Sample Time: 10:50

Sample Description: Manuel 2B

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	309	#/100 ML	10	10	SM9223B	08/10/2021	15:08	LG

Submission: S21080245

Sample Number: 010

Sample Date: 08/10/2021

Sample Time: 11:00

Sample Description: Manuel 2C

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	122	#/100 ML	10	10	SM9223B	08/10/2021	15:08	LG

Submission: S21080245

Sample Number: 011

Sample Date: 08/10/2021

Sample Time: 11:10

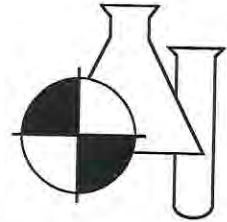
Sample Description: Manuel 3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	31	#/100 ML	10	10	SM9223B	08/10/2021	15:08	LG

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080245

Sample Number: 012

Sample Description: Rockfill

Sample Date: 08/10/2021

Sample Method: Grab

Sample Time: 12:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E-COLI BY IDEXX QUANTITRAY	52	#/100 ML	10	10	SM9223B	08/10/2021	15:08	LG

Melinda Merchant

08/13/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant / Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy not met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

standard report

21080245

PAGE 4 OF 6

Benchmark EA South
1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7

Benchmark EA, Inc.
1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with Temperature Gun ID #RAYL000570277

Client:
GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819
Reports: Sheri Finn (Sheri.Finn@ghd.com); Andrew Wyatt (Andrew.Wyatt@ghd.com)
David Hempleman (David.Hempleman@ghd.com)

KIT Shipped to client via UPS Standard in cooler

Chain of Custody Form: CFM F113
Project Number:

Laboratory Submission #:

521080245

Station ID	Sample Type ¹	Sample Matrix ²	Date/Time:		Laboratory Submission #
			Na Thio	1 x 100mL Sterile Plastic	
Manuel Weir	Grab	SW	8/10/21	0905	1
Hospital West	Grab	SW		0920	2
Traver Park Point	Grab	SW		0935	3
Hospital East	Grab	SW		0945	4
Heritage Park	Grab	SW		0955	5
Manuel 2	Grab	SW		1015	6
Manuel 2 Divert	Grab	SW		1035	7
Manuel 2A	Grab	SW		1040	8

Instructions:

1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Under "Preservative," list any preservatives that were added to the sample container.

Laboratory Sample Acceptability: pH < 7.0
BEAS Temperature: 1.4°C
BEA Temperature:

1 Collector: Andrew Wyatt	Date & Time: 8/10/21	2 Received By: M. Muchant	Date & Time: 8/10/21 1358
3 Relinquished By:	Date & Time:	4 Received By:	Date & Time:
5 Relinquished By:	Date & Time:	6 Received By:	Date & Time:
7 Relinquished By:	Date & Time:	8 Received By:	Date & Time:

Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAY1.000570277

Client:

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave, Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Kit Shipped to client via UPS Standard in cooler

Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)
David Hempleman (David.Hempleman@ghd.com)

Chain of Custody Form: CFM F1B
Project Number:

Laboratory Submission #:

521080245

E. coli (SM9223B-QT)

NaThio

1 x 100mL Sterile Plastic

Station ID	Sample Type ¹	Sample Matrix ²	Date/Time:	Laboratory Submission #
Manvel 2B	Grab	SW	8/10/21 1050	9
Manvel 2C	Grab	SW	1100	10
Manvel 3	Grab	SW	1110	11
Rock Fill	Grab	SW	1200	12
	Grab	SW		
	Grab	SW		
	Grab	SW		
	Grab	SW		
	Grab	SW		

¹ "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

² "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).

³ "Container Type" is used to indicate whether the container is plastic (P) or glass (G). Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).

⁴ Under "Preservative," list any preservatives that were added to the sample container.

Instructions: 1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

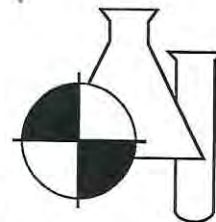
1	Collector: Andrew Wyatt	Date & Time: 8/10/21 1358	2	Received By: Michelle Muehrent	Date & Time: 8/10/21 1358
3	Relinquished By:	Date & Time:	4	Received By:	Date & Time:
5	Relinquished By:	Date & Time:	6	Received By:	Date & Time:
7	Relinquished By:	Date & Time:	8	Received By:	Date & Time:

Laboratory Sample Acceptability: pH < 2 : □

BEAS Temperature: 1.4°C

BEA Temperature:

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission
Number :

S21080284

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CFM FIB

Date Received : 08/11/2021

Time Received : 14:09

Submission: S21080284

Sample Number: 001

Sample Description: Veronica Shoemaker 2

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 11:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	216	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

Submission: S21080284

Sample Number: 002

Sample Description: Veronica Shoemaker 3

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 11:40

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	213	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

Submission: S21080284

Sample Number: 003

Sample Description: Veronica Shoemaker 4

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 11:45

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	435	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

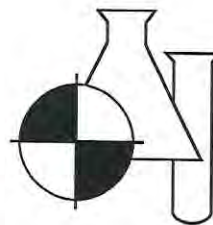
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standard report

21080284

PAGE 1 OF 7

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ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080284

Sample Number: 004

Sample Description: Zapato 2

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 11:55

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	175	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

Submission: S21080284

Sample Number: 005

Sample Description: Zapato 3

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 12:10

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	1019	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

Submission: S21080284

Sample Number: 006

Sample Description: Marsh

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 12:25

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	256	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

Submission: S21080284

Sample Number: 007

Sample Description: Ballard 1

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 12:35

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	262	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

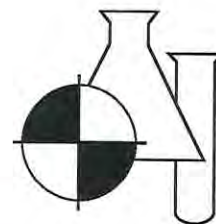
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standard report

21080284

PAGE 2 OF 7

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080284

Sample Number: 008

Sample Description: Ford Street 2

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 09:25

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	754	#/100 ML	10	10	SM9223B	08/11/2021	14:34	LG

Submission: S21080284

Sample Number: 009

Sample Description: Reclaim Water

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 09:35

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	10 U	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

Submission: S21080284

Sample Number: 010

Sample Description: Ford Street 3

Sample Date: 08/11/2021

Sample Method: Grab

Sample Time: 09:45

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	794	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

Submission: S21080284

Sample Number: 011

Sample Description: First Street

Sample Date: 08/11/2021

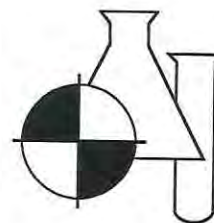
Sample Method: Grab

Sample Time: 10:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	908	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

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ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080284

Sample Number: 012

Sample Date: 08/11/2021

Sample Time: 10:15

Sample Description: Seaboard

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	836	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

Submission: S21080284

Sample Number: 013

Sample Date: 08/11/2021

Sample Time: 10:30

Sample Description: King Street

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	677	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

Submission: S21080284

Sample Number: 014

Sample Date: 08/11/2021

Sample Time: 10:45

Sample Description: Shoemaker Bridge

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	345	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

Submission: S21080284

Sample Number: 015

Sample Date: 08/11/2021

Sample Time: 10:50

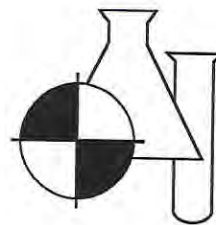
Sample Description: Veronica Shoemaker 1

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	96	#/100 ML	10	10	SM9223B	08/11/2021	15:02	LG

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

NELAC Certification #E85086

Melinda Merchant

08/16/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant/ Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

- A = Value reported is an average of two or more determinations.
- B = Results based upon colony counts outside the ideal range.
- H = Value based on field kit determination. Results may not be accurate.
- I = Reported value is between the laboratory MDL and the PQL.
- J1 = Est. value surrogate recovery limits exceeded.
- J2 = Est. value. No quality control criteria exists for component.
- J3 = Est. value quality control criteria for precision or accuracy not met.
- J4 = Est. value. Sample matrix interference suspected.
- J5 = Est. value. Data questionable due to improper lab or field protocols
- K = Off-scale low. Value is known to be < the value reported.
- L = Off-scale high. Value is known to be > the value reported

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061 -fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAYL000570277

Client:

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819
Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)
David Hempleman (David.Hempleman@ghd.com)

Kit Shipped to client via UPS Standard in cooler

Chain of Custody Form: CFM F1B

Project Number: 11135752

Laboratory Submission #:

521080284

E. coli (SM9223B-QT)

NaThio

1 x 100mL Sterile Plastic

Station ID	Sample Type ¹	Sample Matrix ²	Date/Time:	Laboratory Submission #
Veronica Sweetwater 2	Grab	SW	8/11/21 1600	1
Veronica Sweetwater 3	Grab	SW	1140	2
Veronica Sweetwater 4	Grab	SW	1145	3
Zapata 2	Grab	SW	1155	4
Zapata 3	Grab	SW	1210	5
Marsh	Grab	SW	1225	6
Bouard 1	Grab	SW	1235	7

¹ "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

² "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).

³ "Container Type" is used to indicate whether the container is plastic (P) or glass (G). Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).

⁴ Under "Preservative," list any preservatives that were added to the sample container.

Instructions: 1. Each bottle has a label identifying sample ID, preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability: pH < 2 : 0
BEAS Temperature: 21.3°C
BEA Temperature:

1	Collector: Asher Lopez	Date & Time: 8/11/21 1404	2	Received By: Muelenda Muchawit	Date & Time: 8/11/21 1409
3	Relinquished By:	Date & Time:	4	Received By:	Date & Time:
5	Relinquished By:	Date & Time:	6	Received By:	Date & Time:
7	Relinquished By:	Date & Time:	8	Received By:	Date & Time:

Benchmark EA South
 1001 Corporate Avenue, Suite 102
 North Port, FL 34289
 (941) 625-3137 / (800) 736-9986
 (941) 423-7336 fax
 Sample Temperature checked upon receipt at BEAS
 with Temperature Gun ID #7

Benchmark EA, Inc.
 1711 12th St. East
 Palmetto, FL 34221
 (941) 723-9986 / (800) 736-9986
 (941) 723-6061-fax
 Sample Temperature checked upon receipt at BEA with
 Temperature Gun ID #RAY1.000570277

Client:
GHD Services, Inc. (HSA ENG)
 2675 Winkler Ave, Suite 180
 Ft. Myers, FL 33901
 Andrew Wyatt
 Fax: 239-936-0819
 Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)
 David Hempleman (David.Hempleman@ghd.com)

Kit Shipped to client via UPS Standard in cooler

Chain of Custody Form: CFM FIG
 Project Number: 11635752

Laboratory Submission #:

521080284

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)		Laboratory Submission #
			NaThio	1 x 100mL Sterile Plastic	
Field Street 2	Grab	SW	Date/Time: 8/11/21	0925	8
Reclaim Water	Grab	SW	Date/Time:	0935	9
Field Street 3	Grab	SW	Date/Time:	0945	10
First Street	Grab	SW	Date/Time:	1000	11
Seaboard	Grab	SW	Date/Time:	1015	12
King Street	Grab	SW	Date/Time:	1030	13
Shoemaker Bridge	Grab	SW	Date/Time:	1045	14
Veronica Shoemaker	Grab	SW	Date/Time:	1050	15

1. Each bottle has a label identifying sample ID, preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Instructions:
 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMT), or sludge (SLDG).
 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).
 Under "Preservative," list any preservatives that were added to the sample container.

Laboratory Sample Acceptability: pH < 2.0
 BEAS Temperature: 2.3°C
 BEA Temperature:

1 Collector: Andrew Wyatt	Date & Time: 8/11/21	2 Received By: Sheri Finn	Date & Time: 8/11/21
3 Relinquished By:	Date & Time:	4 Received By:	Date & Time:
5 Relinquished By:	Date & Time:	6 Received By:	Date & Time:
7 Relinquished By:	Date & Time:	8 Received By:	Date & Time:

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ANALYTICAL REPORT

Eurofins TestAmerica, Tampa
6712 Benjamin Road
Suite 100
Tampa, FL 33634
Tel: (813)885-7427

Laboratory Job ID: 660-112965-1

Client Project/Site: Acetaminophen in Surface Water

For:

GHD Services Inc.-HSA
3380 Fairlane Farms Road, Suite 12
Wellington, Florida 33414

Attn: Mr. Tom Emenhiser



Authorized for release by:
9/2/2021 11:26:46 AM

Matt Jones, Project Manager I
(850)284-4486
matthew.jones@eurofinset.com

LINKS

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results through
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Have a Question?



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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

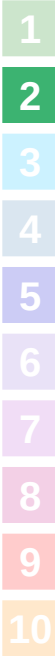


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Case Narrative	4
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Detection Summary	6
Method Summary	7
Subcontract Data	8
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Sample Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-112965-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-112965-1	Reclaim Water	Water	08/11/21 09:35	08/12/21 08:45
660-112965-2	CFM Billy 3	Water	08/11/21 11:25	08/12/21 08:45
660-112965-3	CFM Cementery	Water	08/11/21 11:10	08/12/21 08:45
660-112965-4	Rockfill	Water	08/10/21 12:00	08/12/21 08:45

Case Narrative

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-112965-1

Job ID: 660-112965-1

Laboratory: Eurofins TestAmerica, Tampa

Narrative

Job Narrative
660-112965-1

Comments

No additional comments.

Receipt

The samples were received on 8/12/2021 8:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

Subcontract non-Sister

See attached subcontract report.

1

2

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Definitions/Glossary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-112965-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-112965-1

Client Sample ID: Reclaim Water

Lab Sample ID: 660-112965-1

No Detections.

Client Sample ID: CFM Billy 3

Lab Sample ID: 660-112965-2

No Detections.

Client Sample ID: CFM Cementery

Lab Sample ID: 660-112965-3

No Detections.

Client Sample ID: Rockfill

Lab Sample ID: 660-112965-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Tampa

Method Summary

Client: GHD Services Inc.-HSA

Job ID: 660-112965-1

Project/Site: Acetaminophen in Surface Water

Method	Method Description	Protocol	Laboratory
Subcontract	L220 - Acetaminophen	None	Eurofin SB

Protocol References:

None = None

Laboratory References:

Eurofin SB = Eurofins Eaton Analytical, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

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STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN00035	New Jersey*	IN598
Colorado Radiochemistry	IN00035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida(Primary AB)*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon*	4156
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA014	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

*NELAP/TNI Recognized Accreditation Bodies

NELAC NARRATIVE PAGE

Client: TestAmerica

Report #: 527432NP

Eurofins Eaton Analytical, LLC is a NELAP accredited laboratory. All reported results meet the requirements of the NELAC standards, unless otherwise noted.

EEA contact person: Jaclyn Gatchell

NELAP requires complete reporting of deviations from method requirements, regardless of the suspected impact on the data. Quality control failures not reported within the report summary are noted here.

Method L220

Note: EEA samples 4984285 and 4984287 were prefiltered before extraction due to cloudiness/sediments.

Note: In the analysis, the IS-Atrazine-d5 recovery in the sample submitted (46%) was outside the acceptance limits of 50-150%.

There were no additional quality control failures.

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	asm	08/30/2021
Authorized Signature	Title	Date

Page 1 of 1



Eaton Analytical

110 South Hill Street
South Bend, IN 46617
Tel: (574) 233-4777
Fax: (574) 233-8207
1 800 332 4345

Laboratory Report

Client: TestAmerica
Attn: Matt Jones
6712 Benjamin Rd
Suite 100
Tampa, FL 33634

Report: 527432
Priority: Standard Written
Status: Final
PWS ID: Not Supplied

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4984284	660-112965-1	L220	08/11/21 09:35	Client	08/13/21 09:00
4984285	660-112965-2	L220	08/11/21 11:25	Client	08/13/21 09:00
4984286	660-112965-3	L220	08/11/21 11:10	Client	08/13/21 09:00
4984287	660-112965-4	L220	08/11/21 12:00	Client	08/13/21 09:00

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Jaclyn Gatchell at (574) 233-4777.

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Jaclyn Gatchell asm

Authorized Signature

Title

08/30/2021

Date

Client Name: TestAmerica

Report #: 527432

Client Name: TestAmerica

Report #: 527432

Sampling Point: 660-112965-1

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
103-90-2	Acetaminophen \$	L220	---	0.005	< 0.005	ug/L	08/19/21 07:40	08/21/21 16:52	4984284

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 660-112965-2

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
103-90-2	Acetaminophen \$	L220	---	0.005	< 0.005	ug/L	08/19/21 07:40	08/21/21 17:33	4984285

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 660-112965-3

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
103-90-2	Acetaminophen \$	L220	---	0.005	< 0.005	ug/L	08/19/21 07:40	08/21/21 18:14	4984286

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 660-112965-4

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
103-90-2	Acetaminophen \$	L220	---	0.005	< 0.005	ug/L	08/19/21 07:40	08/21/21 18:55	4984287

\$ The state of origin does not offer certification for this parameter.

† EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

If applicable, the calculation of the matrix spike (MS) or matrix spike duplicate (MSD) percent recovery is as follows: $(\text{MS or MSD value} - \text{Sample value}) \times 100 / \text{spike target} / \text{dilution factor} = \text{Recovery \%}$

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

Chain of Custody Record



Environment Testing
America

527432
433187

Client Information (Sub Contract Lab)		Sampler: Jones, Matt		Lab PM: Jones, Matt		Carrier Tracking No(s):		GOC No: 660-131497.1	
Client Contact:		Phone:		E-Mail: matthew.jones@eurofinset.com		State of Origin: Florida		Page: 1 of 1	
Shipping/Receiving		Company: Eurofins Eaton Analytical		Accreditations Required (See note):		Job #:		660-112965-1	
Address: 110 S Hill Street,		Due Date Requested: 8/26/2021		Analysis Requested		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - other (specify)	
City: South Bend		TAT Requested (days):		Field Filtered Sample (Yes or No)		SUB (L220 - Acetaminophen)		Total Number of containers	
State, Zip: IN, 46617		PO #:		Perform MS/MSD (Yes or No)		X		1	
Phone: 574-233-4777(Tel) 574-233-8207(Fax)		WO #:		Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)		X		1	
Email:		Project #:		Sample Type (C=Comp, G=grab)		X		1	
Project Name: Acetaminophen in Surface Water		66016303		Sample Time		X		1	
Site:		SSOW#:		Sample Date		X		1	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Preservation Code:		Special Instructions/Note:	
Reclaim Water (660-112965-1)		8/11/21		09:35 Eastern		Water		4984, 284	
CFM Billy 3 (660-112965-2)		8/11/21		11:25 Eastern		Water		285	
CFM Cementery (660-112965-3)		8/11/21		11:10 Eastern		Water		286	
Rockfill (660-112965-4)		8/10/21		12:00 Eastern		Water		287	
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.									
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months									
Empty Kit Relinquished by: Relinquished by: [Signature] Date: 8/12/21 17:00 Company: EPA Relinquished by: [Signature] Date: [Blank] Company: [Blank] Relinquished by: [Signature] Date: [Blank] Company: [Blank] Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.: Shipping straps intact upon receipt Cooler Temperature(s) °C and Other Remarks: 2.80C									

Eurofins Eaton Analytical Run Log

Run ID: 293583 Method: L220

Type	Sample Id	Sample Site	Matrix	Instrument ID	Analysis Date	Calibration File
ICL	4990252		OS	DQ	08/21/2021 06:38	082121L220a2.mdb
ICS	4990253		OS	DQ	08/21/2021 07:19	082121L220a2.mdb
ICS	4990254		OS	DQ	08/21/2021 08:00	082121L220a2.mdb
ICS	4990255		OS	DQ	08/21/2021 08:41	082121L220a2.mdb
ICS	4990256		OS	DQ	08/21/2021 09:22	082121L220a2.mdb
ICS	4990257		OS	DQ	08/21/2021 10:03	082121L220a2.mdb
ICS	4990258		OS	DQ	08/21/2021 10:44	082121L220a2.mdb
LFB	4990207		RW	DQ	08/21/2021 12:06	082121L220a2.mdb
LMB	4990206		RW	DQ	08/21/2021 14:08	082121L220a2.mdb
FS	4984284	660-112965-1	SW	DQ	08/21/2021 16:52	082121L220a2.mdb
FS	4984285	660-112965-2	SW	DQ	08/21/2021 17:33	082121L220a2.mdb
FS	4984286	660-112965-3	SW	DQ	08/21/2021 18:14	082121L220a2.mdb
FS	4984287	660-112965-4	SW	DQ	08/21/2021 18:55	082121L220a2.mdb
CCC	4990260		OS	DQ	08/21/2021 19:36	082121L220a2.mdb

QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
ICL	IS-Atrazine-d5	L220	N/A	---		70371	68718	ug/L	102	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 06:38	4990252
ICL	SS-Acetaminophen-d4	L220	N/A	---		0.0987	0.1	ug/L	99	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 06:38	4990252
ICL	Acetaminophen	L220	N/A	---		0.0048	0.005	ug/L	96	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 06:38	4990252
ICS	IS-Atrazine-d5	L220	N/A	---		66565	68718	ug/L	97	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 07:19	4990253
ICS	SS-Acetaminophen-d4	L220	N/A	---		0.1007	0.1	ug/L	101	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 07:19	4990253
ICS	Acetaminophen	L220	N/A	---		0.0102	0.01	ug/L	102	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 07:19	4990253
ICS	IS-Atrazine-d5	L220	N/A	---		69449	68718	ug/L	101	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 08:00	4990254
ICS	SS-Acetaminophen-d4	L220	N/A	---		0.0978	0.1	ug/L	98	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 08:00	4990254
ICS	Acetaminophen	L220	N/A	---		0.0259	0.025	ug/L	103	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 08:00	4990254
ICS	IS-Atrazine-d5	L220	N/A	---		67458	68718	ug/L	98	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 08:41	4990255
ICS	SS-Acetaminophen-d4	L220	N/A	---		0.1009	0.1	ug/L	101	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 08:41	4990255
ICS	Acetaminophen	L220	N/A	---		0.0507	0.05	ug/L	101	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 08:41	4990255
ICS	IS-Atrazine-d5	L220	N/A	---		68590	68718	ug/L	100	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 09:22	4990256
ICS	SS-Acetaminophen-d4	L220	N/A	---		0.0978	0.1	ug/L	98	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 09:22	4990256
ICS	Acetaminophen	L220	N/A	---		0.1003	0.1	ug/L	100	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 09:22	4990256
ICS	IS-Atrazine-d5	L220	N/A	---		67089	68718	ug/L	98	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 10:03	4990257
ICS	SS-Acetaminophen-d4	L220	N/A	---		0.1031	0.1	ug/L	103	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 10:03	4990257
ICS	Acetaminophen	L220	N/A	---		0.2468	0.25	ug/L	99	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 10:03	4990257
ICS	IS-Atrazine-d5	L220	N/A	---		71509	68718	ug/L	104	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 10:44	4990258
ICS	SS-Acetaminophen-d4	L220	N/A	---		0.1010	0.1	ug/L	101	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 10:44	4990258
ICS	Acetaminophen	L220	N/A	---		0.5014	0.5	ug/L	100	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 10:44	4990258
LFB	IS-Atrazine-d5	L220	N/A	---		61164	68718	ug/L	89	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 12:06	4990207
LFB	SS-Acetaminophen-d4	L220	N/A	---		0.0509	0.1	ug/L	51	5 - 150	---	1.0	08/19/2021 07:40	08/21/2021 12:06	4990207
LFB	Acetaminophen	L220	0.005	---		0.1044	0.1	ug/L	104	70 - 130	---	1.0	08/19/2021 07:40	08/21/2021 12:06	4990207
LMB	IS-Atrazine-d5	L220	N/A	---		67325	68718	ug/L	98	50 - 150	---	1.01	08/19/2021 07:40	08/21/2021 14:08	4990206
LMB	SS-Acetaminophen-d4	L220	N/A	---		0.0464	0.1	ug/L	46	5 - 150	---	1.01	08/19/2021 07:40	08/21/2021 14:08	4990206
LMB	Acetaminophen	L220	0.005	---	<	0.005		ug/L	---	---	---	1.01	08/19/2021 07:40	08/21/2021 14:08	4990206
FS	IS-Atrazine-d5	L220	N/A	660-112965-1		31614	68718	ug/L	46	50 - 150	---	0.97	08/19/2021 07:40	08/21/2021 16:52	4984284
FS	SS-Acetaminophen-d4	L220	N/A	660-112965-1		0.0171	0.1	ug/L	18	5 - 150	---	0.97	08/19/2021 07:40	08/21/2021 16:52	4984284
FS	Acetaminophen	L220	0.005	660-112965-1	<	0.005		ug/L	---	---	---	0.97	08/19/2021 07:40	08/21/2021 16:52	4984284
FS	IS-Atrazine-d5	L220	N/A	660-112965-2		50743	68718	ug/L	74	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 17:33	4984285
FS	SS-Acetaminophen-d4	L220	N/A	660-112965-2		0.0451	0.1	ug/L	45	5 - 150	---	1.0	08/19/2021 07:40	08/21/2021 17:33	4984285
FS	Acetaminophen	L220	0.005	660-112965-2	<	0.005		ug/L	---	---	---	1.0	08/19/2021 07:40	08/21/2021 17:33	4984285
FS	IS-Atrazine-d5	L220	N/A	660-112965-3		56066	68718	ug/L	82	50 - 150	---	0.97	08/19/2021 07:40	08/21/2021 18:14	4984286
FS	SS-Acetaminophen-d4	L220	N/A	660-112965-3		0.0287	0.1	ug/L	30	5 - 150	---	0.97	08/19/2021 07:40	08/21/2021 18:14	4984286
FS	Acetaminophen	L220	0.005	660-112965-3	<	0.005		ug/L	---	---	---	0.97	08/19/2021 07:40	08/21/2021 18:14	4984286
FS	IS-Atrazine-d5	L220	N/A	660-112965-4		58556	68718	ug/L	85	50 - 150	---	1.06	08/19/2021 07:40	08/21/2021 18:55	4984287
FS	SS-Acetaminophen-d4	L220	N/A	660-112965-4		0.0679	0.1	ug/L	64	5 - 150	---	1.06	08/19/2021 07:40	08/21/2021 18:55	4984287
FS	Acetaminophen	L220	0.005	660-112965-4	<	0.005		ug/L	---	---	---	1.06	08/19/2021 07:40	08/21/2021 18:55	4984287
FS	IS-Atrazine-d5	L220	N/A	---		60908	68718	ug/L	89	50 - 150	---	1.0	08/19/2021 07:40	08/21/2021 19:36	4990260



