



June 10, 2022

Mr. Anthony Rodriguez:
Zoning Manager
Lee County Community Development
1500 Monroe Street
Fort Myers, Florida 33901

**RE: Fifth Annual Monitoring Report
RH Golf LLC, River Hall, Lee County, Florida
Zoning Violation Case # VIO2017-18588**

Dear Mr. Rodriguez:

Water Science Associates is pleased to provide the fifth annual water quality monitoring report conducted at the River Hall Golf Course, located in Lee County, Florida and to request removal of Fipronil and Glyphosate from the required parameters to be monitored moving forward. The purpose of this monitoring report is to evaluate various influences on the water quality conditions in the River Hall Golf Course lake system and monitor key water quality indicators. The report was prepared in accordance with the requirements of Zoning Resolution Z-15-003 dated June 3, 2015. Condition 6.k. of the zoning resolution requires submittal of an annual monitoring report of surface water quality to assess the potential for herbicide, pesticide, or fertilizer contamination within the golf course. The Water Quality Monitoring Plan was approved by Lee County Department of Natural Resources (LCDNR) on February 2, 2018. The initial annual monitoring report was submitted on April 3, 2018, the second annual monitoring report was submitted on April 9, 2019, the third annual monitoring report was submitted on April 1, 2020, and the fourth annual monitoring report was submitted on March 15, 2021.

A request to remove Fipronil and Glyphosate was made as part of the second annual monitoring report submittal in 2019 and LCDNR's response dated May 9, 2019 (See Exhibit A) indicated that the consideration would be made after completion of 5 years of monitoring. This report provides definitive demonstration that neither Fipronil nor Glyphosate have been detected in the waters sampled for the past 5 years during 9 separate sampling events. The cost for continued monitoring of these parameters is excessive due to the complexity of the laboratory analysis and it is our conclusion that continued monitoring for them is unnecessary and unwarranted based on the record showing that they have not been shown to be present at detectable levels. It is hereby requested that the parameter of Fipronil and Glyphosate be removed from the monitoring required for River Hall.

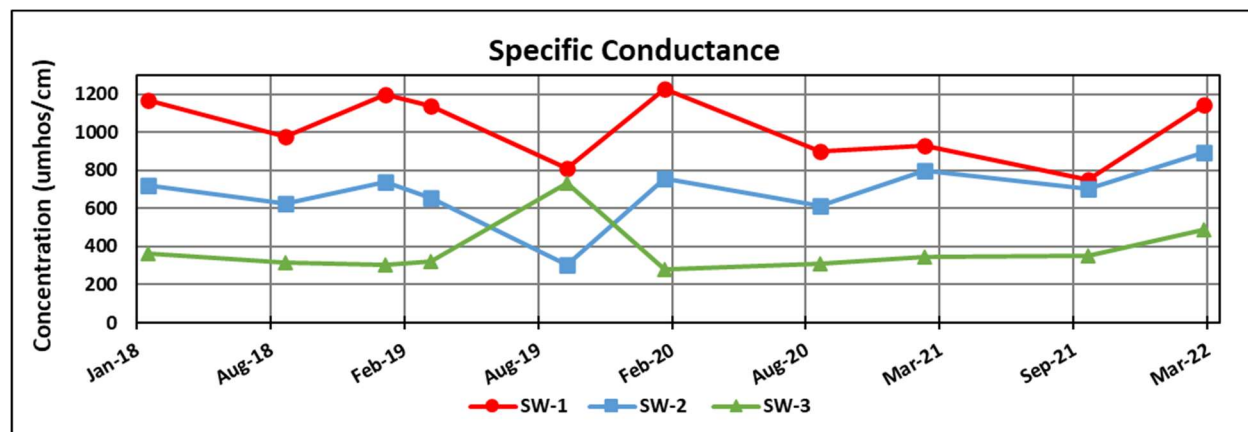
Since the fourth annual monitoring report, two additional sampling events have been conducted at the sites designated in the approved plan and the interim results of the two events have been submitted via e-mail reports to Lee County on February 2, 2022 and June 8, 2022. During both of the two most recent sampling events, samples were collected at sites designated as SW-1, SW-2, and SW-3 located respectively at the three lakes Lake 3-3, 4-1B, and Lake 4-2C. Refer to Figure 1 for a map showing the sample site locations. The Water Quality Monitoring Plan requires semi-annual sampling events and the preparation of an Annual Monitoring Report for submittal to Lee County. LCDNR requested that results of the laboratory analyses of water samples be provided in Electronic Data Deliverable (EDD) format for compatibility with the Florida Department of Environmental Protection (FDEP) automated data processing tool (ADaPT). The formatted data has been submitted via e-mail to LCDNR after analysis of each of the completed sampling events and are therefore not included in this report. Refer to Table 1 for a summary of the monitoring results and refer to Exhibit B for the laboratory water quality analysis reports.

The two most recent semi-annual sampling results were compared to applicable target levels for Class III surface water outlined in Chapter 62-302, F.A.C. Most parameters listed in Table 1 have standards based on background, trends, and inter-relationships with other contaminants but do not have numeric target levels. However, typical stormwater

pollutant concentrations for various types of land uses representative of Central and South Florida conditions have been compiled in a report by Harvey Harper (1999). That report suggests