QC Summary Report (cont.)															
Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
CCC	SS-Acetaminophen-d4	L220	N/A	-----		0.0791	0.1	ug/L	79	50 - 150	-----	1.0	08/19/2021 07:40	08/21/2021 19:36	4990260
CCC	Acetaminophen	L220	0.005	-----		0.0872	0.1	ug/L	87	70 - 130	-----	1.0	08/19/2021 07:40	08/21/2021 19:36	4990260

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
CCC	SS-Acetaminophen-d4	L220	N/A	----		0.0791	0.1	ug/L	79	50 - 150	----	1.0	08/19/2021 07:40	08/21/2021 19:36	4990260
CCC	Acetaminophen	L220	0.005	----		0.0872	0.1	ug/L	87	70 - 130	----	1.0	08/19/2021 07:40	08/21/2021 19:36	4990260

Sample Type Key

<u>Type (Abbr.)</u>	<u>Sample Type</u>	<u>Type (Abbr.)</u>	<u>Sample Type</u>
CCC	Continuing Calibration Check		
FS	Field Sample		
ICL	Initial Calibration Low		
ICS	Initial Calibration Sample		
LFB	Laboratory Fortified Blank		
LMB	Laboratory Method Blank		

END OF REPORT

Client Information			Carrier Tracking No(s):			COC No:		
Lab PM: Jones, Matt			Carrier Tracking No(s):			COC No:		
E-Mail: Matthew.jones@eurofinset.com			Carrier Tracking No(s):			COC No:		
State of Origin:			Carrier Tracking No(s):			COC No:		
Job #:			Carrier Tracking No(s):			COC No:		
Analysis Requested			Analysis Requested			Analysis Requested		
Due Date Requested:			Analysis Requested			Analysis Requested		
TAT Requested (days):			Analysis Requested			Analysis Requested		
Compliance Project: ☐ Yes ☐ No			Analysis Requested			Analysis Requested		
Purchase Order not required			Analysis Requested			Analysis Requested		
WO #:			Analysis Requested			Analysis Requested		
Project #:			Analysis Requested			Analysis Requested		
66046303			Analysis Requested			Analysis Requested		
SSOW#:			Analysis Requested			Analysis Requested		
11135752			Analysis Requested			Analysis Requested		
Sample Identification			Analysis Requested			Analysis Requested		
Sample Date			Analysis Requested			Analysis Requested		
Sample Time			Analysis Requested			Analysis Requested		
Sample Type (C=comp, G=grab)			Analysis Requested			Analysis Requested		
Matrix (W=water, S=solid, O=oil, A=air)			Analysis Requested			Analysis Requested		
Preservation Code:			Analysis Requested			Analysis Requested		
8/11/21			Analysis Requested			Analysis Requested		
935			Analysis Requested			Analysis Requested		
8/11/21			Analysis Requested			Analysis Requested		
1125			Analysis Requested			Analysis Requested		
8/11/21			Analysis Requested			Analysis Requested		
1110			Analysis Requested			Analysis Requested		
8/10/21			Analysis Requested			Analysis Requested		
1200			Analysis Requested			Analysis Requested		
Reclaim water			Analysis Requested			Analysis Requested		
CFM Billy 3			Analysis Requested			Analysis Requested		
CFM cemetery			Analysis Requested			Analysis Requested		
Rockfill			Analysis Requested			Analysis Requested		
Loc: 660			Analysis Requested			Analysis Requested		
112965			Analysis Requested			Analysis Requested		
660-112965 Chain of Custody			Analysis Requested			Analysis Requested		
Possible Hazard Identification			Analysis Requested			Analysis Requested		
Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐			Analysis Requested			Analysis Requested		
Deliverable Requested: I, II, III, IV, Other (specify)			Analysis Requested			Analysis Requested		
Empty Kit Relinquished by:			Analysis Requested			Analysis Requested		
Relinquished by:			Analysis Requested			Analysis Requested		
Relinquished by:			Analysis Requested			Analysis Requested		
Relinquished by:			Analysis Requested			Analysis Requested		
Custody Seal Intact: ☐ Yes ☐ No			Analysis Requested			Analysis Requested		
Custody Seal No.:			Analysis Requested			Analysis Requested		
2.4/2.7			Analysis Requested			Analysis Requested		

Login Sample Receipt Checklist

Client: GHD Services Inc.-HSA

Job Number: 660-112965-1

Login Number: 112965

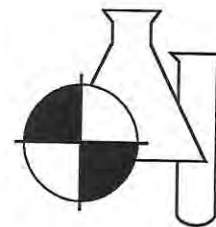
List Source: Eurofins TestAmerica, Tampa

List Number: 1

Creator: Arevalo, Maria L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission
Number :

S21080480

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CITY OF FT MYERS

Date Received : 08/18/2021

Time Received : 13:17

Submission: S21080480

Sample Number: 001

Sample Date: 08/18/2021

Sample Time: 11:00

Sample Description: First Street

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	605	#/100 ML	10	10	SM9223B	08/18/2021	14:07	LG

Submission: S21080480

Sample Number: 002

Sample Date: 08/18/2021

Sample Time: 11:20

Sample Description: Seaboard

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	2098	#/100 ML	10	10	SM9223B	08/18/2021	14:07	LG

Submission: S21080480

Sample Number: 003

Sample Date: 08/18/2021

Sample Time: 11:30

Sample Description: CFM FSP

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	473	#/100 ML	10	10	SM9223B	08/18/2021	14:07	LG

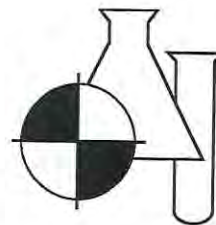
1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

standard report

21080480

PAGE 1 OF 3

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21080480

Sample Number: 004

Sample Date: 08/18/2021

Sample Time: 11:50

Sample Description: CFM Cemetery

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	703	#/100 ML	10	10	SM9223B	08/18/2021	14:07	LG

Submission: S21080480

Sample Number: 005

Sample Date: 08/18/2021

Sample Time: 12:05

Sample Description: Zapato 3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	249	#/100 ML	10	10	SM9223B	08/18/2021	14:07	LG

Melinda Merchant

08/20/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant/ Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy not met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

standard report

21080480

PAGE 2 OF 3

Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061 -fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAY1000570277

Client:

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819
Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com) ;
David Hempleman (David.Hempleman@ghd.com)

Kit Shipped to client via UPS Standard in cooler

Chain of Custody Form: *City of Fort Myers*
Project Number: *11135752*

Laboratory Submission #:

521080480

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)		Laboratory Submission #
			NaThio		
			1 x 100mL Sterile Plastic		
<i>First Street</i>	Grab	SW	Date/Time: <i>8/18/21</i>	<i>1100</i>	<i>1</i>
<i>Seaboard</i>	Grab	SW	Date/Time:	<i>1120</i>	<i>2</i>
<i>CFM FSP</i>	Grab	SW	Date/Time:	<i>1130</i>	<i>3</i>
<i>CFM Cemetery</i>	Grab	SW	Date/Time:	<i>1130</i>	<i>4</i>
<i>Zapata 3</i>	Grab	SW	Date/Time: <i>↓</i>	<i>1205</i>	<i>5</i>
	Grab	SW	Date/Time:		
	Grab	SW	Date/Time:		
	Grab	SW	Date/Time:		

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).

3. "Sample Type" is used to indicate whether the container is plastic (P) or glass (G).

4. Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42°F).

Under "Preservative," list any preservatives that were added to the sample container.

1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

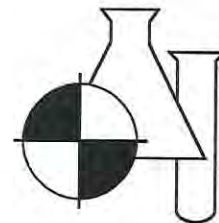
Laboratory Sample Acceptability: pH < 2 : 0

BEAS Temperature: *4, 6°C*

BEA Temperature:

1	Collector: <i>CHL</i>	Date & Time: <i>8/18/21</i>	1317	2	Received By: <i>Melinda Mackenst</i>	Date & Time: <i>8/18/21</i>	1317
3	Relinquished By:	Date & Time:		4	Received By:	Date & Time:	
5	Relinquished By:	Date & Time:		6	Received By:	Date & Time:	
7	Relinquished By:	Date & Time:		8	Received By:	Date & Time:	

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission
Number :

S21090183

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CITY OF FORT MYERS FIB

Date Received : 09/08/2021

Time Received : 13:31

Submission: S21090183

Sample Number: 001

Sample Description: Manuel Weir

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 08:30

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	2613	#/100 ML	10	10	SM9223B	09/08/2021	14:58	LG

Submission: S21090183

Sample Number: 002

Sample Description: Hospital West

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 09:05

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	1835	#/100 ML	10	10	SM9223B	09/08/2021	14:58	LG

Submission: S21090183

Sample Number: 003

Sample Description: Trailer Park Point

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 09:15

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	933	#/100 ML	10	10	SM9223B	09/08/2021	14:58	LG

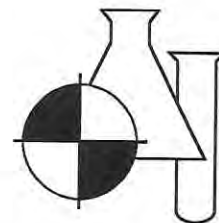
1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

standard report

21090183

PAGE 1 OF 5

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090183

Sample Number: 004

Sample Date: 09/08/2021

Sample Time: 09:25

Sample Description: Hospital East

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	1860	#/100 ML	10	10	SM9223B	09/08/2021	14:58	LG

Submission: S21090183

Sample Number: 005

Sample Date: 09/08/2021

Sample Time: 09:35

Sample Description: Heritage Park

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	428	#/100 ML	10	10	SM9223B	09/08/2021	14:58	LG

Submission: S21090183

Sample Number: 006

Sample Date: 09/08/2021

Sample Time: 09:45

Sample Description: Manuel 2 Divot

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	620	#/100 ML	10	10	SM9223B	09/08/2021	14:58	LG

Submission: S21090183

Sample Number: 007

Sample Date: 09/08/2021

Sample Time: 09:55

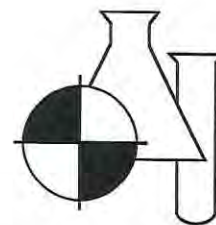
Sample Description: Manuel 2A

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	1723	#/100 ML	10	10	SM9223B	09/08/2021	15:24	LG

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090183

Sample Number: 008

Sample Description: Manuel 2B

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 10:05

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	798	#/100 ML	10	10	SM9223B	09/08/2021	15:24	LG

Submission: S21090183

Sample Number: 009

Sample Description: Manuel 2C

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 10:15

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	860	#/100 ML	10	10	SM9223B	09/08/2021	15:24	LG

Submission: S21090183

Sample Number: 010

Sample Description: Manuel 3

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 10:25

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	187	#/100 ML	10	10	SM9223B	09/08/2021	15:24	LG

Submission: S21090183

Sample Number: 011

Sample Description: Manuel 2

Sample Date: 09/08/2021

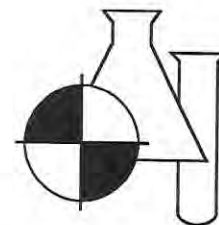
Sample Method: Grab

Sample Time: 10:55

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	359	#/100 ML	10	10	SM9223B	09/08/2021	15:24	LG

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090183

Sample Number: 012

Sample Description: DUP-1

Sample Date: 09/08/2021

Sample Method: Grab

Sample Time: 12:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E. COLI BY IDEXX QUANTITRAY	1187	#/100 ML	10	10	SM9223B	09/08/2021	15:24	LG

Melinda Merchant

09/14/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant / Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

- A = Value reported is an average of two or more determinations.
- B = Results based upon colony counts outside the ideal range.
- H = Value based on field kit determination. Results may not be accurate.
- I = Reported value is between the laboratory MDL and the PQL.
- J1 = Est. value surrogate recovery limits exceeded.
- J2 = Est. value. No quality control criteria exists for component.
- J3 = Est. value quality control criteria for precision or accuracy not met.
- J4 = Est. value. Sample matrix interference suspected.
- J5 = Est. value. Data questionable due to improper lab or field protocols
- K = Off-scale low. Value is known to be < the value reported.
- L = Off-scale high. Value is known to be > the value reported

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

Benchmark EnviroAnalytical, Inc.

1711 Twelfth Street East
Palmetto, FL 34221
(941) 723-9986
(941) 723-6061 fax

www.benchmarkea.com

Benchmark EA South E85086
1001 Corporate Ave. Ste 102
North Port FL 34289
941-240-3066 / 941-625-3137

Client:

GHD Services, Inc. (GSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Kit Shipped to client via UPS Standard in cooler

Sample Temperature checked upon receipt with Temperature Gun ID #RAY1000570277

BEAS Sample Receipt Temp. 2.3

Reports: Sheri Finn (Sheri.Finn@ghd.com); Andrew Wyatt (Andrew.Wyatt@ghd.com); David Hempelman (David.Hempelman@ghd.com), Conner Hayden @ghd.com

Chain of Custody Form: City of Fort Myers FIBS
Project Number: 11135752
Checked at Benchmark EA South E85086
With Temperature Gun ID #7

Laboratory Submission #:

S21090183

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)		Laboratory Submission #
			NaThio	1 x 100mL Sterile Plastic	
manuel weir	Grab	SW	Date/Time: 9/8/21	0830	1
hospital west	Grab	SW	Date/Time: 0905		2
trailer park point	Grab	SW	Date/Time: 0915		3
hospital east	Grab	SW	Date/Time: 0925		4
heritage park	Grab	SW	Date/Time: 0935		5
manuel 2 DUCT	Grab	SW	Date/Time: 0945		6
Manuel 2A	Grab	SW	Date/Time: 0955		7
Manuel 2B	Grab	SW	Date/Time: 1005		8
manuel 2C	Grab	SW	Date/Time: 1015		9

¹ "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
² "Sample Matrix" is used to indicate whether the sample is being designed to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).
³ "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
⁴ Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 4°C (42.8°F).
⁵ Under "Preservative," list any preservatives that were added to the sample container.

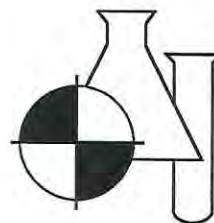
⁶ BEAS has a label identifying sample ID, preservative contained in the bottle, sample type, client ID, and parameters for analysis.
⁷ The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
⁸ All bottles containing preservative may be rinsed with appropriate sample prior to collection.
⁹ The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability: pH < 2 : 0
BEAS Temperature: 2.3°C
BEA Temperature:

1 Collector: Bull	Date & Time: 9/8/21	133	2 Received By: Melinda Merchant	Date & Time: 9/8/21	1331
3 Relinquished By:	Date & Time:	4	Received By:	Date & Time:	
5 Relinquished By:	Date & Time:	6	Received By:	Date & Time:	
7 Relinquished By:	Date & Time:	8	Received By:	Date & Time:	

manuel 3 Grab SW 9/8/21 1025 10
manuel 2 Grab SW 1055 11
DUP-1 Grab SW 1200 12

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission
Number :

S21090266

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CFM-FIB

Date Received : 09/09/2021

Time Received : 14:04

Submission: S21090266

Sample Number: 001

Sample Description: 1st Street

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 08:20

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	160	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

Submission: S21090266

Sample Number: 002

Sample Description: Seaboard

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 08:35

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	512	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

Submission: S21090266

Sample Number: 003

Sample Description: King Street

Sample Date: 09/09/2021

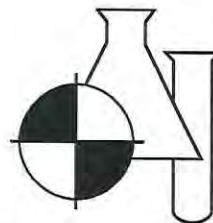
Sample Method: Grab

Sample Time: 08:55

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	359	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090266

Sample Number: 004

Sample Description: Shoemaker Bridge

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 09:05

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	481	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

Submission: S21090266

Sample Number: 005

Sample Description: Marsh

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 09:20

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	84	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

Submission: S21090266

Sample Number: 006

Sample Description: Ballard 1

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 09:25

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	160	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

Submission: S21090266

Sample Number: 007

Sample Description: Zapato 2

Sample Date: 09/09/2021

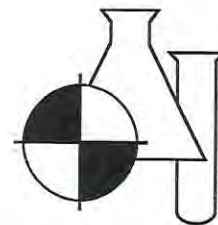
Sample Method: Grab

Sample Time: 09:40

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	262	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090266

Sample Number: 008

Sample Description: Dup-2

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 12:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	738	#/100 ML	10	10	SM9223B	09/09/2021	14:51	MM

Submission: S21090266

Sample Number: 009

Sample Description: Zapato 3

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 09:55

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	20	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

Submission: S21090266

Sample Number: 010

Sample Description: Rockfill

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 10:05

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	160	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

Submission: S21090266

Sample Number: 011

Sample Description: Ford Street 3

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 10:35

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	703	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

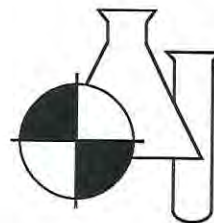
1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

standard report

21090266

PAGE 3 OF 7

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090266

Sample Number: 012

Sample Date: 09/09/2021

Sample Time: 10:50

Sample Description: Ford Street 2

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	473	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

Submission: S21090266

Sample Number: 013

Sample Date: 09/09/2021

Sample Time: 11:05

Sample Description: Veronica Shoemaker 1

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	10	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

Submission: S21090266

Sample Number: 014

Sample Date: 09/09/2021

Sample Time: 11:15

Sample Description: Veronica Shoemaker 2

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	241	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

Submission: S21090266

Sample Number: 015

Sample Date: 09/09/2021

Sample Time: 11:30

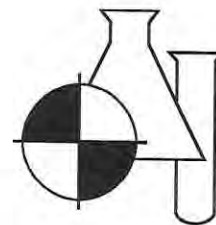
Sample Description: Veronica Shoemaker 3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	171	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21090266

Sample Number: 016

Sample Description: Veronica Shoemaker 4

Sample Date: 09/09/2021

Sample Method: Grab

Sample Time: 11:40

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E-COLI BY IDEXX QUANTITRAY	148	#/100 ML	10	10	SM9223B	09/09/2021	15:27	MM

Melinda Merchant

09/14/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant / Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy not met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAY1000570277

Client:**GHD Services, Inc. (HSA ENG)**

2675 Winkler Ave, Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Kit Shipped to client via UPS Standard in cooler

Please send 24 hour verbal
results via email

Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)
David Hempleman (David.Hempleman@ghd.com) (dmmc@hoyden.com)

Chain of Custody Form: CFM - FIB
Project Number: 11135752

Laboratory Submission #:

521090266

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)		Laboratory Submission #
			NaThio	1 x 100mL Sterile Plastic	
1 st Spot	Grab	SW	Date/Time: 9/9/21	0820	1
SEABOARD	Grab	SW	Date/Time:	0835	2
KING STREET	Grab	SW	Date/Time:	0855	3
SHOEMAKER BRIDGE	Grab	SW	Date/Time:	0905	4
MARSH	Grab	SW	Date/Time:	0920	5
BALARD 1	Grab	SW	Date/Time:	0925	6
ZAPATO 2	Grab	SW	Date/Time:	940	7
DUP 2	Grab	SW	Date/Time:	1200	8

¹ "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

² "Sample Matrix" is used to indicate whether the sample is being dispensed to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).

³ "Container Type" is used to indicate whether the container is plastic (P) or glass (G).

⁴ "Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F). Under "Preservative," list any preservatives that were added to the sample container.

⁵ "Injections" - Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.

⁶ The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

⁷ All bottles not containing preservative must be cooled with appropriate sample prior to collection.

⁸ The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability: pH < 2 : ☐

BEAS Temperature: 4,4°C

BEA Temperature:

1 Collector:	Date & Time: 9/9/21	1404	2 Received By: <i>Michelle Merchant</i>	Date & Time: 9/9/21	1404
3 Relinquished By:	Date & Time:		4 Received By:	Date & Time:	
5 Relinquished By:	Date & Time:		6 Received By:	Date & Time:	
7 Relinquished By:	Date & Time:		8 Received By:	Date & Time:	

7 of 9

Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAY1000570277

Client:**GHD Services, Inc. (HSA ENG)**

2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Kit Shipped to client via UPS Standard in cooler

Please send 24 hour verba
results via email

Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com) ;
David Hempleman (David.Hempleman@ghd.com) cmmor, haydon @ghd.com

Chain of Custody Form: CFM - FIB

Project Number: 11135752

Laboratory Submission #:

521090266

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)		Laboratory Submission #
			NaThio	1 x 100mL Sterile Plastic	
Zapato 3	Grab	SW	Date/Time: 9/9/21	0955	9
Rocelfin	Grab	SW	Date/Time: 1005		10
Ford Street 3	Grab	SW	Date/Time: 1035		11
Ford Street 2	Grab	SW	Date/Time: 1050		12
Veronica Sneemaver 1	Grab	SW	Date/Time: 1105		13
Veronica Sneemaver 2	Grab	SW	Date/Time: 1115		14
Veronica Sneemaver 3	Grab	SW	Date/Time: 1130		15
Veronica Sneemaver 4	Grab	SW	Date/Time: 1140		16

Instructions:
1. Each bottle has a label identifying sample ID, measured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink, date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be stored with appropriate preservative prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Under "Preservative," list any preservatives that were added to the sample container.
"Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
"Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).
"Container Type" is used to indicate whether the container is plastic (P) or glass (G).
"Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F)."

Laboratory Sample Acceptability: pH < 2: ☐
BEAS Temperature: 4.4°C
BEA Temperature:

1 Collector: Paul He	Date & Time: 9/9/21	1404	2 Received By: M. Hempleman	Date & Time: 9/15/21	1404
3 Relinquished By:	Date & Time:		4 Received By:	Date & Time:	
5 Relinquished By:	Date & Time:		6 Received By:	Date & Time:	
7 Relinquished By:	Date & Time:		8 Received By:	Date & Time:	



15280 NW 79th Court, Suite 107 Miami Lakes, Florida 33016

Fecal Host Quantification ID Test Results Report

Detection and quantification of the fecal host associated gene biomarker by quantitative Polymerase Chain Reaction (qPCR) DNA analytical technology

ND: Not Detected

DNQ: Detected, Not Quantifiable

Submitter: GHD Services, Inc

Report Generated: September 16, 2021

[illegible]

Reported Results Authorized By: Anda Quintero, Quality Manager

Results reported herein apply only to the sample matrices as received.

Results reported herein relate to the genetic material extracted from the sample matrix processed and included in the analysis.

Revision 1.4
Effective Date
12/12/19



Detection and quantification of the fecal host associated gene biomarker by quantitative Polymerase Chain Reaction (qPCR) DNA analytical technology

ND: Not Detected

DNQ: Detected, Not Quantifiable

Submitter: GHD Services, Inc

Report Generated: September 16, 2021

Reported Results Authorized By: Anda Quintero, Quality Manager

Results reported herein apply only to the sample matrices as received.

Results reported herein relate to the genetic material extracted from the sample matrix processed and included in the analysis.

Revision 1.4
Effective Date 12/12/19

Laboratory Comments
Submitter: GHD Services, Inc
Report Generated: September 16, 2021

Non-Detect Results

In sample(s) classified as non-detect, the host-associated fecal gene biomarker(s) was either not detected in test replicates, one replicate was detected at a cycle threshold greater than 35 and the other was not, or one replicate was detected at a cycle threshold less than 35 and the other was not after repeated analysis.

Detected Results

In sample(s) classified as detected, the host-associated fecal gene biomarker(s) was detected in both test replicates suggesting that the host's fecal contamination is present in the sample(s). Copy number measurements reported are relative, not absolute, quantification.

Detected Not Quantified (DNQ) Results

In sample(s) classified as Detected Not Quantified (DNQ), the host-associated fecal biomarker was detected in both test replicates but in quantities below the limit of quantification. This result indicates that fecal indicators associated with the respective host was present in the sample(s) but in low concentrations.

Fecal Reference Samples

The client is encouraged to submit fecal samples from suspected sources in the surrounding area in order to gain a better understanding of the concentration of the host-associated biomarker with the regional population. A more precise interpretation would be available to the client with the submittal of such baseline samples.

Result Interpretations

The presence of the biomarker does not signify the presence or absence of that form of fecal pollution conclusively. The most reliable way to accurately test for contamination is to combine genetic testing with scientifically sound and adequate study design appropriate for the water quality questions to be answered or issues to be resolved.

Additional Testing

A portion of all samples has been frozen and will be archived for 3 months. The client is encouraged to perform additional tests on the sample(s) for other hosts suspected of contributing to the fecal contamination.

Limitation of Damages – Repayment of Service Price

It is agreed that in the event of breach of any warranty or breach of contract, or negligence of LuminUltra Technologies Inc, as well as its agents or representatives, the liability of the company shall be limited to the repayment, to the purchaser (submitter), of the individual analysis price paid by him/her to LuminUltra Technologies Inc. The company shall not be liable for any damages, either direct or consequential. LuminUltra Technologies Inc provides analytical services on a PRIME CONTRACT BASIS ONLY. Terms are available upon request. The sample(s) cited in this report may be used for research purposes after an archiving period of 3 months from the date of this report. Research includes, but is not limited to internal validation studies and peer-reviewed research publications. Anonymity of the sample(s), including the exact geographic location will be maintained by assigning an arbitrary internal reference. These anonymous samples will only be grouped by state / province of origin for research purposes. The client must contact LuminUltra Technologies Inc in writing within 10 days from the date of this report if he/she does not wish for their submitted sample(s) to be used for any type of future research.

DNA Analytical Method Explanation

Water Samples: Each submitted water sample is filtered through 0.45 micron membrane filter(s). Each filter is placed in a separate, sterile 2ml disposable tube containing a unique mix of beads and lysis buffer. The sample is homogenized for and the DNA extracted per kit manufacturer's protocol. Deviations to these procedures may occur at the client's request.

Non-Water Samples: Each non-water sample submitted by the client is processed as per internal laboratory extraction procedures. An extracted DNA sample is proceed directly to PCR analysis. Details available upon request.

Amplifications to detect the target gene biomarker were run in a final reaction volume of 20ul sample extract, forward primer, reverse primer, probe and an optimized buffer. All assays are run in duplicate. Quantification is achieved by extrapolating target gene copy numbers from a standard curve generated from serial dilutions of known gene copy numbers.

For quality control purposes, a positive control and a negative control, were run alongside the sample(s) to ensure a properly functioning reaction and reveal any false negatives or false positives.

Chain Of Custody Record

LUMINULTRA®
microbial monitoring

LuminUltra Microbial Monitoring

15280 NW 79th Court, Suite 107

Miami Lakes, FL 33016

Tel: (1) 786 220 0379

Mark boxes with "X" for requested source. Please indicate the specific test (See Test Options - Tab B) or "no preference" in the comments

Company Name GHD Services
Contact Name(s) Connor Haydon
Send Results To connor.haydon@ghd.com
lori.coolidge@ghd.com
Phone 239 292 0341

andrew.wyatt@ghd.com

TAT: 10 Business Days

Sample ID for	Human (HF183)	Human (HumM2)	Dog	Cow	CowM2	CowM3	Pig	Chicken	Poultry	Geese	Gull	Bird	Horse	Ruminant	Beaver	Comments	Collection Date	Collection Time
CFM BILLY3	X															9/8/21		1205
Veronica Shoemaker 1	X															9/9/21		1105
CFM Cemetery	X															9/8/21		1155
RockFu	X															(CM) 9/8/21	9/9/21	1005
CFM Manuel	X															9/8/21	(CM) 9/9/21	1110
Manuel weiv	X															9/8/21		0830
manuel 2	X															9/8/21		1055

(CM) 9/9/21

Completed by Source Molecular:

Temperature 8.1°C Received/Filtered ✓
Thermometer 001 Signature Anushe
Date/Time 9/10/2021 10:35 AM BS008

Completed by Client:

Relinquished By Connor Haydon
Signature [Signature]
Date/Time 9/9/21 1500

To protect confidentiality, confirmation and results will only be sent to email address provided or authorized by contact provided. Signed form indicates agreement with the test limitations on the back of this form and the company's terms of use found here: sourcemolecular.com/about-sourcemolecular/privacy_statement/.

ANALYTICAL REPORT

Eurofins TestAmerica, Tampa
6712 Benjamin Road
Suite 100
Tampa, FL 33634
Tel: (813)885-7427

Laboratory Job ID: 660-113640-1

Client Project/Site: Acetaminophen in Surface Water

For:

GHD Services Inc.-HSA
3380 Fairlane Farms Road, Suite 12
Wellington, Florida 33414

Attn: Mr. Tom Emenhiser



Authorized for release by:
10/18/2021 3:26:23 PM

Matt Jones, Project Manager I
(850)284-4486
matthew.jones@eurofinset.com

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results through
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Isotope Dilution Summary	20



Sample Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-113640-1	CFM BILLY 3	Water	09/08/21 12:05	09/10/21 08:40
660-113640-2	veronica shoemaker	Water	09/08/21 11:05	09/10/21 08:40
660-113640-3	CFM CEMETERY	Water	09/08/21 11:55	09/10/21 08:40
660-113640-4	CFM manuel	Water	09/08/21 11:10	09/10/21 08:40
660-113640-5	manuel weir	Water	09/08/21 08:30	09/10/21 08:40
660-113640-6	manuel 2	Water	09/08/21 10:55	09/10/21 08:40

Case Narrative

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Job ID: 660-113640-1

Laboratory: Eurofins TestAmerica, Tampa

Narrative

Job Narrative
660-113640-1

Comments

No additional comments.

Receipt

The samples were received on 9/10/2021 8:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.4° C.

LCMS

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Qualifiers

LCMS

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Client Sample ID: CFM BILLY 3

Lab Sample ID: 660-113640-1

No Detections.

Client Sample ID: veronica shoemaker

Lab Sample ID: 660-113640-2

No Detections.

Client Sample ID: CFM CEMETERY

Lab Sample ID: 660-113640-3

No Detections.

Client Sample ID: CFM manuel

Lab Sample ID: 660-113640-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetaminophen	0.0055		0.0048	0.0048	ug/L	1		L220	Total/NA

Client Sample ID: manuel weir

Lab Sample ID: 660-113640-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetaminophen	0.0079		0.0049	0.0049	ug/L	1		L220	Total/NA

Client Sample ID: manuel 2

Lab Sample ID: 660-113640-6

No Detections.

Client Sample Results

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Client Sample ID: CFM BILLY 3

Lab Sample ID: 660-113640-1

Date Collected: 09/08/21 12:05

Matrix: Water

Date Received: 09/10/21 08:40

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0049	U	0.0049	0.0049	ug/L		09/14/21 07:53	09/16/21 23:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Acetaminophen-d4	33		50 - 150				09/14/21 07:53	09/16/21 23:33	1

Client Sample ID: veronica shoemaker

Lab Sample ID: 660-113640-2

Date Collected: 09/08/21 11:05

Matrix: Water

Date Received: 09/10/21 08:40

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0049	U	0.0049	0.0049	ug/L		09/14/21 07:53	09/17/21 00:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Acetaminophen-d4	29		50 - 150				09/14/21 07:53	09/17/21 00:13	1

Client Sample ID: CFM CEMETERY

Lab Sample ID: 660-113640-3

Date Collected: 09/08/21 11:55

Matrix: Water

Date Received: 09/10/21 08:40

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0049	U	0.0049	0.0049	ug/L		09/14/21 07:53	09/17/21 00:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Acetaminophen-d4	32		50 - 150				09/14/21 07:53	09/17/21 00:54	1

Client Sample ID: CFM manuel

Lab Sample ID: 660-113640-4

Date Collected: 09/08/21 11:10

Matrix: Water

Date Received: 09/10/21 08:40

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0055		0.0048	0.0048	ug/L		09/14/21 07:53	09/17/21 01:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Acetaminophen-d4	41		50 - 150				09/14/21 07:53	09/17/21 01:35	1

Client Sample ID: manuel weir

Lab Sample ID: 660-113640-5

Date Collected: 09/08/21 08:30

Matrix: Water

Date Received: 09/10/21 08:40

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0079		0.0049	0.0049	ug/L		09/14/21 07:53	09/17/21 02:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Acetaminophen-d4	27		50 - 150				09/14/21 07:53	09/17/21 02:16	1

Client Sample ID: manuel 2

Lab Sample ID: 660-113640-6

Date Collected: 09/08/21 10:55

Matrix: Water

Date Received: 09/10/21 08:40

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0049	U	0.0049	0.0049	ug/L		09/14/21 07:53	09/17/21 02:57	1

Eurofins TestAmerica, Tampa

Client Sample Results

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Client Sample ID: manuel 2

Lab Sample ID: 660-113640-6

Date Collected: 09/08/21 10:55

Matrix: Water

Date Received: 09/10/21 08:40

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Acetaminophen-d4	31		50 - 150	09/14/21 07:53	09/17/21 02:57	1

QC Sample Results

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

Lab Sample ID: MB 810-3121/1-A
Matrix: Water
Analysis Batch: 3356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3121

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetaminophen	0.0049	U	0.0049	0.0049	ug/L		09/14/21 07:53	09/16/21 22:52	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Acetaminophen-d4	44		50 - 150				09/14/21 07:53	09/16/21 22:52	1

Lab Sample ID: LCS 810-3121/2-A
Matrix: Water
Analysis Batch: 3356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetaminophen	0.0981	0.0997		ug/L		102	70 - 130
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
Acetaminophen-d4	42		50 - 150				

QC Association Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

LCMS

Prep Batch: 3121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-113640-1	CFM BILLY 3	Total/NA	Water	L220	
660-113640-2	veronica shoemaker	Total/NA	Water	L220	
660-113640-3	CFM CEMETERY	Total/NA	Water	L220	
660-113640-4	CFM manuel	Total/NA	Water	L220	
660-113640-5	manuel weir	Total/NA	Water	L220	
660-113640-6	manuel 2	Total/NA	Water	L220	
MB 810-3121/1-A	Method Blank	Total/NA	Water	L220	
LCS 810-3121/2-A	Lab Control Sample	Total/NA	Water	L220	

Analysis Batch: 3356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-113640-1	CFM BILLY 3	Total/NA	Water	L220	3121
660-113640-2	veronica shoemaker	Total/NA	Water	L220	3121
660-113640-3	CFM CEMETERY	Total/NA	Water	L220	3121
660-113640-4	CFM manuel	Total/NA	Water	L220	3121
660-113640-5	manuel weir	Total/NA	Water	L220	3121
660-113640-6	manuel 2	Total/NA	Water	L220	3121
MB 810-3121/1-A	Method Blank	Total/NA	Water	L220	3121
LCS 810-3121/2-A	Lab Control Sample	Total/NA	Water	L220	3121

Lab Chronicle

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Client Sample ID: CFM BILLY 3

Lab Sample ID: 660-113640-1

Date Collected: 09/08/21 12:05

Matrix: Water

Date Received: 09/10/21 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	L220			3121	09/14/21 07:53	SC	EA SB
Total/NA	Analysis	L220		1	3356	09/16/21 23:33	CM	EA SB

Client Sample ID: veronica shoemaker

Lab Sample ID: 660-113640-2

Date Collected: 09/08/21 11:05

Matrix: Water

Date Received: 09/10/21 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	L220			3121	09/14/21 07:53	SC	EA SB
Total/NA	Analysis	L220		1	3356	09/17/21 00:13	CM	EA SB

Client Sample ID: CFM CEMETERY

Lab Sample ID: 660-113640-3

Date Collected: 09/08/21 11:55

Matrix: Water

Date Received: 09/10/21 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	L220			3121	09/14/21 07:53	SC	EA SB
Total/NA	Analysis	L220		1	3356	09/17/21 00:54	CM	EA SB

Client Sample ID: CFM manuel

Lab Sample ID: 660-113640-4

Date Collected: 09/08/21 11:10

Matrix: Water

Date Received: 09/10/21 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	L220			3121	09/14/21 07:53	SC	EA SB
Total/NA	Analysis	L220		1	3356	09/17/21 01:35	CM	EA SB

Client Sample ID: manuel weir

Lab Sample ID: 660-113640-5

Date Collected: 09/08/21 08:30

Matrix: Water

Date Received: 09/10/21 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	L220			3121	09/14/21 07:53	SC	EA SB
Total/NA	Analysis	L220		1	3356	09/17/21 02:16	CM	EA SB

Client Sample ID: manuel 2

Lab Sample ID: 660-113640-6

Date Collected: 09/08/21 10:55

Matrix: Water

Date Received: 09/10/21 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	L220			3121	09/14/21 07:53	SC	EA SB
Total/NA	Analysis	L220		1	3356	09/17/21 02:57	CM	EA SB

Laboratory References:

EA SB = Eurofins Eaton Analytical - South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Eurofins TestAmerica, Tampa

Method Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Method	Method Description	Protocol	Laboratory
L220	Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)	Lab SOP	EA SB
L220	Solid-Phase Extraction (SPE)	Lab SOP	EA SB

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

EA SB = Eurofins Eaton Analytical - South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Laboratory: Eurofins Eaton Analytical - South Bend

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	ISO/IEC 17025	5794.01	07-31-22
Alabama	State	40700	06-30-22
Alaska	State	IN00035	06-30-22
Arizona	State	AZ0432	07-26-22
Arkansas (DW)	State	EPA IN00035	06-30-22
California	State	2920	06-30-22
Colorado	State	IN00035	02-28-22
Connecticut	State	PH-0132	03-31-22
Delaware (DW)	State	IN00035	06-30-22
Florida	NELAP	E87775	06-30-22
Georgia (DW)	State	929	06-30-22
Hawaii	State	IN035	06-30-22
Idaho (DW)	State	IN00035	12-31-21
IL Dept. of Public Health (Micro)	State	17767	06-30-22
Illinois	NELAP	200001	09-30-22
Indiana	State	C-71-01	12-31-22
Indiana (Micro)	State	M-76-07	12-31-22
Iowa	State	IA Lab #098	11-01-21
Kansas	NELAP	E-10233	10-31-21
Kentucky (DW)	State	KY90056	12-31-21
Louisiana (DW)	State	LA180008	12-31-21
Maine	State	IN00035	05-01-23
Maryland	State	209	03-31-22
Massachusetts	State	M-IN035	06-30-22
MI - RadChem Recognition	State	9926	06-30-22
Michigan	State	9926	03-22-22
Minnesota	NELAP	1989807	12-31-21
Mississippi	State	IN00035	06-30-22
Missouri	State	880	09-30-24
Montana (DW)	State	CERT0026	01-01-22
Nebraska	State	NE-OS-05-04	06-30-22
Nevada	State	IN000352021-1	08-01-22
New Hampshire	NELAP	2124	11-05-21
New Jersey	NELAP	IN598	06-30-22
New Mexico	State	IN00035	06-30-22
New York	NELAP	11398	04-01-22
North Carolina (DW)	State	18700	07-31-22
North Dakota	State	R-035	06-30-22
Ohio	State	87775	06-30-22
Oklahoma	NELAP	D9508	08-31-22
Oregon	NELAP	4156	09-16-22
Pennsylvania	NELAP	68-00466	04-30-22
Puerto Rico	State	IN00035	04-02-22
Rhode Island	State	LAO0034	12-31-21
South Carolina	State	95005001	06-30-21 *
South Dakota (DW)	State	IN00035	12-31-22
Tennessee	State	TN02973	06-30-22
Texas	NELAP	T104704187-20-4	12-31-21
Texas	TCEQ Water Supply	TX207	06-30-22
USEPA Reg X SDWA	US Federal Programs	IN00035	08-20-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Tampa

Accreditation/Certification Summary

Client: GHD Services Inc.-HSA

Job ID: 660-113640-1

Project/Site: Acetaminophen in Surface Water

Laboratory: Eurofins Eaton Analytical - South Bend (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Utah	NELAP	IN000352020-13	07-31-21 *
Vermont	State	VT-8775	11-15-21
Virginia	NELAP	460275	03-14-22
Washington	State	C837	01-01-22
West Virginia (DW)	State	9927 C	12-31-21
Wisconsin	State	999766900	08-31-22
Wisconsin (Micro)	State	10121	12-31-21
Wyoming	State	8TMS-L	08-23-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Tampa

Chain of Custody Record

[illegible]



Environment Testing America

Phone: 813-885-7427 Fax: 813-885-7049		Sampler:		Lab PM: Jones, Matt		Carrier Tracking No(s):		COC No: 660-132221.1	
Client Information (Sub Contract Lab)		Phone:		E-Mail: matthew.jones@eurofinset.com		State of Origin: Florida		Page: Page 1 of 1	
Company: Eurofins Eaton Analytical				Accreditations Required (See note):				Job #: 660-113640-1	
Address: 110 S Hill Street,		Due Date Requested: 9/20/2021		Analysis Requested				Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
City: South Bend		TAT Requested (days):							
State, Zip: IN, 46617		PO #:		Total Number of containers				Other:	
Phone: 574-233-4777(Tel) 574-233-8207(Fax)		WO #:							
Email:		Project #: 66016303		Samples are preserved ppw 09/11/21				Special Instructions/Note:	
Project Name: Acetaminophen in Surface Water		SSOW#:							
Site:									
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	
CFM BILLY 3 (660-113640-1)		9/8/21		12:05 Eastern		Water			
veronica shoemaker (660-113640-2)		9/8/21		11:05 Eastern		Water		1	
CFM CEMETERY (660-113640-3)		9/8/21		11:55 Eastern		Water		1	
CFM manuel (660-113640-4)		9/8/21		11:10 Eastern		Water		1	
manuel weir (660-113640-5)		9/8/21		08:30 Eastern		Water		1	
manuel 2 (660-113640-6)		9/8/21		10:55 Eastern		Water		1	
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.									
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Unconfirmed						☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)						Primary Deliverable Rank: 2			
Special Instructions/QC Requirements:									
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:	
Relinquished by: <i>AT Reel</i>				Date/Time: 9-10-21 @ 1700		Company: EEA		Received by: <i>Penny Pohlkamp Wright</i>	
Relinquished by:				Date/Time:		Company:		Date/Time: 09/10/21 1020	
Relinquished by:				Date/Time:		Company:		Date/Time:	
Custody Seals Intact:		Custody Seal No.: <i>Strapping intact</i>		Cooler Temperature(s) °C and Other Remarks: <i>0.4 Wet</i>					
Δ Yes Δ No				Client Provided Sample Container					

Ver: 06/08/2021 10/18/2021

Login Sample Receipt Checklist

Client: GHD Services Inc.-HSA

Job Number: 660-113640-1

Login Number: 113640

List Source: Eurofins TestAmerica, Tampa

List Number: 1

Creator: Hornbrook, Zachary

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GHD Services Inc.-HSA

Job Number: 660-113640-1

Login Number: 113640

List Source: Eurofins Eaton Analytical - South Bend

List Number: 2

List Creation: 09/13/21 12:33 PM

Creator: Pehling-Wright, Penny

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Isotope Dilution Summary

Client: GHD Services Inc.-HSA
Project/Site: Acetaminophen in Surface Water

Job ID: 660-113640-1

Method: L220 - Screening Analysis of Pharmaceutically Active Compounds (Positive ESI/LC/MS/MS)

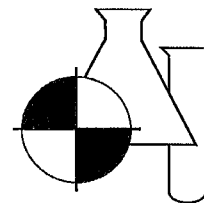
Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	taminophe (50-150)
660-113640-1	CFM BILLY 3	33
660-113640-2	veronica shoemaker	29
660-113640-3	CFM CEMETERY	32
660-113640-4	CFM manuel	41
660-113640-5	manuel weir	27
660-113640-6	manuel 2	31
LCS 810-3121/2-A	Lab Control Sample	42
MB 810-3121/1-A	Method Blank	44
Surrogate Legend		
Acetaminophen-d4 = Acetaminophen-d4		

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 21100598

G H D Services, Inc.
2675 Winkler Ave., Ste.180
Fort Myers, FL 33901

Project Name : CFM - FIB
Date Received : 10/12/2021
Time Received : 1437

Submission Number: 21100598 Sample Date: 10/12/2021
Sample Number: 001 Sample Time: 1200
Sample Description: HE Soil -1 Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL SOLIDS	80.4	% DRY WT	0.1	SM2540G	10/15/2021 14:20	PG
FECAL COLIFORM BY MPN	199 Z	#/GRAM	0.224	SM9221E	10/13/2021 09:15	LG

All values reported in UG/KG, MG/KG #/GRAM and MPN/GRAM are on a dry weight basis

Submission Number: 21100598 Sample Date: 10/12/2021
Sample Number: 002 Sample Time: 1205
Sample Description: HE Soil -2 Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL SOLIDS	87.5	% DRY WT	0.1	SM2540G	10/15/2021 14:20	PG
FECAL COLIFORM BY MPN	183	#/GRAM	0.206	SM9221E	10/13/2021 09:15	LG

All values reported in UG/KG, MG/KG #/GRAM and MPN/GRAM are on a dry weight basis

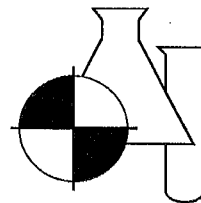
Submission Number: 21100598 Sample Date: 10/12/2021
Sample Number: 003 Sample Time: 1210
Sample Description: HE Soil -3 Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL SOLIDS	81.6	% DRY WT	0.1	SM2540G	10/15/2021 14:20	PG
FECAL COLIFORM BY MPN	196 Z	#/GRAM	0.221	SM9221E	10/13/2021 09:15	LG

All values reported in UG/KG, MG/KG #/GRAM and MPN/GRAM are on a dry weight basis

BENCHMARK

EnviroAnalytical Inc.



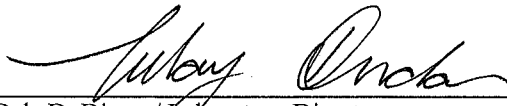
NELAC Certification #E84167

Submission Number: 21100598
Sample Number: 004
Sample Description: HE Soil -4

Sample Date: 10/12/2021
Sample Time: 1215
Sample Method: Grab

Parameter	Result	Units	MDL	Procedure	Analysis Date/Time	Analyst
TOTAL SOLIDS	87.9	% DRY WT	0.1	SM2540G	10/15/2021 14:20	PG
FECAL COLIFORM BY MPN	27.3	#/GRAM	0.205	SM9221E	10/13/2021 09:15	LG

All values reported in UG/KG, MG/KG #/GRAM and MPN/GRAM are on a dry weight basis


Dale D. Dixon / Laboratory Director

10/19/2021

Date

Tülay Tanrisever - Technical Director/QC Officer

Kara Peterson - QA Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.
J2 = Estimated value. No control criteria exists for this component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
L = Off-scale high. Value is known to be > the value reported.
Q = Sample held beyond accepted hold time.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES:

2: SOUR calculations are based on Total Solids.
PQL = 4xMDL.

COMMENTS:

For questions and comments regarding these results, please contact us at (941) 723-9986.
Results relate only to the samples.

Benchmark EA South
1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7

Benchmark EA, Inc.
1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #RAYL000570277

Client:

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Reports: Sheri Finn (Sheri.Finn@ghd.com); Andrew Wyatt (Andrew.Wyatt@ghd.com);
David Hempleman (David.Hempleman@ghd.com)

Kit Shipped to client via UPS Standard in cooler

Chain of Custody Form: CFM - FIB

Project Number: 11135752

Laboratory Submission #:

2100598

Station ID	Sample Type ¹	Sample Matrix ²	Fecal Coliform (MPN) (SM9221E)	Laboratory Submission #
			NaThio	
			1 x 100mL Sterile Plastic	
HE Soil -1	Grab	Soil	10/12/21 1200	1
HE Soil -2	Grab	Soil	1205	2
HE Soil -3	Grab	Soil	1210	3
HE Soil -4	Grab	Soil	1215	4

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).

3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).

4. Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).

Under "Preservative," list any preservatives that were added to the sample container.

Instructions:

1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

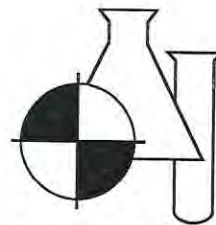
Laboratory Sample Acceptability: pH < 2.0

BEAS Temperature:

BEA Temperature: 3.5°C

1	Collector: Andrew Wyatt	Date & Time: 10/12/21 1328	2	Received By: Sheri Finn	Date & Time: 10/12/21 1437
3	Relinquished By:	Date & Time:	4	Received By:	Date & Time:
5	Relinquished By:	Date & Time:	6	Received By:	Date & Time:
7	Relinquished By:	Date & Time:	8	Received By:	Date & Time:

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

**Submission
Number :**

S21100366

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CFM-FIB

Date Received : 10/12/2021

Time Received : 13:28

Submission: S21100366

Sample Number: 001

Sample Date: 10/12/2021

Sample Time: 09:20

Sample Description: Manuel Weir

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	3044	#/100 ML	10	10	SM9223B	10/12/2021	14:19	KH

Submission: S21100366

Sample Number: 002

Sample Date: 10/12/2021

Sample Time: 09:35

Sample Description: Hospital West

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	2282	#/100 ML	10	10	SM9223B	10/12/2021	14:19	KH

Submission: S21100366

Sample Number: 003

Sample Date: 10/12/2021

Sample Time: 09:45

Sample Description: Trailer Park Point

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	1334	#/100 ML	10	10	SM9223B	10/12/2021	14:19	KH

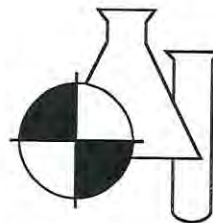
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21100366

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ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100366

Sample Number: 004

Sample Date: 10/12/2021

Sample Time: 09:55

Sample Description: Hospital East

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	1576	#/100 ML	10	10	SM9223B	10/12/2021	14:19	KH

Submission: S21100366

Sample Number: 005

Sample Date: 10/12/2021

Sample Time: 10:10

Sample Description: Heritage Park

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	759	#/100 ML	10	10	SM9223B	10/12/2021	14:19	KH

Submission: S21100366

Sample Number: 006

Sample Date: 10/12/2021

Sample Time: 10:30

Sample Description: Manuel-2

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	269	#/100 ML	10	10	SM9223B	10/12/2021	14:19	KH

Submission: S21100366

Sample Number: 007

Sample Date: 10/12/2021

Sample Time: 10:45

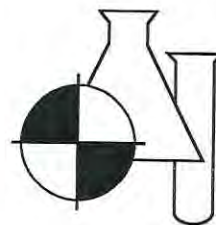
Sample Description: Manuel-2 Divot

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	488	#/100 ML	10	10	SM9223B	10/12/2021	15:12	KH

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100366

Sample Number: 008

Sample Date: 10/12/2021

Sample Time: 10:55

Sample Description: Manuel-2A

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	471	#/100 ML	10	10	SM9223B	10/12/2021	15:12	KH

Submission: S21100366

Sample Number: 009

Sample Date: 10/12/2021

Sample Time: 11:05

Sample Description: Manuel-2B

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	233	#/100 ML	10	10	SM9223B	10/12/2021	15:12	KH

Submission: S21100366

Sample Number: 010

Sample Date: 10/12/2021

Sample Time: 11:15

Sample Description: Manuel-2C

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	110	#/100 ML	10	10	SM9223B	10/12/2021	15:12	KH

Submission: S21100366

Sample Number: 011

Sample Date: 10/12/2021

Sample Time: 11:25

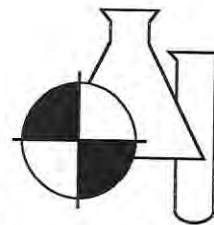
Sample Description: Manuel-3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	98	#/100 ML	10	10	SM9223B	10/12/2021	15:12	KH

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ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100366

Sample Number: 012

Sample Description: Dup-2

Sample Date: 10/12/2021

Sample Method: Grab

Sample Time: 11:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date	Analysis Time	Analyst
E-COLI BY IDEXX QUANTITRAY	134	#/100 ML	10	10	SM9223B	10/12/2021	15:12	KH

Melinda Merchant

10/15/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant / Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

- A = Value reported is an average of two or more determinations.
- B = Results based upon colony counts outside the ideal range.
- H = Value based on field kit determination. Results may not be accurate.
- I = Reported value is between the laboratory MDL and the PQL.
- J1 = Est. value surrogate recovery limits exceeded.
- J2 = Est. value. No quality control criteria exists for component.
- J3 = Est. value quality control criteria for precision or accuracy not met.
- J4 = Est. value. Sample matrix interference suspected.
- J5 = Est. value. Data questionable due to improper lab or field protocols
- K = Off-scale low. Value is known to be < the value reported.
- L = Off-scale high. Value is known to be > the value reported

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

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standard report

21100366

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Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061 -fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAY1000570277

Client:

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave, Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)

David Hempleman (David.Hempleman@ghd.com)

Kit Shipped to client via UPS Standard in cooler

Chain of Custody Form: CFM - FIB
Project Number: 11135752

Laboratory Submission #:

521100366

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)			Laboratory Submission #
			NaThio			
			1 x 100mL Sterile Plastic			
			Date/Time:			
	Grab	SW	Date/Time:	10/12/21	0920	1
Manuel Weir	Grab	SW	Date/Time:		0935	2
Hospital West	Grab	SW	Date/Time:		0945	3
Trailer Park Point	Grab	SW	Date/Time:		0955	4
Hospital East	Grab	SW	Date/Time:		1010	5
Heritage Park	Grab	SW	Date/Time:		1030	6
Manuel -2	Grab	SW	Date/Time:		1045	7
Manuel -2 Divot	Grab	SW	Date/Time:		1055	8
Manuel -2A	Grab	SW	Date/Time:			

¹Sample Type¹ is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

¹ "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

² "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SD/MNT), or sludge (SLDG).

³ "Container Type" is used to indicate whether the container is plastic (P) or glass (G). Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).

⁴ Under "Preservative," list any preservatives that were added to the sample container.

Instructions:

1. Each bottle has a label identifying sample ID, preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

1	Collector:	Andrew Wyatt	Old Shirts	Date & Time:	10/12/21	1328	2	Received By:	Michelle Muehnt	Date & Time:	10/13/21	1328
3	Relinquished By:			Date & Time:			4	Received By:		Date & Time:		
5	Relinquished By:			Date & Time:			6	Received By:		Date & Time:		
7	Relinquished By:			Date & Time:			8	Received By:		Date & Time:		

Laboratory Sample Acceptability: pH < 2.0

BEAS Temperature: 5.3°C

BEA Temperature:

1062

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Benchmark EA South

1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.

1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAYL000570277

Client:

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819

Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)
David Hempleman (David.Hempleman@ghd.com)

242

Kit Shipped to client via UPS Standard in cooler

page 6 of 6

Chain of Custody Form: CFM - FIB
Project Number: 11135752

Laboratory Submission #:

581160366

Station ID	Sample Type ¹	Sample Matrix ²	Laboratory Submission #	
			E. coli (SM9223B-QT)	Laboratory Submission #
			NaThio	
			1 x 100mL Sterile Plastic	
Manuel - 2B	Grab	SW	Date/Time: 10/12/21	1105
Manuel - 2C	Grab	SW	Date/Time: 1115	10
Manuel - 3	Grab	SW	Date/Time: 1125	11
DUP - 2	Grab	SW	Date/Time: 1100	12
HE Soil - 1	Grab	SW Soil	Date/Time: 1200	1200 (E. coli / Total) on a separate
HE Soil - 2	Grab	SW Soil	Date/Time: 1205	1205
HE Soil - 3	Grab	SW Soil	Date/Time: 1210	1210
HE Soil - 4	Grab	SW Soil	Date/Time: 1215	1215

1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.

2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.

3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.

4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Instructions:

"Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

"Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).

"Container Type" is used to indicate whether the container is plastic (P) or glass (G).

Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).

Under "Preservative," list any preservatives that were added to the sample container.

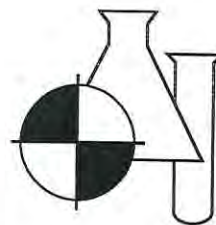
Laboratory Sample Acceptability: pH < 2 : ☐

BEAS Temperature: ☐

BEA Temperature: ☐

1	Collector:	Date & Time:	2	Received By:	Date & Time:
1	Andrew Wyatt	10/12/21	2	Michelle Munchaut	10/12/21
3	Relinquished By:	Date & Time:	4	Received By:	Date & Time:
5	Relinquished By:	Date & Time:	6	Received By:	Date & Time:
7	Relinquished By:	Date & Time:	8	Received By:	Date & Time:

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission
Number :

S21100424

G H D Services, Inc
2675 Winkler Ave. Suite 180
Fort Myers, FL 33901

Project Name : CFM - FIB

Date Received : 10/13/2021

Time Received : 13:32

Submission: S21100424

Sample Number: 001

Sample Date: 10/13/2021

Sample Time: 09:10

Sample Description: 1st Street

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	20	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

Submission: S21100424

Sample Number: 002

Sample Date: 10/13/2021

Sample Time: 09:20

Sample Description: Seaboard

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	158	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

Submission: S21100424

Sample Number: 003

Sample Date: 10/13/2021

Sample Time: 09:30

Sample Description: King Street

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	379	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

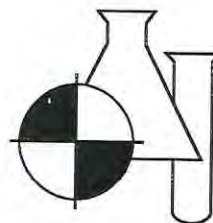
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standard report

21100424

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100424

Sample Number: 004

Sample Date: 10/13/2021

Sample Time: 09:45

Sample Description: Shoemaker Bridge

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	327	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

Submission: S21100424

Sample Number: 005

Sample Date: 10/13/2021

Sample Time: 10:05

Sample Description: Veronica Shoemaker - 1

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	96	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

Submission: S21100424

Sample Number: 006

Sample Date: 10/13/2021

Sample Time: 10:10

Sample Description: Veronica Shoemaker - 2

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	169	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

Submission: S21100424

Sample Number: 007

Sample Date: 10/13/2021

Sample Time: 10:25

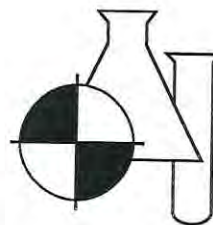
Sample Description: Veronica Shoemaker - 3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	75	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100424

Sample Number: 008

Sample Date: 10/13/2021

Sample Time: 10:35

Sample Description: Veronica Shoemaker - 4

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	20	#/100 ML	10	10	SM9223B	10/13/2021	14:32	LG

Submission: S21100424

Sample Number: 009

Sample Date: 10/13/2021

Sample Time: 10:55

Sample Description: Marsh

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	135	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

Submission: S21100424

Sample Number: 010

Sample Date: 10/13/2021

Sample Time: 11:05

Sample Description: Ballard - 1

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	41	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

Submission: S21100424

Sample Number: 011

Sample Date: 10/13/2021

Sample Time: 11:15

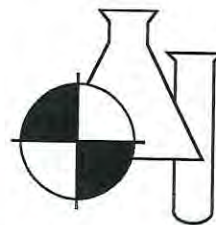
Sample Description: Zapato - 2

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	31	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100424

Sample Number: 012

Sample Date: 10/13/2021

Sample Time: 11:25

Sample Description: Zapato - 3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	52	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

Submission: S21100424

Sample Number: 013

Sample Date: 10/13/2021

Sample Time: 11:35

Sample Description: Rockfill

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	20	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

Submission: S21100424

Sample Number: 014

Sample Date: 10/13/2021

Sample Time: 11:50

Sample Description: Ford Street - 2

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	402	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

Submission: S21100424

Sample Number: 015

Sample Date: 10/13/2021

Sample Time: 12:05

Sample Description: Ford Street - 3

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis		Analyst
						Date	Time	
E- COLI BY IDEXX QUANTITRAY	318	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

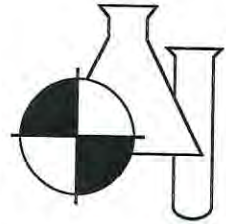
1001 Corporate Ave, Suite 102 North Port, FL 34289 Phone: (941) 625-3137 Fax: (941) 240-3071

standard report

21100424

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BENCHMARK EA SOUTH



ANALYTICAL TEST REPORT

NELAC Certification #E85086

THESE RESULTS MEET NELAC STANDARDS

Submission: S21100424

Sample Number: 016

Sample Description: DUP - 3

Sample Date: 10/13/2021

Sample Method: Grab

Sample Time: 12:00

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date	Time	Analyst
E- COLI BY IDEXX QUANTITRAY	30	#/100 ML	10	10	SM9223B	10/13/2021	15:07	LG

Melinda Merchant

10/15/2021

Dale D. Dixon / Laboratory Director

Date

Melinda Merchant/ Laboratory Manager

DATA QUALIFIERS THAT MAY APPLY:

- A = Value reported is an average of two or more determinations.
- B = Results based upon colony counts outside the ideal range.
- H = Value based on field kit determination. Results may not be accurate.
- I = Reported value is between the laboratory MDL and the PQL.
- J1 = Est. value surrogate recovery limits exceeded.
- J2 = Est. value. No quality control criteria exists for component.
- J3 = Est. value quality control criteria for precision or accuracy not met.
- J4 = Est. value. Sample matrix interference suspected.
- J5 = Est. value. Data questionable due to improper lab or field protocols.
- K = Off-scale low. Value is known to be < the value reported.
- L = Off-scale high. Value is known to be > the value reported.

PQL = 4xMDL. Except for Micro PQL=MDL

X = Value exceed MCL.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time (15 minutes for pH).

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC); the numeric value represents the filtration volume.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

! = Data deviate from historically established concentration ranges.

* = Not reported due to interference.

COMMENTS:

For questions or comments regarding these results, please contact us at (941) 625-3137.

These results relate only to the samples included in this report.

GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819
Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)
David Hempleman (David.Hempleman@ghd.com)

5211201474

Station ID		Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)		Laboratory Submission #
				NaTrio		
				1 x 100mL Sterile Plastic		
	1st Street	Grab	SW	Date/Time: 10/13/21	0910	1
	Seaboard	Grab	SW	Date/Time:	0920	2
	King Street	Grab	SW	Date/Time:	0930	3
	Shoemaker Bridge	Grab	SW	Date/Time:	0945	4
	Veronica Shoemaker - 1	Grab	SW	Date/Time:	1005	5
	Veronica Shoemaker - 2	Grab	SW	Date/Time:	1010	6
	Veronica Shoemaker - 3	Grab	SW	Date/Time:	1025	7
	Veronica Shoemaker - 4	Grab	SW	Date/Time:	1035	8

Laboratory Sample Acceptability: pH < 2 : ☐

BEA Temperature: 3, 5 °C

BEA Temperature:

Page 6 of 7

Benchmark EA South
1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS
with Temperature Gun ID #7

Benchmark EA, Inc.
1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with
Temperature Gun ID #RAY1000570277

Client:

GHD Services, Inc. (GSA ENG)
2675 Winkler Ave, Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819
Reports: Sheri Finn (Sheri.Finn@ghd.com) ; Andrew Wyatt (Andrew.Wyatt@ghd.com)

Kit Shipped to client via UPS Standard in cooler

David Hempleman (David.Hempleman@ghd.com)

Chain of Custody Form: CFM - FIB
Project Number: 11135752

Laboratory Submission #:

521106424

Station ID	Sample Type ¹	Sample Matrix ²	E. coli (SM9223B-QT)			Laboratory Submission #
			NaThio			
			1 x 100mL Sterile Plastic			
			Date/Time:			
Marsh	Grab	SW	Date/Time:	10/13/21	1055	9
Ballinal -1	Grab	SW	Date/Time:		1105	10
Zapato -2	Grab	SW	Date/Time:		1115	11
Zapato -3	Grab	SW	Date/Time:		1125	12
Rockfill	Grab	SW	Date/Time:		1135	13
Ford Street -2	Grab	SW	Date/Time:		1150	14
Ford Street -3	Grab	SW	Date/Time:		1205	15
Old -3	Grab	SW	Date/Time:		1200	16

¹Sample Type¹ is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMN), or sludge (SLDG).
3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4. Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 4°C (42.8°F).

Laboratory Sample Acceptability: pH < 2 : ☐
BEAS Temperature: 3.5°C
BEA Temperature:

1 Collector: Ashton Wyatt, Cameron Hoffman	Date & Time: 10/13/21 1332	2 Received By: M. Hempleman	Date & Time: 10/13/21 1332
3 Relinquished By:	Date & Time:	4 Received By:	Date & Time:
5 Relinquished By:	Date & Time:	6 Received By:	Date & Time:
7 Relinquished By:	Date & Time:	8 Received By:	Date & Time:

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	First St
LOCATION:	upstream of bridge
DATE/TIME:	8/18/21 11:00
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	2 m (feet)	Sample Depth:	1.50 (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1100	1.50	7.64	3.64	47.6	27.3	435	2.52
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden

REMARKS: minor pollen / leaves floating on surface. man sleeping along concrete bank on the west side of bridge

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Seaboard</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>8/18/21</u> <u>1120</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>NM</u>	(feet)	Sample Depth:	<u>1.50</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	<u>Normal</u>	High	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1120</u>	<u>1.50</u>	<u>7.43</u>	<u>3.31</u>	<u>42.5</u>	<u>28.0</u>	<u>393</u>	<u>4.31</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden

REMARKS: minor pollen and leaves seen floating in water, slow moving flow. minor debris seen

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

CFM FSP

LOCATION:

upstream of bridge

DATE/TIME:

8/18/21 11:30

ALL TIMES ARE:

(ETZ) or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: 2.1 m (feet)
(Average of 2 measurements)

Sample Depth: 1.50 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper

Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1130	1.50	7.45	3.31	42.7	29.5	473	2.45
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

N/A

Samples immediately placed on ice?

(Yes) No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE:

Connor Hayden

REMARKS:

*water very slow moving, almost no flow. Strong vegetation around sample area. plants growing in water under surface

SURFACE WATER FIELD SHEET
Station Information

STATION ID: LFM CEMETERY

LOCATION: upstream of bridge

DATE/TIME: 8/18/21 1150

ALL TIMES ARE: (ETZ) or CTZ
(circle one)

WATERBODY TYPE: (Circle One) Small Lake (>4 and <10HA)
(collect samples in middle of open water) Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area) Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet) Sample Depth: 1.50 (feet)
(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1150</u>	<u>1.50</u>	<u>7.47</u>	<u>4.41</u>	<u>57.9</u>	<u>29.5</u>	<u>469</u>	<u>2.86</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden

REMARKS: knowing noted right near canal, minor ~~veg~~ lily pad growth seen in canal, small patches of thin film seen on water surface

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Zapato 3

LOCATION:

downstream of bridge

DATE/TIME:

8/18/21 1205

ALL TIMES ARE:

ETZ or

CTZ

(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream

(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:

n/m

(feet)

Sample Depth:

1.50

(feet)

(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with
Sample Bottle

Dipper

Other

Field Measurements

Meter ID#

**Field Measurements
Read By: (initials)**

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1205</u>	<u>1.50</u>	<u>7.34</u>	<u>2.87</u>	<u>37.5</u>	<u>28.3</u>	<u>523</u>	<u>5.56</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE:

Bonnie Hayden

REMARKS:

standing water. slightly greenish/gray color, slow flow downstream of bridge. large snails seen just under water's surface

Benchmark EA South
1001 Corporate Avenue, Suite 102
North Port, FL 34289
(941) 625-3137 / (800) 736-9986
(941) 423-7336 fax
Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7

Benchmark EA, Inc.
1711 12th St. East
Palmetto, FL 34221
(941) 723-9986 / (800) 736-9986
(941) 723-6061-fax
Sample Temperature checked upon receipt at BEA with Temperature Gun ID #RAYL000570277

Client: GHD Services, Inc. (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers, FL 33901
Andrew Wyatt
Fax: 239-936-0819
Reports: Sheri Finn (Sheri.Finn@ghd.com); Andrew Wyatt (Andrew.Wyatt@ghd.com);
David Hempleman (David.Hempleman@ghd.com)

Kit Shipped to client via UPS Standard in cooler

Chain of Custody Form: *City of Fort Myers*
Project Number: *11135752*

Laboratory Submission #:

521080480

Station ID	Sample Type ¹	Sample Matrix ²	Date/Time:	E. coli (SM9223B-QT)	Laboratory Submission #
<i>First Street</i>	Grab	SW	<i>8/18/21 1100</i>		<i>1</i>
<i>Seaboard</i>	Grab	SW	<i>1120</i>		<i>2</i>
<i>CFM FSP</i>	Grab	SW	<i>1130</i>		<i>3</i>
<i>CFM cemetery</i>	Grab	SW	<i>1130</i>		<i>4</i>
<i>Zapata 3</i>	Grab	SW	<i>1205</i>		<i>5</i>
	Grab	SW			
	Grab	SW			
	Grab	SW			

NaThio
1 x 100mL Sterile Plastic

Laboratory Sample Acceptability: pH < 2 : ☐
BEAS Temperature: *4.4°C*
BEA Temperature:

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediment (SDMNT), or sludge (SLDG).
3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4. Sample must be refrigerated or stored in wet ice after collection. The maximum temperature during storage should be 6°C (42.8°F).
Under "Preservative", list any preservatives that were added to the sample container.
Instructions:
1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be reused with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

1 Collector: <i>C. Apple</i>	Date & Time: <i>8/18/21 1317</i>	2 Received By: <i>M. Mulmudy</i>	Date & Time: <i>8/18/21 1317</i>
3 Relinquished By:	Date & Time:	4 Received By:	Date & Time:
5 Relinquished By:	Date & Time:	6 Received By:	Date & Time:
7 Relinquished By:	Date & Time:	8 Received By:	Date & Time:

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Manuel Weir

LOCATION: Downstream of Weir

DATE/TIME: 03/10/21 0905

ALL TIMES ARE: ETZ or CTZ
(circle one)

WATERBODY TYPE: (Circle One) Small Lake (>4 and <10HA)
(collect samples in middle of open water) Large Lake (>10HA)
(collect samples at selected location point)

Small Stream Large River
(collect samples in representative area) (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: 11m (feet) Sample Depth: 1.5 (feet)
(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0905</u>	<u>1.5</u>	<u>7.58</u>	<u>3.55</u>	<u>45.0</u>	<u>27.4</u>	<u>764</u>	<u>1.23</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Haydon

REMARKS: Small amount of trash on bank

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Hospital West</u>
LOCATION:	<u>From Bank Behind Hospital Dumpster</u>
DATE/TIME:	<u>8/10/21</u> <u>0920</u>
ALL TIMES ARE:	ETZ or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>N/A</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0920</u>	<u>1.0</u>	<u>7.69</u>	<u>2.35</u>	<u>30.0</u> ~~32.0~~	<u>27.6</u>	<u>441</u>	<u>2.20</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: No Trash, No exposed pipes

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Trailer Park Point</u>		
LOCATION:	<u>Downstream of</u>	<u>From Bank</u>	<u>0935</u> <u>Current</u>
DATE/TIME:	<u>8/10/21</u>	<u>0935</u>	
ALL TIMES ARE:	<u>ETZ</u> or CTZ	(circle one)	

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#			Field Measurements Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0935</u>	<u>1.5</u>	<u>7.40</u>	<u>1.02</u>	<u>13.5</u>	<u>28.1</u>	<u>490</u>	<u>1.82</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Small amounts of trash within banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Hospital East</u>
LOCATION:	<u>From Bank New Trailer Park Boundary</u>
DATE/TIME:	<u>8/10/21</u> <u>0945</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>nm</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#					
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0945</u>	<u>1.0</u>	<u>7.61</u>	<u>2.62</u>	<u>33.5</u>	<u>27.9</u>	<u>438</u>	<u>1.51</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wright, Connor Hayden

REMARKS: No Trash, No exposed pipes

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Heritage Park

LOCATION:

(Downstream of Culvert)
From Bank Across
Riteway
Home
ST

DATE/TIME:

8/10/21 0955

ALL TIMES ARE:

ETD or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: 1.1M (feet)
(Average of 2 measurements)

Sample Depth: 1.0
(feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with
Sample Bottle

Dipper Other

Field Measurements

Meter ID#

Field Measurements
Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0955</u>	<u>1.0</u>	<u>7.61</u>	<u>2.66</u>	<u>34.1</u>	<u>28.1</u>	<u>427</u>	<u>2.12</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: 1.1M

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew W. White, Cassa Haydon

REMARKS: Small amount of Trash on banks, No Leaks from pipe crossing

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manuel 2</u>
LOCATION:	<u>Upstream of Cleveland Ave crossing</u>
DATE/TIME:	<u>8/10/21</u> <u>1015</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>nm</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1015</u>	<u>0.5</u>	<u>7.69</u>	<u>3.89</u>	<u>50.5</u>	<u>28.4</u>	<u>429</u>	<u>1.73</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manual 2 Divot</u>
LOCATION:	<u>From Bank Across Divot in Road</u>
DATE/TIME:	<u>8/10/21 1035</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#					
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1035</u>	<u>0.5</u>	<u>7.59</u>	<u>2.72</u>	<u>35.0</u>	<u>28.5</u>	<u>429</u>	<u>1.89</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Shopping cart in middle of canal

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manuel 2A</u>
LOCATION:	<u>Upstream of Broadway at Bridge</u>
DATE/TIME:	<u>8/10/21</u> <u>1040</u>
ALL TIMES ARE:	ETZ or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#					
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1040</u>	<u>1.0</u>	<u>7.67</u>	<u>1.91</u>	<u>24.4</u>	<u>28.4</u>	<u>390</u>	<u>1.25</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wright, Connor Hayden

REMARKS: Small amounts of trash under bridge and on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manvel 2B</u>	
LOCATION:	<u>Upstream of Meadow Ave at Bridge</u>	
DATE/TIME:	<u>8/10/21</u>	<u>1050</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)	

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements) (Circle One if applicable)	<u>N/A</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW:	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL:	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1050</u>	<u>0.5</u>	<u>7.64</u>	<u>3.55</u>	<u>47.0</u>	<u>28.3</u>	<u>390</u>	<u>0.74</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manvel 2C</u>		
LOCATION:	<u>Upstream of Royal Palm Ave</u>		
DATE/TIME:	<u>8/10/21</u>	<u>1100</u>	<u>at Bridge</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)		

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NA</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#			Field Measurements Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1100</u>	<u>0.5</u>	<u>7.57</u>	<u>6.70</u>	<u>86.5</u>	<u>28.5</u>	<u>380</u>	<u>0.82</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Dense Aquatic Vegetation, small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manuel 3</u>	
LOCATION:	<u>Upstream of Evans Ave at Bridge</u>	
DATE/TIME:	<u>8/10/21</u>	<u>1110</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)	

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#			Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1110	0.5	7.52	1.85	23.6	24.0	764	1.96
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? YES No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: No Trash, dense Aquatic Vegetation

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Rockfill

LOCATION:

From Bank Downstream of
Concrete Facility

DATE/TIME:

9/10/21 1200

ALL TIMES ARE:

ETZ or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: 0.5
(feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with
Sample Bottle

Dipper Other

Field Measurements

Meter ID#

Field Measurements
Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1200</u>	<u>0.5</u>	<u>7.32</u>	<u>2.02</u>	<u>26.3</u>	<u>29.3</u>	<u>590</u>	<u>1.63</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyder, Connor Hayden

REMARKS: smells of human feces, light green/gray water in pond
on south side of
Concrete Facility

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Ford Street 2</u>
LOCATION:	<u>Downstream at Bridge</u>
DATE/TIME:	<u>8/11/21</u> <u>0925</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>nm</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
(Average of 2 measurements)			
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u> Flood Conditions
WATER LEVEL:	(Circle One)	Low	<u>Normal</u> High
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u> Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#					
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0925</u>	<u>1.0</u>	<u>7.32</u>	<u>4.28</u>	<u>54.0</u>	<u>27.3</u>	<u>390</u>	<u>2.57</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Connor Hayden

REMARKS: Small amounts of trash on banks, dense aquatic vegetation

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Reclaim</u> <u>Reclaimed Water</u>
LOCATION:	<u>Clemente Park Back Flow</u>
DATE/TIME:	<u>8/11/21</u> <u>0935</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	<u>NA</u> Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>NM</u> (feet)	Sample Depth:	<u>NM</u> (feet)
(Average of 2 measurements)			
STREAM FLOW:	(Circle One if applicable) <u>NA</u>	No Flow	Flow within Banks
WATER LEVEL:	(Circle One) <u>NA</u>	Low	Normal High
WATER SAMPLE COLLECTION DEVICE	(Circle One) Van Dorn	Direct Grab with Sample Bottle	Dipper Other

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0935</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Winters, Connor Hopson

REMARKS: sampled for acetametaphen and E.coli

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Ford Street 3</u>
LOCATION:	<u>Downstream of Edison Ave at Bridge</u>
DATE/TIME:	<u>8/11/21</u> <u>0945</u>
ALL TIMES ARE:	<u>ED</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0945</u>	<u>0.5</u>	<u>7.55</u>	<u>3.33</u>	<u>42.1</u>	<u>27.4</u>	<u>398</u>	<u>2.75</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynt, Connor Hayden

REMARKS: Banks recently mowed, small amounts of trash on banks/in water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>1st Street</u>
LOCATION:	<u>Upstream of 1st Street at Bridge</u>
DATE/TIME:	<u>8/11/21</u> <u>1000</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: <u>NA</u> (feet) (Average of 2 measurements)	Sample Depth: <u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow <u>Flow within Banks</u> Flood Conditions
WATER LEVEL: (Circle One)	Low <u>Normal</u> High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1000</u>	<u>1.5</u>	<u>7.74</u>	<u>3.03</u>	<u>39.3</u>	<u>28.7</u>	<u>435</u>	<u>5.85</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew West, Connor Hayden

REMARKS: No trash in water or on bank

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Seaboard

LOCATION: Upstream at bridge

DATE/TIME: 8/11/21 1015

ALL TIMES ARE: ETZ or CTZ
(circle one)

WATERBODY TYPE: (Circle One) Small Lake (>4 and <10HA) (collect samples in middle of open water) Large Lake (>10HA) (collect samples at selected location point)

Small Stream Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet) Sample Depth: 1.5 (feet)

(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1015	1.5	7.63	3.76	48.8	20.4	439	3.21
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID: King Street

LOCATION: From Bank

DATE/TIME: 8/11/21 1030

ALL TIMES ARE: ETZ or CTZ
(circle one)

WATERBODY TYPE: Small Lake (>4 and <10HA) Large Lake (>10HA)
(Circle One) (collect samples in middle of open water) (collect samples at selected location point)

Small Stream Large River
(collect samples in representative area) (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet) Sample Depth: 1.5 (feet)
(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1030</u>	<u>1.5</u>	<u>7.60</u>	<u>2.99</u>	<u>39.0</u>	<u>20.4</u>	<u>430</u>	<u>4.08</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NH

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: No Trash in water or on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Shoemaker Bridge

LOCATION:

Upstream of Bridge

DATE/TIME:

2/11/21 1045

ALL TIMES ARE:

ETZ or

CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream

(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: 1.5
(feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1045</u>	<u>1.5</u>	<u>7.75</u>	<u>3.24</u> ~~3.66~~	<u>41.8</u>	<u>28.5</u>	<u>434</u>	<u>7.72</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE:

Andor W. W. Connor, H. H. H.

REMARKS:

small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Veronica Shoemaker 1

LOCATION:

Downstream of Brookville Dr
at Bridge

DATE/TIME:

8/11/21 1050

ALL TIMES ARE:

ETZ or CTZ

(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream

(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: 1.0 (feet)
(Average of 2 measurements)

Sample Depth: 1.0 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1050</u>	<u>1.0</u>	<u>7.98</u>	<u>6.60</u>	<u>86.5</u>	<u>22.3</u>	<u>446</u>	<u>2.02</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE:

Andrea Wyatt, Connor Haysen

REMARKS:

no trash on banks or in water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Veronica Shoemaker 2</u>	
LOCATION:	<u>Downstream of Michigan Ave at Bridge</u>	
DATE/TIME:	<u>3/11/21</u>	<u>1100</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)	

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NA</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1100</u>	<u>1.0</u>	<u>7.91</u>	<u>5.61</u>	<u>73.4</u>	<u>29.9</u>	<u>440</u>	<u>2.96</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyrwiler, Brian Hyden

REMARKS: Dense aquatic vegetation, small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Cemetery

LOCATION:

Upstream of Bridge

DATE/TIME:

8/11/21 1110

ALL TIMES ARE:

ETZ or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

**Field Measurements
Read By: (initials)**

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1110</u>	<u>1.5</u>	<u>7.86</u>	<u>4.72</u>	<u>61.2</u>	<u>23.8</u>	<u>440</u>	<u>3.73</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

NA

Samples immediately placed on ice?

Yes

No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS:

No Trash in water or on banks
Collected aculeomorphus only

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Billy3

LOCATION:

Flow over Weir

DATE/TIME:

8/11/21 1125

ALL TIMES ARE:

ETZ or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: Flow (feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

**Field Measurements
Read By: (initials)**

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1125</u>	<u>Flow</u>	<u>7.20</u>	<u>2.31</u>	<u>29.9</u>	<u>28.2</u>	<u>397</u>	<u>2.43</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS:

dense aquatic vegetation / Foam and bubbles (light brown in color)
collected acetometaphin only present downstream of weir

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Veronica Shoemaker - 3

LOCATION:

Downstream of MLK Jr Blvd
at Bridge

DATE/TIME:

8/11/21 1140

ALL TIMES ARE:

ETZ or CTZ
(circle one)

WATERBODY TYPE:

(Circle One)

Small Lake (>4 and <10HA)

(collect samples in middle of open water)

Large Lake (>10HA)

(collect samples at selected location point)

Small Stream

(collect samples in representative area)

Large River

(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:

NA

(feet)

(Average of 2 measurements)

Sample Depth:

0.5

(feet)

STREAM FLOW:

(Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL:

(Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE

(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper

Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1140</u>	<u>0.5</u>	<u>7.82</u>	<u>6.58</u>	<u>61.0</u>	<u>30.3</u>	<u>433</u>	
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wright, Connor Haydon

REMARKS:

small amounts of trash in water and on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Veronica Shoemaker 4</u>
LOCATION:	<u>Downstream of Edison at Bridge</u>
DATE/TIME:	<u>8/11/21</u> <u>1145</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1145</u>	<u>1.0</u>	<u>7.64</u>	<u>4.75</u>	<u>61.2</u>	<u>28.2</u>	<u>455</u>	<u>3.54</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyder, Connor Hayden

REMARKS: Small amounts of trash in water and on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Zapato 2

LOCATION:

Downstream of Michigan Ave Bridge

DATE/TIME:

8/11/21 1155

ALL TIMES ARE:

ETZ or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream

(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: 1.0 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

**Field Measurements
Read By: (initials)**

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1155</u>	<u>1.0</u>	<u>7.53</u>	<u>2.17</u>	<u>28.0</u>	<u>28.4</u>	<u>417</u>	<u>1.24</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Haydon

REMARKS:

small amounts of trash in water and on banks
water discharges into canal from east storm water culvert

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Zapato 3</u>
LOCATION:	<u>Downstream of MCK Jr Blvd at Bridge</u>
DATE/TIME:	<u>8/11/21</u> <u>1210</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: <u>nm</u> (feet) (Average of 2 measurements)	Sample Depth: <u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow <u>Flow within Banks</u> Flood Conditions
WATER LEVEL: (Circle One)	Low Normal <u>High</u>
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1210</u>	<u>1.5</u>	<u>7.72</u>	<u>1.88</u>	<u>24.4</u>	<u>28.9</u>	<u>364</u>	<u>5.15</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Connor Hayden

REMARKS: Dense vegetation in canal downstream
small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Marsh

LOCATION:

Downstream of Bridge

DATE/TIME:

8/11/21

1225

ALL TIMES ARE:

ETZ

or

CTZ

(circle one)

WATERBODY TYPE:

(Circle One)

Small Lake (>4 and <10HA)

(collect samples in middle of open water)

Large Lake (>10HA)

(collect samples at selected location point)

Small Stream

(collect samples in representative area)

Large River

(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:

NA

(feet)

Sample Depth:

1.5

(Average of 2 measurements)

(feet)

STREAM FLOW:

(Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL:

(Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE

(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper

Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1225</u>	<u>1.5</u>	<u>7.61</u>	<u>2.93</u>	<u>39.1</u>	<u>30.6</u>	<u>440</u>	<u>5.12</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

NA

Samples immediately placed on ice?

Yes

No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Connor Hayson

REMARKS: mowed recently around banks

small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Ballard 1</u>
LOCATION:	<u>Upstream of Discharge into Billys Creek</u>
DATE/TIME:	<u>8/11/21</u> <u>1235</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements) (Circle One if applicable)	<u>NM</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW:	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL:	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1235</u>	<u>0.5</u>	<u>7.76</u>	<u>4.69</u>	<u>63.7</u>	<u>31.5</u>	<u>487</u>	<u>1.55</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrea Wypor, Connor Haysom

REMARKS: Recently moved around banks
Small amounts of trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Manuel Weir

LOCATION: Downstream of Weir

DATE/TIME: 10/12/21 0920

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)
	Canal (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NA</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW:	(Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions		
WATER LEVEL:	(Circle One) Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other		

Field Measurements					Field Measurements		
					Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0920</u>	<u>1.5</u>	<u>7.43</u>	<u>3.12</u>	<u>41.5</u>	<u>26.1</u>	<u>544</u>	<u>2.03</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Connor Hayden

REMARKS: Trash (bottles) up on bank in vegetation
- No foam buildup

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>West</u> <u>Hospital East</u>
LOCATION:	<u>North Side of Bank</u>
DATE/TIME:	<u>10/12/21</u> <u>0935</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)
	Canal (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NA</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>
WATER LEVEL:	(Circle One)	Low	<u>Normal</u> High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements		Meter ID#		Field Measurements			
				Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0935</u>	<u>1.5</u>	<u>7.36</u>	<u>2.02</u>	<u>25.1</u>	<u>26.1</u>	<u>529</u>	
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wpater, Connor Hayden

REMARKS: Trash floating downstream

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Trawler Park Point

LOCATION: North Side of Bank
Across from Trawler Park

DATE/TIME: 10/12/21 0845

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)
	Canal (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NA</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW:	(Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions		
WATER LEVEL:	(Circle One) Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other		

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0845</u>	<u>1.0</u>	<u>7.36</u>	<u>2.08</u>	<u>26.1</u>	<u>27.5</u>	<u>4420</u>	<u>1.21</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Camo Haydon

REMARKS: High Conductivity

- Trash on banks in vegetation

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Hospital East

LOCATION: North Side of Bank

DATE/TIME: 10/12/21 0955

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)
	Canal (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NA</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0955</u>	<u>1.0</u>	<u>7.31</u>	<u>2.27</u>	<u>28.3</u>	<u>26.4</u>	<u>464</u>	<u>1.15</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Fish caught in vegetation

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Heritage Park

LOCATION: North Side of Barre
Across from Heritage Park

DATE/TIME: 10/12/21 1010

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)
	Canal (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>nm</u> (feet)	Sample Depth:	<u>0.5</u> (feet)
STREAM FLOW:	(Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions		
WATER LEVEL:	(Circle One) Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other		

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1010</u>	<u>0.5</u>	<u>7.28</u>	<u>2.39</u>	<u>27.8</u>	<u>26.7</u>	<u>456</u>	<u>2.69</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyder, Connor Hayden

REMARKS: No Trash

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Manuel-2

LOCATION: Upstream of Cleveland

DATE/TIME: 10/12/21 1030

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)
	<u>Canal</u> (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>N/A</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW:	(Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions		
WATER LEVEL:	(Circle One) Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other		

Field Measurements					Field Measurements		
Meter ID#					Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1030	1.5	7.31	2.69	33.0	26.8	429	1.34
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wright, Connor Haydon

REMARKS: No Trash, Heavy Abundant Aquatic Vegetation

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Manuel 2 Divot

LOCATION: South Side of Burn
Across from Divots in Road

DATE/TIME: 10/12/21 1045

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)
	<u>Canal</u> (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>nm</u> (feet)	Sample Depth: <u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow <u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low <u>Normal</u> High	
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements			Field Measurements				
			Meter ID#	Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1045</u>	<u>1.5</u>	<u>7.37</u>	<u>1.78</u>	<u>22.3</u>	<u>26.9</u>	<u>450</u>	<u>2.46</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hydon

REMARKS: Shopping Cart in canal, no other trash

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Manvel - 2A

LOCATION:

Upstream of Broadway

DATE/TIME:

10/12/21 1055

ALL TIMES ARE:

ETZ

or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal

(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NA (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1055</u>	<u>1.5</u>	<u>7.28</u>	<u>1.16</u>	<u>14.2</u>	<u>26.6</u>	<u>446</u>	<u>2.08</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: No Trash

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Manuel - 28

LOCATION: Upstream of Meadows Ave

DATE/TIME: 10/12/21 1105

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)
	<u>Canal</u> (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>nm</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW:	(Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions		
WATER LEVEL:	(Circle One) Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other		

Field Measurements				Field Measurements			
		Meter ID#		Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1105</u>	<u>1.0</u>	<u>7.32</u>	<u>1.08</u>	<u>13.5</u>	<u>26.8</u>	<u>378</u>	<u>1.46</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew W. Jett, Connor Haysan

REMARKS: Glossy sheen on water surface

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Manuel - 2C

LOCATION:

Upstream of Royal Palm Ave

DATE/TIME:

10/12/21
10/12/21 1115

ALL TIMES ARE:

ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: 1.0 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1115</u>	<u>1.0</u>	<u>7.21</u>	<u>1.58</u>	<u>19.6</u>	<u>27.1</u>	<u>430</u>	<u>1.01</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew W. Smith, Connor Hayden

REMARKS: No Trash

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Manvel - 3

LOCATION:

Upstream of Evans Ave

DATE/TIME:

10/12/21 1125

ALL TIMES ARE:

ETZ or

CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal

(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:
(Average of 2 measurements)

NA

(feet)

Sample Depth:

0.5

(feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper

Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1125</u>	<u>0.5</u>	<u>7.21</u>	<u>1.96</u>	<u>23.8</u>	<u>26.3</u>	<u>450</u>	<u>2.16</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS:

No Trash

DUP-2 (1100)

SURFACE WATER FIELD SHEET
Station Information

STATION ID: 1st Street

LOCATION: Upstream of Bridge

DATE/TIME: 10/13/21 0910

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)
	Canal (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	<u>High</u>
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0910</u>	<u>1.5</u>	<u>7.65</u>	<u>3.69</u>	<u>46.7</u>	<u>28.1</u>	<u>1508</u>	<u>3.47</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Back flow from river

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Seaboard

LOCATION: Upstream of Bridge

DATE/TIME: 10/13/21 0920

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Small Stream
(collect samples in representative area)

Canal
(collect samples in representative area)

Large Lake (>10HA)
(collect samples at selected location point)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0920</u>	<u>1.5</u>	<u>7.64</u>	<u>2.10</u>	<u>26.5</u>	<u>27.5</u>	<u>1054</u>	<u>3.23</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? YES No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Connor Hayden

REMARKS: low flow, slight oil sheen on surface of water

SURFACE WATER FIELD SHEET
Station Information

STATION ID: King Street

LOCATION: North Side of Bank

DATE/TIME: 10/13/21 0930

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Small Stream
(collect samples in representative area)

Canal
(collect samples in representative area)

Large Lake (>10HA)
(collect samples at selected location point)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NA (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#		Field Measurements			
				Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0930</u>	<u>1.5</u>	<u>7.59</u>	<u>0.89</u> ~~1.5~~	<u>11.1</u>	<u>26.8</u>	<u>666</u>	<u>2.77</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Water is slow flowing

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Shoemaker Bridge

LOCATION: Upstream of Bowye

DATE/TIME: 10/13/21 0945

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One) Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Small Stream
(collect samples in representative area)

Canal
(collect samples in representative area)

Large Lake (>10HA)
(collect samples at selected location point)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other _____

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0945</u>	<u>1.5</u>	<u>7.62</u>	<u>1.33</u>	<u>17.0</u>	<u>27.3</u>	<u>578</u>	<u>5.36</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NK

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hansen

REMARKS: No Trash, slow flow

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Veronica Shoemaker - 1

LOCATION: Downstream of Ballard

DATE/TIME: 10/13/21 1005

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One) Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Small Stream Large Lake (>10HA)
(collect samples in representative area)

Canal Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet) Sample Depth: 1.0 (feet)
(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#		Field Measurements			
				Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1005</u>	<u>1.0</u>	<u>7.52</u>	<u>3.27</u>	<u>39.3</u>	<u>26.3</u>	<u>529</u>	<u>1.25</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyle, Connor Haydon

REMARKS: Trash on East bank

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Veronica Streamer -2

LOCATION: Downstream of Michigan Ave

DATE/TIME: 10/13/21 1010

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One) Small Lake (>4 and <10HA)
(collect samples in middle of open water) Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area) Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NA (feet) Sample Depth: 1.0 (feet)
(Average of 2 measurements)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other _____

Field Measurements		Meter ID#		Field Measurements			
				Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1010</u>	<u>1.0</u>	<u>7.48</u>	<u>1.85</u>	<u>22.7</u>	<u>26.3</u>	<u>531</u>	<u>2.04</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wright, Connor Hayden

REMARKS: High density of aquatic vegetation

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Veronica Shoemaker - 3

LOCATION:

Downstream of MLR or Blvd

DATE/TIME:

10/13/21 1025

ALL TIMES ARE:

ETZ or

CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal

(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: 1.0
(feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#		Field Measurements			
				Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1025</u>	<u>1.0</u>	<u>7.65</u>	<u>3.84</u>	<u>48.3</u>	<u>27.1</u>	<u>478</u>	<u>6.20</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wydr, Connor Hayden

REMARKS: Trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Veronica Shoemaker - 4

LOCATION: Downstream of Edison

DATE/TIME: 10/13/21 1035

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1035</u>	<u>1.5</u>	<u>7.39</u>	<u>0.25</u>	<u>3.10</u>	<u>27.2</u>	<u>614</u>	<u>4.15</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynter, Connor Hayden

REMARKS: Lots of Trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Marsh

LOCATION: Upstream of Bridge

DATE/TIME: 10/13/21 1055

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Canal
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements				Field Measurements			
		Meter ID#		Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1055</u>	<u>1.5</u>	<u>7.64</u>	<u>2.10</u>	<u>26.3</u>	<u>27.4</u>	<u>504</u>	<u>6.38</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Trash in canal and on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID: _____

Ballard-1

LOCATION: _____

Upstream of canal outlet
into Billy Creek

DATE/TIME: _____

10/13/21 1105

ALL TIMES ARE: _____

ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: 1.0
(feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other _____

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1105</u>	<u>1.0</u>	<u>7.69</u>	<u>3.15</u>	<u>32.5</u>	<u>22.7</u>	<u>578</u>	<u>2.12</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: est

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Light, Connor Hayden

REMARKS: Trash on side of banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Zapato -2

LOCATION:

Downstream of Michigan Ave

DATE/TIME:

10/13/21 1115

ALL TIMES ARE:

ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NA (feet)
(Average of 2 measurements)

Sample Depth: 1.0
(feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#		Field Measurements			
				Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1115</u>	<u>1.0</u>	<u>7.48</u>	<u>1.66</u>	<u>20.4</u>	<u>26.5</u>	<u>708</u>	<u>1.39</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Trash on Banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Zapata - 3

LOCATION:

Downstream MLK Jr

DATE/TIME:

10/13/21 1125

ALL TIMES ARE:

ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NA (feet)
(Average of 2 measurements)

Sample Depth: 1.5
(feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Meter ID#

Field Measurements
Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1125</u>	<u>1.5</u>	<u>7.68</u>	<u>2.50</u>	<u>30.5</u>	<u>26.4</u>	<u>720</u>	<u>4.26</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Haydon

REMARKS: slow flow, Trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Rockfall

LOCATION:

East Side of Bank

DATE/TIME:

10/13/21 1135

ALL TIMES ARE:

ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: nm (feet)
(Average of 2 measurements)

Sample Depth: 1.5
(feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

Field Measurements
Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1135</u>	<u>1.5</u>	<u>7.22</u>	<u>1.98</u>	<u>25.0</u>	<u>26.9</u>	<u>430</u>	<u>2.44</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: nt
Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wynn, Connor Hayden

REMARKS: DUP-3 (1200)

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Ford Street - 2

LOCATION:

Downstream of MLK Jr Blvd

DATE/TIME:

10/13/21 1150

ALL TIMES ARE:

ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Canal
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: N/A (feet)
(Average of 2 measurements)

Sample Depth: 0.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1150</u>	<u>0.5</u>	<u>7.50</u>	<u>3.19</u>	<u>39.6</u>	<u>26.5</u>	<u>505</u>	<u>5.77</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyder, Connor Hagan

REMARKS: Trash in canal

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Ford Street - 3

LOCATION: Downstream of Edison

DATE/TIME: 10/13/21 1205

ALL TIMES ARE: ETZ or CTZ
(circle one)

SAMPLE LOCATION IMAGE

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)
	<u>Canal</u> (collect samples in representative area)	

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>1.1m</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW:	(Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions		
WATER LEVEL:	(Circle One) Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other		

Field Measurements		Meter ID#			Field Measurements Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1205</u>	<u>1.5</u>	<u>7.57</u>	<u>2.60</u>	<u>32.8</u>	<u>27.4</u>	<u>555</u>	<u>2.29</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: 12

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wright, Connor Hayden

REMARKS: Trash on banks

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manuel Weir</u>
LOCATION:	<u>downstream of weir</u>
DATE/TIME:	<u>7/8/21 0830</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>NM</u>	(feet)	Sample Depth:	<u>1.5</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	<u>Normal</u>	High	
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other	

Field Measurements		Meter ID#			Field Measurements Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0830</u>	<u>1.5</u>	<u>7.43</u>	<u>2.54</u>	<u>31.6</u>	<u>26.8</u>	<u>580</u>	<u>2.61</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy; windy

PERSONNEL ON SITE: Connor Maydon, Brendan Boar

REMARKS: Sample collected just down stream clear, non odorous water
minor trash in water. Acetaminophen / HF 183 collected

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Hospital West</u>
LOCATION:	<u>North Bank</u>
DATE/TIME:	<u>9/8/21</u> <u>0905</u>
ALL TIMES ARE:	☒ ETZ or ☐ CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	☒ Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>N/A</u>	(feet)	Sample Depth:	<u>@ surface</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	☒ Flow within Banks	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	☒ Normal	High	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	☒ Direct Grab with Sample Bottle	Dipper	Other _____

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O. (mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0905</u>	<u>@ surface</u>	<u>7.43</u>	<u>2.09</u>	<u>25.4</u>	<u>26.9</u>	<u>502</u>	<u>1.5</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O. (mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice?

☒ Yes ☐ No

WEATHER CONDITIONS: (circle) raining, ☒ clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden Brendan Gooch

REMARKS: sample collected from north bank clear, non odorous water.
slow moving creek w/ leaves in water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Tranter Park point</u>
LOCATION:	<u>North bank</u>
DATE/TIME:	<u>9/8/21 9:15</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>N/A</u> (feet)	Sample Depth:	<u>2</u> <u>Surface</u> (feet)
(Average of 2 measurements)			
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u> Flood Conditions
WATER LEVEL:	(Circle One)	Low	<u>Normal</u> High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#					
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>9:15</u>	<u>2</u> <u>Surface</u>	<u>7.41</u>	<u>2.03</u>	<u>25.8</u>	<u>27.0</u>	<u>512</u>	<u>2.74</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: Dup collected. sample collected at north bank,
where hospital drain connects to stream. Grayish water
coming from hospital. no odor. clear water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Hospital East</u>
LOCATION:	<u>North Bank</u>
DATE/TIME:	<u>9/8/21</u> <u>925</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>@ surface</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>925</u>	<u>@ surface</u>	<u>7.42</u>	<u>2.12</u>	<u>26.4</u>	<u>22.1</u>	<u>504</u>	<u>16.03</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brenden Gaar

REMARKS: sample collected from north bank slow, steady stream.
clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Heritage Park

LOCATION: North bank

DATE/TIME: 9/8/21 935

ALL TIMES ARE: ETZ or CTZ
(circle one)

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: 10m (feet)
(Average of 2 measurements)

Sample Depth: (a) surface (feet)

STREAM FLOW: (Circle One if applicable)
No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One)
Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One)
Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>935</u>	<u>(a) surface</u>	<u>7.47</u>	<u>2.16</u>	<u>27.2</u>	<u>27.3</u>	<u>507</u>	<u>1.35</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: sample collected from north bank near, non odorous water. limited vegetation in stream.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manuel 2 Pivot</u>
LOCATION:	<u>S. of dam</u>
DATE/TIME:	<u>9/8/21</u> <u>0945</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>N/A</u>	(feet)	Sample Depth:	<u>(A) surface</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	<u>Normal</u>	High	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other _____

Field Measurements		Meter ID#			Field Measurements Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O. (mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0945</u>	<u>(B) surface</u>	<u>7.41</u>	<u>15.6</u> <u>1.21</u>	<u>15.4</u>	<u>27.3</u>	<u>494</u>	<u>14.64</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O. (mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

Samples immediately placed on ice?

N/A
Yes No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Goar

REMARKS: Sample collected from S bank of canal, slow moving stream
Strong bank growth, but limited vegetation in water.
Clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>manuel 2A</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>9/8/21 0955</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>(A) surface</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>955</u>	<u>(A) Surface</u>	<u>7.37</u>	<u>1.23</u>	<u>15.4</u>	<u>27.4</u>	<u>487</u>	<u>6.75</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/M

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gaur

REMARKS: sample collected upstream of bridge @ canal/broadway
vegetation seen growing around concrete pillars/banks,
clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manvel 2B</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>9/8/21</u> <u>1005</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>(2) surface</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1005</u>	<u>(2) surface</u>	<u>7.35</u>	<u>1.49</u>	<u>14.9</u>	<u>27.6</u>	<u>459</u>	<u>1.02</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? (es) No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gaur

REMARKS: sample collected upstream of bridge on meadow/canal
strong vegetation in stream/banks. clear, non odorous
water.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Manuel 2C</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>9/8/21</u> <u>1015</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>Nm</u> (feet)	Sample Depth:	<u>@ surface</u> (feet)
(Average of 2 measurements)			
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u> Flood Conditions
WATER LEVEL:	(Circle One)	Low	<u>Normal</u> High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1015</u>	<u>@ surface</u>	<u>7.34</u>	<u>1.17</u>	<u>14.7</u>	<u>28.1</u>	<u>462</u>	<u>1.29</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

Samples immediately placed on ice?

N/A
Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brenden Gear

REMARKS: Sample collected upstream of bridge, gray/white film seen
on water upstream. Clear, non-odorous water.
Strong vegetation in stream

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>manuel 3</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>9/8/21</u> <u>1025</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>NM</u>	(feet)	Sample Depth:	<u>@ Surface</u>	(feet)
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	<u>Normal</u>	High	
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other	

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1025</u>	<u>@ Surface</u>	<u>7.32</u>	<u>0.78</u>	<u>9.8</u>	<u>27.2</u>	<u>483</u>	<u>13.47</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Connor Haydon, Brendan Gear

REMARKS: samples collected upstream of bridge. strong vegetation on banks / in canal. clear (slightly yellow), non odorous water.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:

Manuel 2

LOCATION:

upstream of bridge

DATE/TIME:

9/8/21 1055

ALL TIMES ARE:

ETZ or CTZ
(circle one)

WATERBODY TYPE:
(Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: Nm (feet)
(Average of 2 measurements)

Sample Depth: @ surface (feet)

STREAM FLOW: (Circle One if applicable)

No Flow

Flow within Banks

Flood Conditions

WATER LEVEL: (Circle One)

Low

Normal

High

WATER SAMPLE COLLECTION DEVICE
(Circle One)

Van Dorn

Direct Grab with Sample Bottle

Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1055</u>	<u>@ surface</u>	<u>7.29</u>	<u>2.94</u>	<u>30.0</u>	<u>28.2</u>	<u>496</u>	
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE:

Connor Hayden, Brenden Gear

REMARKS:

Sample collected upstream of weir. Strong vegetation in water/banks. Acetaminophen/HF 183 collected. Clear, nonodorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>1st Street</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>9/9/21 0820</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	Normal	<u>High</u>
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0820</u>	<u>1.5</u>	<u>7.93</u>	<u>3.59</u>	<u>47.4</u>	<u>29.7</u>	<u>569</u>	<u>3.82</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

Samples immediately placed on ice?

N/A

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Groar

REMARKS: sample collected from upstream of bridge. leaves/debris
area in water, plus thin organic looking films. clear,
non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Seaboard</u>
LOCATION:	<u>upstream of bridge</u>
DATE/TIME:	<u>9/9/21</u> <u>835</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>N/A</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	Normal	<u>High</u>
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>835</u>	<u>1.5</u>	<u>7.58</u>	<u>1.80</u>	<u>23.0</u>	<u>28.4</u>	<u>603</u>	<u>3.51</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: sample collected upstream of bridge. leaves and debris floating in river. thin organic looking film on water. clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	King Street
LOCATION:	South side of bank
DATE/TIME:	9/9/21 0855
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	NM	(feet)	Sample Depth:	1.5	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	Normal	<u>High</u>	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
855	1.5	7.53	2.79	34.3	28.6	572	4.29
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: sample collected on southern bank. leaves/debris on water surface. clear, non odorous water. fruit from trees on ground/in water.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Shoemaker Bridge</u>
LOCATION:	<u>Upstream of bridge</u>
DATE/TIME:	<u>9/9/21</u> <u>9:05</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>Nm</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	Normal	<u>High</u>
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>9:05</u>	<u>1.5</u>	<u>7.62</u>	<u>2.82</u>	<u>34.2</u>	<u>28.9</u>	<u>584</u>	<u>5.55</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: Sample collected upstream side of bridge. slow moving water w/ no debris. clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Marsh</u>
LOCATION:	<u>South bank</u>
DATE/TIME:	<u>9/19/21</u> <u>920</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>NM</u>	(feet)	Sample Depth:	<u>1.0</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	Normal	<u>High</u>	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other _____

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#					
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>920</u>	<u>1.0</u>	<u>7.58</u>	<u>3.94</u>	<u>50.9</u>	<u>29.0</u>	<u>478</u>	<u>4.38</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gane

REMARKS: Sample collected from southern bank. Slow moving stream.
clear, non odorous water.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Ballard 1</u>
LOCATION:	<u>upstream of culvert</u>
DATE/TIME:	<u>9/9/21</u> <u>925</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>Nm</u> (feet)	Sample Depth:	<u>@ surface</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	Normal	<u>High</u>
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>925</u>	<u>@ surface</u>	<u>7.64</u>	<u>4.20</u>	<u>54.1</u>	<u>28.2</u>	<u>536</u>	<u>3.08</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Goar.

REMARKS: sample collected upstream of ~~water~~ culvert. normal moving stream, clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Zapato 2</u>
LOCATION:	<u>downstream of bridge</u>
DATE/TIME:	<u>9/9/21</u> <u>940</u>
ALL TIMES ARE:	<u>(ETZ)</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>3m</u>	(feet)	Sample Depth:	<u>1.0</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	<u>Normal</u>	High	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other _____

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>940</u>	<u>1.0</u>	<u>7.50</u>	<u>1.47</u>	<u>19.0</u>	<u>28.3</u>	<u>713</u>	<u>1.23</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? (Yes) No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Goar

REMARKS: sample collected downstream side of bridge. Fast, clear, moving stream. shrubs downstream from bridge have been trimmed. clear, non odorous water.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Zapata 3</u>
LOCATION:	<u>downstream of bridge</u>
DATE/TIME:	<u>9/9/21</u> <u>0955</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH:	<u>Nm</u>	(feet)	Sample Depth:	<u>1.5</u>	(feet)
(Average of 2 measurements)					
STREAM FLOW:	(Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions	
WATER LEVEL:	(Circle One)	Low	<u>Normal</u>	High	
WATER SAMPLE COLLECTION DEVICE	(Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper	Other _____

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>955</u>	<u>1.5</u>	<u>7.66</u>	<u>2.05</u>	<u>26.6</u>	<u>28.3</u>	<u>828</u>	<u>6.32</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: Sample collected downstream of bridge sight
Sewage smell noted in the air. clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Rockfall</u>
LOCATION:	<u>east bank</u>
DATE/TIME:	<u>9/9/21 1005</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: <u>nm</u> (feet) (Average of 2 measurements)	Sample Depth: <u>@ surface</u> (feet)
STREAM FLOW: (Circle One if applicable) No Flow <u>Flow within Banks</u> Flood Conditions	
WATER LEVEL: (Circle One) Low <u>Normal</u> High	
WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn <u>Direct Grab with Sample Bottle</u> Dipper Other _____	

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1005	<u>@ surface</u>	<u>7.18</u>	<u>0.29</u>	<u>3.6</u>	<u>28.1</u>	<u>647</u>	<u>30.20</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden Brendan Gear

REMARKS: sample collected east bank of stream. strong vegetation debris in stream. no discolored water/ clear, non odorous

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Ford Street 3

LOCATION: downstream of bridge

DATE/TIME: 9/9/21 1035

ALL TIMES ARE: (ETZ) or CTZ
(circle one)

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: Nm (feet)
(Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One)

Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One)

Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1035</u>	<u>1.5</u>	<u>7.49</u>	<u>3.23</u>	<u>41.4</u>	<u>28.5</u>	<u>559</u>	<u>5.81</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2:

Samples immediately placed on ice?

NA

(Yes) No

WEATHER CONDITIONS: (circle) raining clear partly cloudy, windy

PERSONNEL ON SITE: Conor Hayden, Brendan Gear

REMARKS:

Sample collected downstream of bridge. Slow moving stream. Trash see along banks/ in water clear, non odorous water. DUP 2 collected

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Ford Street 2</u>
LOCATION:	<u>downstream of</u> <u>bridge</u>
DATE/TIME:	<u>9/9/21</u> <u>1050</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>nm</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	Normal	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	Direct Grab with Sample Bottle	Dipper Other _____

Field Measurements
Read By: (initials)

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1050</u>	<u>1.5 ft</u>	<u>7.36</u>	<u>1.91</u>	<u>23.6</u>	<u>27.4</u>	<u>493</u>	<u>4.05</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: n/a

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Goar

REMARKS: sampled collected downstream of bridge, strong
vegetation growth seen in water, slow moving stream,
clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Veronica Shoemaker

LOCATION: 9/9/21 1105

DATE/TIME: downstream of bridge

ALL TIMES ARE: ETZ or CTZ
(circle one)

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: 1.0 (feet)
(Average of 2 measurements)

Sample Depth: 1.0 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One)

Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One)

Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements		Meter ID#			Field Measurements Read By: (initials)		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1105	1.0	7.58	5.23	68.8	28.7	546	2.89
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Gear

REMARKS: sample collected downstream of bridge.
Acetaminophen / HF 183 collected. minor algae seen on water/rocks. fast moving stream, clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID: Veronica Shoemaker 2

LOCATION: downstream of bridge

DATE/TIME: 9/9/21 1115

ALL TIMES ARE: ETZ or CTZ
(circle one)

WATERBODY TYPE: (Circle One)

Small Lake (>4 and <10HA)
(collect samples in middle of open water)

Large Lake (>10HA)
(collect samples at selected location point)

Small Stream
(collect samples in representative area)

Large River
(collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: NM (feet)
(Average of 2 measurements)

Sample Depth: ~1.0 (feet)

STREAM FLOW: (Circle One if applicable)

No Flow Flow within Banks Flood Conditions

WATER LEVEL: (Circle One)

Low Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One)

Van Dorn Direct Grab with Sample Bottle Dipper Other

Field Measurements

Read By: (initials)

Field Measurements	Meter ID#						
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1115</u>	<u>1.0</u>	<u>7.83</u>	<u>1.73</u>	<u>21.8</u>	<u>28.2</u>	<u>556</u>	<u>11.32</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden Brendan Gear

REMARKS:

Sample collected downstream of bridge. algae
and white film seen in water, heavy vegetation
in water as well. trash noted, clear, non odorous water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Veronica Shoemaker 3</u>
LOCATION:	<u>downstream of bridge</u>
DATE/TIME:	<u>9/9/21</u> <u>1130</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	<u>Small Stream</u> (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>Nm</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements

Read By: (initials)

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1130</u>	<u>1.5</u>	<u>7.78</u>	<u>4.43</u>	<u>58.8</u>	<u>29.0</u>	<u>SST 571</u>	<u>0.29</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice?

Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Goar

REMARKS:

sample collected downstream of bridge. trash/dump site
small nearby. slow moving stream w/ trash seen in canal
non odorous, clear water.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>Veronica Shoemaker 4</u>
LOCATION:	<u>downstream of bridge</u>
DATE/TIME:	<u>9/1/21</u> <u>1140</u>
ALL TIMES ARE:	☒ ETZ or ☐ CTZ (circle one)

WATERBODY TYPE: (Circle One)	Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	☒ Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: <u>NM</u> (feet) (Average of 2 measurements)	Sample Depth: <u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable) No Flow ☒ Flow within Banks Flood Conditions	
WATER LEVEL: (Circle One) Low ☒ Normal ☒ High	
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn ☒ Direct Grab with Sample Bottle Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1140</u>	<u>1.5</u>	<u>7.45</u>	<u>0.55</u>	<u>7.0</u>	<u>29.0</u>	<u>641</u>	<u>5.20</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: N/A

Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, ☒ clear, partly cloudy, windy

PERSONNEL ON SITE: Connor Hayden, Brendan Grier

REMARKS: sample collected downstream from bridge, slow moving water w/ some vegetation growing. clear. non odorous water. some trash seen

Attachment 2

Photographs at Soil Sample Area



Attachment 3

City Policies and SORP



City of Fort Myers Sewer Overflow Response Plan (SORP)

Prepared By:
Richard Moulton

Address:
4200 Dr. Martin Luther King Jr. Blvd
Fort Myers Florida 33916
Voice: (239) 321-7594
Fax: (239) 321-5954

Approved On: _____, 2009
Amended On: April 1, 2020 _____



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Sewer System Owner: City of Fort Myers
2200 Second Street
Drawer 2217
Fort Myers Florida 33901

Contact Persons:

Richard Moulton, Director of Public Works
City of Fort Myers
(239) 321-7215

Reporting Regulatory Agency: Sewer Overflow

Florida Department of Environmental Protection (FDEP), South District Office

Contact Person:

Gary Maier
Administrator
South District Office FDEP
Email: Gary.Maier@dep.state.fl.us
Phone: (239)-344-5665

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Nicole Devine
Environmental Specialist
South District Office FDEP
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Phone: (239)-344-5675



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

FDEP State Warning Point

1-800-320-0519



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

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CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

I. AUTHORITY

This Sewer Overflow Response Plan (SORP) was prepared at the request of the South District Office of FDEP, as a document for review and possible acceptance as the SORP for the City of Fort Myers.

II. GENERAL

The Sewer Overflow Response Plan (SORP) is designed to ensure that every report of a sewage overflow incident is immediately dispatched to the appropriate City of Fort Myers Sewer Department personnel for confirmation and the appropriate actions taken to protect stakeholders and the environment.

Quick response will minimize the effects of the overflow with respect to impacts on public health, beneficial uses and water quality of surface waters and on customer service.

The SORP further includes provisions to ensure safety pursuant to the directions provided by the Florida Department of Environmental protection (FDEP) and that notification and reporting is made to the FDEP local office and the State warning point when applicable.

For purposes of this SORP, “confirmed sewage spill” is also sometimes referred to as “sewer overflow,” “overflow,” or “SSO.” The effective date of this plan is September 16, 2009.

A. Objectives

The primary objective of the SORP is to protect public health and the environment, satisfy regulatory agencies and domestic wastewater facility permit conditions which address a procedure for managing sewer overflows, and minimize risk of enforcement actions against the City of Fort Myers, sewer system owner.

Additional objectives of the SORP are as follows:

- Protect collection system personnel and wastewater treatment plant personnel;
- Protect the collection system, wastewater treatment facilities, and all appurtenances; and
- Protect private and public property beyond the collection and treatment facilities.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

B. Organization of Plan

The key elements of the SORP are addressed individually as follows:

Section III - Overflow Response Procedure

Section IV – Maintenance of SORP

Section V - Appendices

III. OVERFLOW RESPONSE PROCEDURE

The Overflow Response Procedure presents a strategy for the City of Fort Myers Waste Water and Sewer Collections division of the Public Works Department to mobilize labor, materials, tools and equipment to correct or repair any condition, which may cause or contribute to an abnormal sewer related discharge. The plan considers a wide range of potential system failures that could create an overflow.

A. Receipt of Information Regarding an SSO

An overflow may be detected by City employees or by other stakeholders. An overflow may also be detected by the SCADA system that monitors the operational status of several key lift stations. The City of Fort Myers is responsible to act based on received phone calls, emails, social media or written reports on possible sewage overflow from the wastewater system, and to provide immediate response to investigate and/or correct reported sewer overflow.

Generally, telephone calls and or emails from the public reporting possible sewer overflows are received at the Public Works Operation dispatcher or the after-hours dispatcher identified in Appendix D.

A City email address is also provided for reporting to the City on the City's website (Operations@Cityftmyers.com).

1. The dispatcher/recipient obtains all relevant information available regarding the overflow including:
 - a. Time and date the call was received.
 - b. Specific location.
 - c. Description of problem.
 - d. Time possible overflow was noticed by the caller.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

- e. Caller's name and phone number. Callers email address (if available)
- f. Observations of the caller; and
- g. Other relevant information that will enable the City's Public Works Operations personnel to quickly locate, assess and stop the overflow.

The dispatcher records initial information in the Abnormal Events Report (Ref. Appendix A). A work order is also generated for the event. The Operations Superintendent and the Director of Public Works or their designees are also notified.

2. The Public Works dispatcher, dispatches sewer maintenance personnel to confirm the overflow. Until verified, the report of a possible spill will not be referred to as a "sewer overflow." The Operations Superintendent or designee completes the Abnormal Events Report (Ref. Appendix A) within 24 hours of the sewer overflow confirmation and provides the information verbally or by email, to the local FDEP office, the designated abnormal events website (SD-AbnormalEvents@dep.state.fl.us) and the State Warning Point if necessary.

If the overflow exceeds 1,000 gallons or will affect bathing areas or public drinking water intakes, the City shall notify the FDEP contact person(s), email designated website (SD-AbnormalEvents@dep.state.fl.us) and the State Warning Point (SWO) verbally, as soon as practical but no later than 24 hours after becoming aware of the discharge.

In addition, any spill which warrants a call to the SWO (> 1000 gals) will also need to be reported via email to Public Notice of Pollution Board at: <https://floridadep.gov/pollutionnotice>.

The Public Notice of Pollution Board notification will generate a confirmation/event number.

This event number must be added to the abnormal event report in the "Other" line of the report.

Further guidance on filling the Public Notice of Pollution can be found at: <https://floridadep.gov/sec/sec/documents/public-notice-pollution>



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

The Public Works Operations Superintendent is responsible for reviewing, updating and signing the final Sanitary Abnormal Events Report. Sewage overflow response tracking protocol is summarized in Appendix C.

B. Dispatch of Sewer Maintenance Personnel to Site of Sewer Overflow

Failure of any element within the wastewater disposal system that threatens to cause or causes an SSO must trigger an immediate response to isolate and correct the problem. Personnel and equipment must be available to respond to any SSO locations. Public Works Operations Utilities personnel shall be “on call” to provide the manpower as needed.

Summary of Sewer Overflow Action Plan is included in Appendix C.

1. Dispatching Maintenance Personnel

- When the City of Fort Myers dispatcher receives notification of a potential sewer overflow outlined in Section A, staff dispatches maintenance personnel with appropriate resources as required.

2. Maintenance Personnel Instructions

- Dispatch maintenance personnel by email, telephone or radio. The Public Works Operations supervisory team will assign the appropriate personnel, materials, supplies and equipment needed.
- The dispatcher must verify all pertinent information has been received and acknowledged by the maintenance personnel who were dispatched. All personnel being dispatched to the site of an SSO proceed immediately to the site of the overflow.

Reports of any delays or conflicts in assignments shall be communicated immediately for resolution.

- In all cases responding maintenance personnel report their findings, including possible damage to private and public property, to the Superintendent immediately upon making their investigation. If the Superintendent has not received findings from the field crew in a timely manner, the Superintendent contacts the response maintenance personnel to determine the status of the investigation. The Superintendent also shall relay the confirmed information to his immediate supervisor where appropriate.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

3. Additional Resources

The Superintendent and or senior supervisory staff receives and conveys to appropriate parties' requests for additional personnel, material, supplies, and equipment for maintenance personnel working at the site of a sewer overflow.

4. Preliminary Assessment of Damage to Private and Public Property

The Public Works Operations maintenance personnel shall use discretion in their actions as reasonably as they can. The maintenance personnel shall not enter private property for purposes of assessing damage unless authorized by the Superintendent.

Where possible maintenance personnel are encouraged to take the appropriate digital or still photographs and/or video footage; if possible, of the sewer overflow impacted area in order to thoroughly document the nature and extent of impacts.

Retain photographs for filing with the Abnormal Events Report.

5. Field Supervision and Inspection

- Sewer Collections division maintenance supervisors shall visit the site of the sewer overflow to ensure that provisions of the Overflow Response Plan and other directives are met. The Superintendent of Operations can also call on other divisions/departments within the City to assist in the response to the spill as needed.
- The Public Works Operations Superintendent is responsible for verbally notifying FDEP and the State Warning Point within the specified time and submitting the Abnormal Events Report to the FDEP.

6. Coordination with Hazardous Material Response

- Upon arrival at the scene of a sewer overflow, should a suspicious substance (e.g., oil sheen, foamy residue) be found on the ground surface, or should a suspicious odor (e.g., gasoline) not common to the sewer system be detected, the sewer maintenance crew shall immediately contact the Superintendent for guidance before taking further action.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

- Should the Superintendent determine the need to alert the hazardous material response team, the maintenance personnel awaits the contracted hazardous waste team response.
- Contact the City's Fire Department (hazardous material response team).
- Upon arrival of the hazardous material response team, the maintenance personnel take direction from the person with the lead authority of that team. Only when that authority determines it is safe and appropriate precautions have been met will the sewer maintenance personnel proceed under the SORP with the containment, clean-up activities and correction.

C. Overflow Correction, Containment, and Clean-Up

This section describes specific actions to be performed by the City's sewer maintenance personnel during a SSO.

The objectives of these actions are:

- To protect public health, environment and property from sewage overflows and restore surrounding area to normal as soon as possible.
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms).
- To promptly notify the regulatory agency with preliminary overflow information and potential impacts.
- To contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters; and
- To minimize the City's exposure to any regulatory agency penalties and fines.

Under most circumstances, the City can handle all response actions with its own maintenance forces. They have the skills and experience to respond rapidly and in the most appropriate manner. In the event that there are impacts to storm water, waters of the State etc., the appropriate division will be contacted for assistance and expertise.

An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

1. Responsibilities of Sewer Maintenance Personnel upon Arrival

It is the responsibility of the first personnel who arrive at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the maximum extent possible.

Should the overflow not be the responsibility of City but there is imminent danger to public health, public or private property, or to the quality of waters of the state, then the City of Fort Myers and Superintendent should take prudent emergency action, with the approval of the Director of Public Works, until the responsible party assumes responsibility and provides actions.

Upon arrival at a SSO, the sewer maintenance personnel performs the following:

- Determines the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.
- Identifies and requests assistance or additional resources to correct the overflow or to assist in determination of its cause.
- Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump station controls, repairs pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way); and
- Requests additional expertise, personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.

2. Initial Measures for Containment

Initiate measures to contain the overflowing sewage and recover where possible sewage, which has already been discharged, minimizing impact to public health or the environment.

- Determine the immediate destination of the overflow, e.g. storm drain, street curb gutter, body of water, stream bed, etc.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

- Identify and request the necessary methodology, materials and equipment to contain or isolate the overflow, if not readily available; and
- Take immediate steps to contain, remediate the overflow, e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.

3. Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse, set up a portable by-pass pumping operation around the obstruction.

In the event that chemical and or environmentally friendly alternative procedures can be utilized such as, oxygenation of contained water bodies, bactericides ect.,

- Take appropriate measures to determine the proper size and number of pumps, chemicals or target oxygen levels required to effectively and safely handle the sewage flow or affected contained water volumes.
- Implement continuous or periodic monitoring of the by-pass pumping operation and appropriate bacteriological species test sampling and monitoring as required.
- Address regulatory agency issues in conjunction with emergency repairs.

4. Cleanup

Clean sewer overflow sites thoroughly after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, and rubber products) is to remain.

- Whenever possible digital photos should be taken of the area before and after cleanup.
- Where practical and environmentally sound, thoroughly flush the area and clean of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- Secure the overflow area to prevent contact by members of the public until the site has been thoroughly cleaned.
- Where appropriate, disinfect and deodorize the overflow site.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

- Where sewage has resulted in ponding, pump the pond dry and dispose of the residue in accordance with applicable regulations and policies.
- If a ponded area/water body contains sewage, which cannot be pumped dry, it may be treated with the appropriate bactericide and oxygenation of the water body.
If the sewage has discharged into a body of water that may contain fish or other aquatic life the City will apply the best remediation practices available in consultation with the appropriate regulatory agencies.

D. Customer Satisfaction

If the SSO is reported by a citizen/media or other stakeholder, the Superintendent will follow up in person or by telephone with the individual/entity who was reporting the overflow. The cause of the overflow and its resolution will be relayed.

IV. MAINTENANCE OF SORP

The SORP will be reviewed on an annual basis. Possible amendments can include:

- Change in procedures
- Change in contact personnel
- Changes due to regulatory requirements



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

V. APPENDICES

Appendix A - Sanitary Sewer Overflow Report Form

Appendix B - Sewer Overflow Notice Plan Flow Chart

Appendix C - Sewer Overflow Response Tracking Protocol

Appendix D - List of Public Offices to Report Overflow

Appendix E - Suggested Criteria for Demonstrating How a Sewer Overflow was Unavoidable

Appendix F - Measures to Avoid Sewer Overflow

Appendix G - FAC 62-604.550



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Appendix A

ABNORMAL EVENTS REPORT FORM

WASTEWATER MALFUNCTION / ABNORMAL EVENT REPORT

This form is provided for your convenience only. You may complete this form and email to SD-AbnormalEvents@dep.state.fl.us. If the spill is greater than 1000 gallons you MUST call the State Watch Office at 1-800-320-0519. All items with an asterisk (*) are required by rule and must be completed.

*FACILITY NAME:	_____	*FACILITY TYPE:	Domestic Wastewater
*PERMIT NUMBER:	_____	*COUNTY:	Lee
*REPORTER NAME:	_____	*RESPONSIBLE PARTY:	_____
*REPORTER ADDRESS:	_____	*RESPONSIBLE PARTY ADDRESS:	_____
*REPORTER PHONE:	_____	*RESPONSIBLE PARTY PHONE:	_____
*DEP:	☐	*DATE:	_____
*STATE WATCH OFFICE:	☐	*TIME:	_____
		*PERSON CONTACTED:	_____
		INCIDENT NUMBER:	_____

SPILL INFORMATION

*SPILL CHARACTERISTIC	*SOURCE	*AREA AFFECTED
☐ UNTREATED/RAW	☐ LIFT STATION # _____	☐ STORM WATER
☐ PARTIALLY TREATED	☐ MANHOLE	☐ SURFACE WATER/ _____
☐ TREATED	☐ FORCE MAIN/GRAVITY LINE	☐ GROUND
☐ REUSE/RECLAIMED	☐ DISPOSAL SYSTEM	☐ CONTAINMENT AREA
☐ OTHER _____	☐ OTHER _____	☐ OTHER/ _____
	☐ SURGE TANK	
	☐ AERATION TANK	
	☐ CLARIFIER	
	☐ DIGESTER	
	☐ CHLORINE CONTACT TANK	

*DATE / TIME DISCHARGE OCCURRED: _____

*AMOUNT OF DISCHARGE: _____ GALLONS

*AMOUNT RECOVERED: _____ GALLONS

*ONGOING: ☐ * CEASED: ☒

*PHYSICAL LOCATION / ADDRESS / LATITUDE & LONGITUDE: _____

* MALFUNCTION / CAUSE

☐ PUMP FAILURE	☐ LINE BREAK	WEATHER
☐ BLOWER FAILURE	☐ FATS/OILS/GREASE BLOCKAGE	☐ LIGHTNING
☐ SWITCH/TIMER FAILURE	☐ OTHER CLOG OR BLOCKAGE	☐ HEAVY RAINFALL
☐ CLARIFIER FAILURE	☐ POWER OUTAGE/FAILURE	☐ HIGH WINDS
☐ FILTER BYPASS/FAILURE	☐ ACCIDENT	☐ TROPICAL STORM: _____
☐ DISINFECTION SYSTEM FAILURE	☐ UNKNOWN	☐ HURRICANE: _____
☐ OTHER _____	☐ OUTSIDE CONTRACTOR _____	☐ OTHER: _____
* EXPLAIN: _____		

* EFFLUENT LIMIT VIOLATIONS

☐ CL ₂ _____ MG/L	☐ TURBIDITY _____ NTU	☐ PH _____ SU
☐ TSS _____ MG/L	☐ NO ₃ _____ MG/L	☐ CBOD ₅ _____ MG/L
☐ OTHER _____	☐ FECAL COLIFORMS _____ CFU/100ML	☐ ABNORMAL FLOW _____ MGD

* CORRECTIVE / REMEDIAL ACTION BEING TAKEN

☐ LINE REPAIRED	☐ CONTAINED ON-SITE	☐ RESTORED POWER
☐ DISINFECTED WITH _____	☐ SAMPLES TAKEN (IF SURFACE WATERS IMPACTED)	☐ AUXILIARY POWER SYSTEM ON-LINE
☐ WASHED DOWN	☐ SIGNS POSTED NEAR AFFECTED WATERS	☐ BACK-UP ON-LINE
☐ VAC TRUCK/DESTINATION _____	☐ REPAIRED/REPLACED EQUIPMENT	☐ OTHER Granular Calcium Hypochlorite

* REMEDIAL ACTIONS BEING TAKEN / ESTIMATED TIME FOR COMPLETION OF REPAIRS: _____

PREVENTATIVE PLANS/MEASURES

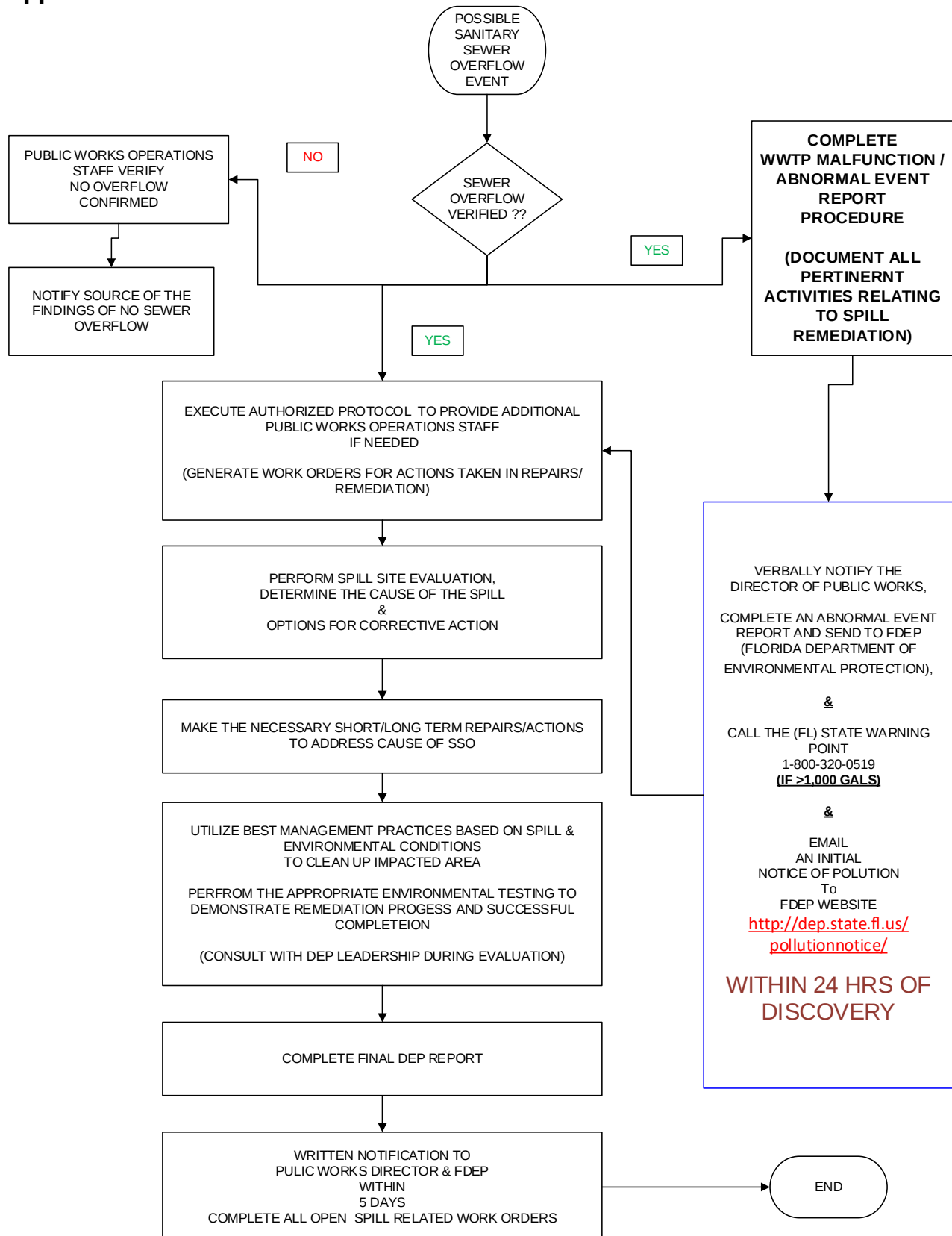
PLEASE DESCRIBE HOW YOU INTEND TO PREVENT SIMILAR OCCURRENCES IN THE FUTURE: _____

Revised 09/15



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Appendix B





CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Appendix C

SEWER OVERFLOW (SSO) RESPONSE TRACKING PROTOCOL

CITY OF FORT MYERS WASTEWATER SYSTEM

Step	Event
1	Report of possible SSO received by an After-hours dispatcher from a stakeholder or City staff
2	Dispatcher records information received as a work order
3	Dispatcher contacts Operations Department personnel, which then deploy maintenance personnel to confirm reported SSO.
4	Maintenance personnel reports back to the Operations Superintendent reporting significance of the overflow.
5	The Operations Superintendent verbally (or email) informs regulatory agencies and Senior management of overflow.
6	Within 5 days the Superintendent prepares Abnormal Events Report for regulatory agencies, Senior management and the Wastewater Superintendent.



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Appendix D

METHODS TO REPORT OVERFLOW IN THE CITY OF FORT MYERS SEWER SYSTEM

City of Fort Myers Public Works Operations Department

Telephone Number (Regular Hours and After Hours): (239) 321-8100

Email Address (Regular Hours and After Hours): operations@cityftmyers.com

Vacant, Public Works Operations Superintendent

City of Fort Myers

(239) 321-7594

Mr. Heath Laufenberg, Wastewater Treatment Superintendent

City of Fort Myers

(239) 321-7574

Mr. Richard Moulton M.B.A, Director of Public Works

City of Fort Myers

(239) 321-7216

Louise Chang

Environmental Specialist

South District Office FDEP

Email: louise.chang@dep.state.fl.us

Phone: (239)-344-5630

Nicole Devine

Environmental Specialist

South District Office FDEP

Email: Nicole.Devine@floridadep.gov

Phone: (239)-344-5660

FDEP State Warning Point

1-800-320-0519



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Appendix E

SUGGESTED CRITERIA FOR DEMONSTRATING HOW A SEWER OVERFLOW WAS UNAVOIDABLE

SSO's can be demonstrated as unavoidable by showing the discharge meets each of the criteria 1 through 4.

1. The discharge resulted from a temporary, exceptional incident that was either:
 - A. Necessary to prevent loss of life, personal injury, or severe property damage.
 - B. Beyond the reasonable control of the operator. Incidents beyond the reasonable control of the operator would include:
 - Exceptional acts of nature.
 - Third party actions that could not be reasonably prevented, including vandalism that could not be avoided by reasonable measures.
 - Blockages that could not be avoided by reasonable measures.
 - Unforeseeable sudden structural, mechanical, or electrical failure that could not be avoided by reasonable measures.
2. The discharge had no feasible alternative.
3. The discharge was not caused by any of the following.
 - A. Operational error,
 - B. Improperly designed or constructed collection system facilities,
 - C. Inadequate collection system facilities or components,
 - D. The lack of appropriate preventive maintenance, or
 - E. Careless or improper oversight
4. Steps to stop the discharge, address the source of the problem, and mitigate potential impacts from the discharge were taken as soon as possible after becoming aware of the release.



Appendix F

MEASURES TO AVOID SEWER OVERFLOW

A. Proper Collection System Maintenance and Operations Program

- Cleaning of pipes (grease, roots deposits)
- Sealing or maintenance for deteriorating sewers
- Remediation of poor/substandard construction (short term)
- Sewer replacement or rehabilitation program (long term)
- Proper maintenance and operations of pump stations
- Inspection of private laterals and grease traps
- Use latest technology and standards in sewer collection and Lift Station Operations systems.

B. New Wastewater System Construction

- Use latest technology and standards in constructing new wastewater disposal system improvements
- Perform proper construction inspection/quality assurance procedures



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

APPENDIX G

62-604.550 Abnormal Events.

(1) The provisions of Rule 62-604.550, F.A.C., are applicable to both new and existing domestic wastewater collection/transmission systems.

(2) The owner/operator of the collection/transmission system shall report to the Department all unauthorized releases or spills of wastewater to surface or ground waters from its collection/transmission system or any other abnormal events as described below:

(a) Unauthorized releases or spills in excess of 1,000 gallons per incident, or other abnormal events where information indicates that public health or the environment will be endangered, shall be reported orally to the STATE WARNING POINT TOLL FREE NUMBER (800)320-0519 as soon as practical, but no later than 24 hours from the time that the owner/operator becomes aware of the circumstances. The owner/operator, to the extent known, shall provide the following information to the State Warning Point:

1. Name, address, and telephone number of person reporting,
2. Name, address, and telephone number of owner/operator of the collection/transmission system or responsible person for the discharge,
3. Date and time of the discharge and status of discharge (ongoing or ceased),
4. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater),
5. Estimated amount of the discharge,
6. Location or address of the discharge,
7. Source and cause of the discharge,
8. Whether the discharge was contained on-site, and cleanup actions taken to date,
9. Description of area affected by the discharge, including name of water body affected, if any; and,
10. Other persons or agencies contacted.

(b) Unauthorized releases or spills of 1,000 gallons per incident or less shall be reported orally to the



CITY OF FORT MYERS SEWER OVERFLOW RESPONSE PLAN (SORP)

Department within 24 hours from the time that the owner/operator of the collection/transmission system becomes aware of the circumstances.

(c) The oral notification shall be followed by a written submission, which shall be provided within five days of the time that the owner/operator becomes aware of the circumstances. The written submission shall contain: a description of the spill, release or abnormal event and its cause; the duration including exact dates and time, and if it has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence. The Department shall waive the written report if the oral report has been received within 24 hours from the time that the owner/operator of the collection/transmission system becomes aware of the circumstances, and the release, spill or abnormal event has been corrected and did not endanger health or the environment.

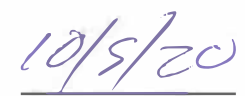
Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.087, 403.088, 403.182 FS. History— New 11-27-89, Amended 6-4-92, 5-31-93, Formerly 17-604.550, Amended 12-26-96, 11-6-03.

PROCEDURE: Wastewater Collection and Conveyance

PROCEDURE TITLE: 31.5 Infrastructure Condition

APPROVED:


Public Works Operations Superintendent


Date

APPROVED:


Public Works Director


Date

PURPOSE: To provide a collection and conveyance system of wastewater that complies with local, state, federal, provincial and Water Environment Federation standards.

SUPPORTING DOCUMENT(S):

1. Wastewater Work Order Reporting
2. Wastewater Collection and Conveyance Procedures
3. Wastewater Work Order Samples
4. Sanitary Sewer Master Plan <https://www.cityftmyers.com/Sewer-Master-Plan-PDF>
5. Reclaimed Water Master Plan <https://www.cityftmyers.com/Reclaimed-Water-Master-Plan-PDF>
6. GIS Asset Condition
7. Master Plan Letter

PROCEDURE:

Infrastructure condition of the Wastewater facilities and components are routinely evaluated and recorded during equipment rounds and daily inspections by maintenance personnel. A computer based maintenance and repair program is utilized to assist in scheduling and tracking timely maintenance and repair tasks to assure continuous successful operation of the Wastewater facilities and components and to maximize the life expectancy of the infrastructure.

The City of Fort Myers has approximately 45,000 linear feet of sewer lines with diameters of 6”–48”. Condition assessments are achieved by smoke testing, visual inspections and CCTV (Closed-circuit television) visuals.

Inspections of the City’s current sewer conditions aid in the design of maintenance strategies, assist in defining repair/replace decisions, and provide data for periodic updating of the City’s Sewer Collection System Master Plan. Force main route inspections are performed to ensure normal functioning and to identify potential problems such as unusual noise, vibration, pipe joint

leakage and displacement, valve arrangement and leakage, lift station operation and performance, discharge pump rates and speed, and pump suction and discharge pressures.

The Lucity reporting system is used to target the most vulnerable assets for evaluation regarding capital improvements and updating the City's master plans. The City is in process of updating its Utilities Master Plan. All reporting conditions are forwarded to the Engineering Division through electronic records.

The Asset conditions are recorded in the City's GIS System. The value of Excellent, Good, Fair, or Poor is notated.

All supporting documents are located in the Superintendent's office.

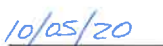
PROCEDURE: Wastewater Collection and Conveyance

PROCEDURE TITLE: 31.9 Illicit Discharges

APPROVED: 
Public Works Operations Superintendent


Date

APPROVED: 
Public Works Director


Date

PURPOSE: To provide a collection and conveyance system of wastewater that complies with local, state, federal, provincial and Water Environment Federation standards.

SUPPORTING DOCUMENT(S):

1. FDEP Compliance Inspection Pretreatment Program Audit
2. Enforcement Response Plan
3. Florida Administrative Code 62-625.500
4. City Code of Ordinance 90-284 – Illicit Discharges and Connections
5. City Code of Ordinance 90-293 – Violations
6. City Code of Ordinance 90-294 – Determination of Compliance or Noncompliance
7. City Code of Ordinance 90-295 – Notice of Violation
8. City Code of Ordinance 90-296 – Assessment of Penalty for Noncompliance

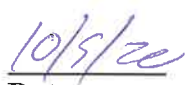
PROCEDURE:

This function is regulated by the Wastewater Treatment Plant. The FDEP approved industrial pretreatment program includes an approved Enforcement Response Plan that clearly defines the control authority's escalating responses for illicit discharges or industrial discharges that do not comply with discharge regulations. This plan is available for review in the Pretreatment Office and the conference room at the Central Plant. The City's Code of Ordinances state that any dumping, spilling, or discharging of any non-stormwater material to any surface area of stormwater management system shall be prohibited, unless allowed by prior written approval from the stormwater utility director, or his designee. Prohibited illicit discharges shall require spill response, spill control, and spill cleanup as designated and prescribed by the stormwater utility director. Penalties for noncompliance shall be in accordance with Section 90-296. The City of Fort Myers Code of Ordinance manuals are available for review in the Central Plant Conference Room. Ordinances are updated by the City Clerk as needed and distributed to each division for updating. The Operations Manual is located in the Operations Superintendent's office.

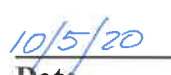
PROCEDURE: Wastewater Collection and Conveyance

PROCEDURE TITLE: 31.12 Sanitary Sewer Overflows

APPROVED: 
Public Works Operations Superintendent


Date

APPROVED: 
Public Works Director


Date

PURPOSE: To provide a collection and conveyance system of wastewater that complies with local, state, federal, provincial and Water Environment Federation standards.

SUPPORTING DOCUMENT(S):

1. Sewer Overflow Response Plan
2. City of Fort Myers Safety Program
3. Abnormal Event Malfunction Report
4. Lucity sample service order

PROCEDURE:

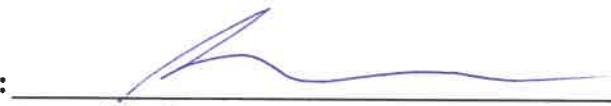
All Wastewater staff will comply with The Sewer Overflow Response Plan (SORP) which is designed to ensure that every report of a sewage overflow incident is immediately dispatched to the appropriate City of Fort Myers Sewer Department personnel for confirmation and resolution. Quick response will minimize the effects of the overflow with respect to impacts on public health, beneficial uses and the water quality of surface waters and on customer service. The SORP further includes provisions to ensure safety, pursuant to the directions provided by the Florida Department of Environmental Protection (FDEP) and that notification and reporting is made to the FDEP local office and the State Warning Point when applicable.

Employees are required to complete all mandatory safety training courses and follow all safety precautions (i.e. Hazardous Materials, Work Zone Safety, Personal Protective Equipment-PPE, etc.) located in the Citywide Safety Manual.

PROCEDURE: Wastewater Collection and Conveyance

PROCEDURE TITLE: 31.13 Testing Alarms

APPROVED:


Public Works Operations Superintendent

11/18/20
Date

APPROVED:


Public Works Director

11/15/20
Date

PURPOSE: To provide a collection and conveyance system of wastewater that complies with local, state, federal, provincial and Water Environment Federation standards.

SUPPORTING DOCUMENT(S):

1. Lift Station Run Times Log Sheet
2. Lucy Lift Station Alarm Work Order
3. Lift Station Run Times Procedure
4. Lift Station Run Time Spreadsheet Example

PROCEDURE:

The City of Fort Myers has a web-based alarm system on its lift stations for alarm notification. Currently the City has 88 lift stations on Data Flow System SCADA(Supervisory Control and Data Acquisition) and 84 on Omnisite.

There are five (5) alarms associated with Lift Stations:

- High level of wet well
- Low level of wet well
- Pump failure
- Power failure
- High level float

To test these alarms, a 4-20ma signal generator is used to simulate the above issues to make sure that these alarms are functioning properly to alleviate immediately any failure in the Wastewater Collection and Conveyance System. These alarms are tested once a month and on an “as needed” basis. Testing is scheduled by a Lucy work order. All results of alarm testing are recorded on the Lift Station Run Times log sheets and entered in the Lucy system.

All supporting documents are located in the Superintendent’s office.

Attachment 4

**Photographs of Pipe Crossing Manuel
Branch**







Attachment 5

Photographs of Trash Cleanup Event





Manuel Branch Park and Canal Cleanup September 25, 2021

Volunteers gathered trash and debris from the Manuel Branch Park, the water stream that flows along Canal Street and nearby roadways. During this cleanup the participants made a significant improvement to this area by removing 540 pounds of litter. By getting this debris removed from the environment it was kept from flowing into our natural waterways and doing considerable harm to wildlife and our water quality.



Attachment 6

Adopt a Canal



Adopt-a-Canal Program

Mr. Richard Moulton
Director of Public Works

Introduction

Adopt-a-Canal (AAC) programs operate nationwide and have in some cases reduced Canal litter by 100% on sponsored canals. Acknowledging volunteers and encouraging communities to respect the good work of others in their community can reduce the thoughtless disposal of waste.

Canal adoption involves communities taking a special interest in maintaining the appearance of Canals and ditches in their community through the regular removal of litter.

Local communities and community based groups are encouraged to 'adopt' sections of canals and pledge to keep them clean for a contracted period of time. Large signs shall be erected to acknowledge the efforts of 'adopters' and to remind others that littering is not an acceptable practice.

The proposed City of Fort Myers AAC program is intended to be a practical environmental initiative to increase community awareness of the damaging effect canal litter has on the local environment and civic image.

The program is ultimately designed to increase canal litter collection on the main canals and ditches in the City of Fort Myers.

Aims/Objectives

The aim of the City of Fort Myers Adopt a Canal program is to decrease the amount of litter in the City's municipal separate storm sewer system (MS4) with community-focused organizations, groups, individuals and businesses that will clean their local roadside canal or ditch environment through a sponsorship arrangement.

The objectives of the Adopt a Canal program are:

- To increase community awareness of the positive effect that litter free canals and ditches have on the environment and the local community image.
- To encourage the community to acknowledge litter as a problem requiring local solutions by involving community groups and organizations in the adoption of sections of canals and ditches

Benefits

Adopt-a-Canal will benefit the community by:

- Identification and reduction of "high incidence" litter areas;
- Care for the local environment;
- Increased awareness of the effects of littering; and
- Improved health, safety and attractiveness.

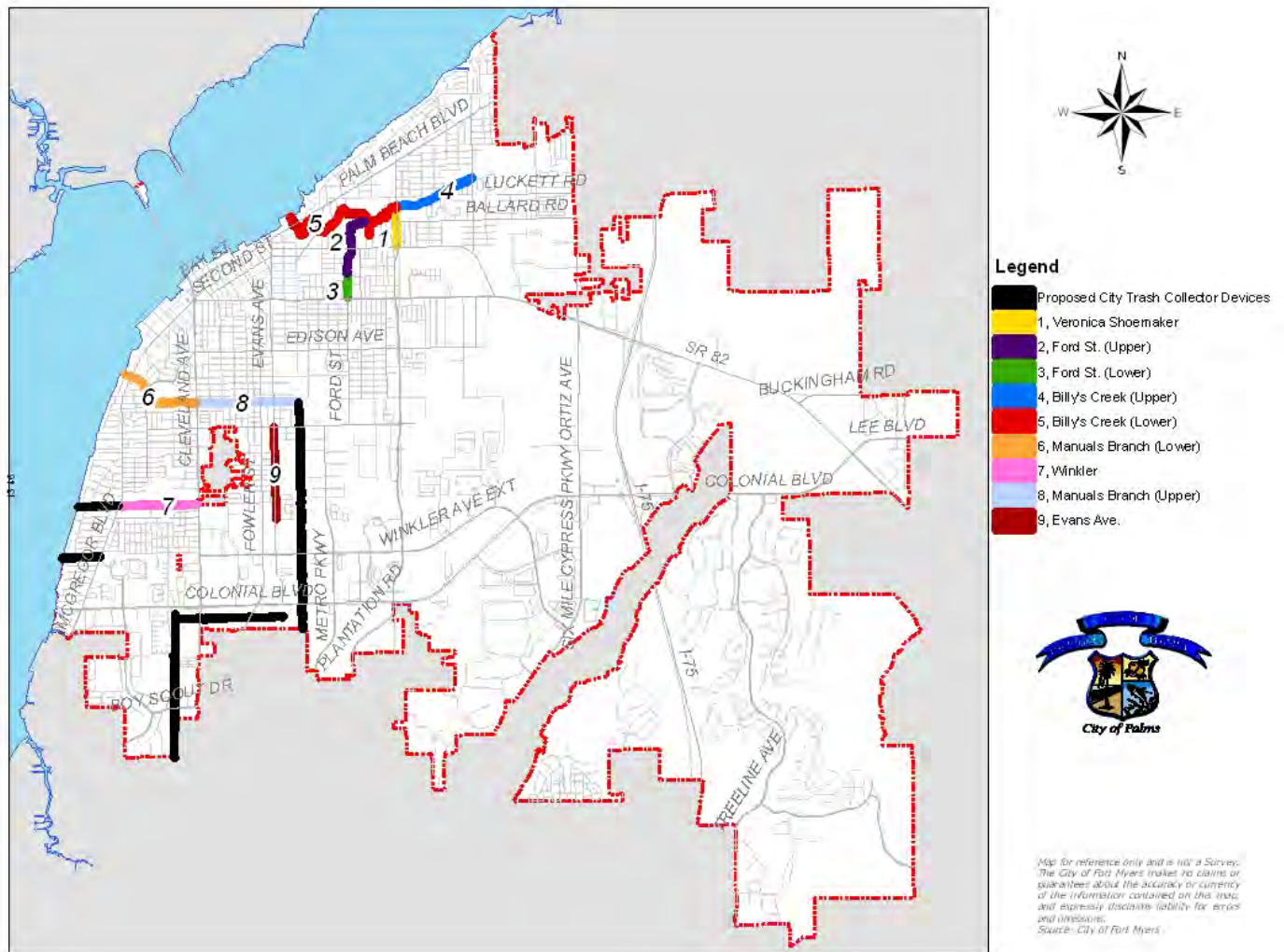
Proposed Canals for the Program

Canals proposed to be sponsored through the program (and displayed in Figure 1) are:

1. Billy Creek (Upper)
2. Billy Creek (Lower)
3. Manuals Branch
4. Carrell Canal
5. Ford St. Canal
6. Winkler Canal
7. North Colonial Waterway
8. Ten Mile Canal
9. Lazy Boy (aka Galloway) Canal (L-2 & L-3)
10. Veronica Shoemaker Canal (Marion St. to Michigan Ave.)

Other canals may be included in the program at the request of the community or the City Council but it is the intention of the program to be concentrated on these main canals so as to maintain a consistent level of cleanliness.

Figure 1:



Sponsor Selection

The City will call for Expressions of Interest (see appendix A) in adopting selected canals (from those listed in Figure 1 as priority canals) and selections of sponsors will be made based on the following criteria:

- Ability of the applicant to fulfill the commitments of the program.
- A minimum canal length to be adopted of 0.5 miles for all new sponsors.
- Connection between the applicant and the selected canal or ditch section.
- Preference to existing sponsors to continue with their selected canal over new sponsors (if existing).
- Preference to new sponsors over existing sponsors for new canal sections to increase the sponsor base group.

After this process, if more than 1 potential sponsor remains, then discussions will be undertaken to look at sharing or other arrangements to ensure maximum participation in the program.

Safety Requirements

- Prior to the first canal cleanup, a designated group representative should visit the adopted canal section to survey the area and find a safe meeting place.
- Prior to the first cleanup, the designated group leader or the entire group must attend an instruction and safety meeting conducted by the City of Fort Myers. Each cleanup participant must sign a liability release form. The group leader shall be responsible for getting all volunteers to sign liability waivers that are supplied by the City on the day of the clean up. The waivers are to be returned to the City along with other required documentation within ten (10) days after the scheduled clean up.
- Individuals under 18 may participate in a canal cleanup only if supervised by an adult. Groups must provide at least one adult supervisor for every six minors. All participants must be at least 12 years old and able to swim.
- Cleanup participants must wear a bright orange safety vest.
- Cleanups shall be scheduled during daylight hours and during fair weather. Most locations will consist of a 4 hour cleanup time period
- Cleanup participants are encouraged to take breaks, drink fluids and avoid overexertion. Groups should bring plenty of water, cell phone and first aid kit.
- Plastic bags, cups, paper, bottles, small pieces of wood, etc. are just a few of the examples of items to be picked up.
- Cleanup participants should document any hazardous or unsafe materials and large items (i.e. shopping carts, tires, bicycles, lumber, trees etc.), to be picked up at a later time by City staff.
- City of Fort Myers shall provide maps, forms, safety vests, gloves, long handled nets, litter grabbers, and garbage bags.
- The designated group representative must notify the City of Fort Myers one week prior to scheduled cleanup.
- All litter collected will be left in a designated pickup location and the group representative will fill out the appropriate paperwork and collect all the equipment to be used again on the next scheduled cleanup.

City's Commitment

The City is committed to providing the following for the Adopt-a-Canal program:

- Supply canal clean up equipment.
- Install acknowledgement signs suitable to the site including the name and logo, if applicable, of the sponsor. No information on contact details or location will be included.
- Acknowledge the efforts of the sponsors on the City's web site.

Volunteers shall be recognized for their efforts by the City by the following means:

- At the end of one year of service, all groups shall be recognized for their efforts and total volume of trash collected at a public meeting and/or gathering.
- At the end of each group's agreement term, each group shall receive a plaque to recognize the total volume of trash collected and shall be presented by the Mayor at a public meeting and/or gathering.

Sponsor's Commitments

Sponsors of the Adopt-a-Canal program agree to:

- Sign a program agreement form with the City for a 2 year period
- (See appendix B).
- Undertake a mutually agreed number of clean ups per year.
- Notify the City, in a timely manner, of any incidents, potential problems observed and or accidents that may have occurred in undertaking the program.
- Complete the required forms in Appendix C and D for every clean up event.

Cancellation of Sponsorship Agreement

The City reserves the right to cancel any Adopt-a-Canal sponsorship arrangement if the sponsor fails to fulfill their commitment and remove acknowledgement signs.

Disposal of Litter

Disposal of collected debris will be carried out by the City of Fort Myers sanitation department on the following business day.

Canal Clean up Kits

Contents of these kits are:

- City Forms
- Safety Vests (provided once per agreement term, if needed)
- Gardening and or leather gloves (provided once per agreement term and as requested.)
- Long handled nets (provided once per agreement term)
- Grabbers (provided once per agreement term)
- First aid kit (provided once per agreement term)
- Litter bags – plastic

Safety requirement Instructions shall be provided by the City during a Stormwater Education Class.

Appendix A

Expression of Interest Form

Expression of Interest Form

Adopt-a-Canal Program

Expression of Interest

The City of Fort Myers Adopt-a-Canal Program is an attempt at reducing canal litter on its environment and community through partnerships between business, organizations, civic groups and Local Government.

A number of canals and ditches are up for adoption to caring organizations that have the right qualities to ensure canal litter is kept to a minimum for the next 2 years.

If your group and or organization possess the following qualities and would like to be considered as a potential canal adopter please complete the attached application form and send to:

Richard Thompson, PE
City of Fort Myers
PO Box 2217
Fort Myers Fl. 33902-2217

Or fax to 239-344-5943 or email to rthompson@cityftmyers.com

Appropriate canal adopter candidate qualities include:

- A passion to rid the City of Fort Myers of Canal and ditch litter.
- A desire to actively contribute to the cleanliness of the City of Fort Myers.
- Good common sense
- Mental Alertness
- Good physical condition, including sight and hearing
- Must be at least 18 years old. Less than 18 years old must be accompanied by an adult supervisor. No more than 6 minors to a group. (Minimum 12 years of age)
- A belief in the need to present our City in the best possible light, and

- A commitment to ensure litter is controlled on the nominated canals and ditches until the end of the mutually agreed upon period.

Private businesses and community groups are encouraged to participate.

Your commitment will involve a 2 year agreement to care for the nominated canal or ditch.

Your group will be given recognition through attractive signs, and on the City's web site.

All enquires regarding the Adopt-A-Canal program can be made to:

Richard Thompson

Telephone No: 239-321-7630

Adopt-a-Canal Program

Expression of Interest Form

Please complete this form and return to the City.

By email: rthompson@cityofmyers.com or by Fax: 239-344-5943

Attention: Adopt-a-Canal Program

or mail to: **Engineering Dept / Stormwater Management
City of Fort Myers
PO Box 2217, Fort Myers, FL 33902-2217**

Attention: Adopt-a-Canal Program

Organization/Business Name: _____

Contact: _____ Position: _____

Address _____

Phone: _____ Email: _____

Which canal do you wish to adopt?

Canal Name: _____ Neighborhood: _____

From: _____ to: _____ Distance: _____ Miles

How often are you prepared to care for and remove litter from the nominated canal?

Every 11 weeks ☐ Every 13 weeks ☐ other, specify _____

(Note: agreements are for 2 years with a minimum of 0.5 miles of canal)

State the reasons why your organization should be considered a suitable adopter of local canals.

Note: The application to adopt a canal is an expression of interest only. Upon receipt of all such expressions of interest, suitable canal adopters will be chosen and allocated a canal corridor in need of care and attention. Should the nominated canal not be suitable, alternative sites may be considered.

Thank you for your interest in the City of Fort Myers Adopt-a-Canal Program.

Appendix B

Volunteer Sponsorship Agreement

Volunteer Sponsorship Agreement

Adopt-a-Canal Program
Canal Adoption Agreement
Between
City of Fort Myers
And

Group/Organization/Business:_____

Contact Name:_____

Signature:_____

Date:_____

Signature of City Contact :_____

Portion of canal to be sponsored:_____

Canal Name:_____

From:_____

To:_____

Distance:_____

Conditions of Adoption Agreement

The adopting organization agrees to the following:

1. Carry out canal clean up no less than ____4____ times per year on the Nominated canal for a period of 2 years from the date of this agreement Commencing from _____ 20__ and ending _____ 20__ .
2. Follow the safety requirements as outlined by the City and apply good common sense to the tasks.
3. The group will hold the City of Fort Myers harmless for any claims, made against the City in respect of damage to property, injury to persons or any other claim arising out of the Adopt-a-Canal activity.
4. The group shall designate a group leader with a backup as a point of contact for the City to coordinate clean up efforts with. The group leader shall be responsible for having volunteers sign the Liability Waiver Form, shown in Appendix C, and complete the Clean Up Summary Form, shown in Appendix D, for every clean up event. These forms shall be returned to the City within ten (10) days after the scheduled clean up.
5. Prior to the first cleanup, the designated group leader and/or the entire group must attend an instruction and safety meeting conducted by the City of Fort Myers. The group shall be educated on safety requirements, identification of hazardous material and stormwater pollution.
6. The group leader is to contact the City a minimum of five (5) days prior to the carrying out of any clean up activities to notify when work will be carried out.
7. Groups containing young people under the age of 18 years shall have no less than one (1) adult supervisor per six (6) young people present at all times during clean up operations.
8. _____ will immediately report any incidents that occur during an Adopt-a-Canal activity to the nominated City contact officer via a telephone call to be backed up with a completed Incident Report form.

9. The City agrees to:

- Provide safety vests and signs– as required
- Provide long nets, grabbers and install acknowledgement signs - at execution of agreement
- Supply litter bags and pick-up of litter collected – for every schedule clean up event
- Provide gloves – at execution of agreement and as requested
- Provide recognition on City's website to participating organizations and at an annual public meeting and/or event.

I the undersigned and authorized official of _____ agree to abide by the terms and conditions specified in the City of Fort Myers Adopt-a-Canal program as described above.

Name: _____

Signature: _____ Date: _____

City Contact : _____ Date: _____

Appendix C

Liability Waiver Form



**CITY OF FORT MYERS FLORIDA
ADOPT A CANAL PROGRAM
LIABILITY WAIVER FORM**

Group Name: _____

Date of Scheduled Clean Up: _____

I accept all responsibility for any damages that may occur as a result of this activity. I agree to hold the City of Fort Myers harmless and indemnify the City of Fort Myers, its officers, agents, employees and/or contractors, from lawsuit, damages or injuries. As part of this release and waiver of liability, I understand and accept that the only cleanup allowed is for the canal right of way, and further accept that no power tools, motorized vehicles or similar instruments may be used in such activities.

By signing this form, I understand that I am releasing the City of Fort Myers from any and all liability from my participation in clean up and related activities for the clean up event.

Print Name	Signature
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	

Appendix D

Clean Up Summary Form



**CITY OF FORT MYERS FLORIDA
ADOPT A CANAL PROGRAM
CLEAN UP SUMMARY FORM**

Group Name: _____

Date of Scheduled Clean Up: _____

Group Leader Completing Form: _____

VOLUME OF DEBRIS COLLECTED

Number of Trash Bags Collected: _____

Estimated Cubic Yards of Debris Removed From Canal: _____

*****Note that the trash bags issued by the City can hold a maximum volume of two (2) cubic yards of trash, if completely filled. Use this as a unit of measure to estimate the total volume of trash collected.***

OBSERVED OBSTRUCTIONS AND HAZARDS

Describe any large debris or hazardous/unsafe material observed in the canal that was unable to be removed by volunteers. Provide a detail of the material and location in reference to adjacent roadways or home addresses.

PORTION TO BE COMPLETED BY CITY STAFF

Estimated Volume of Trash Collected (cu yds) _____

Staff: _____ Date Confirmed: _____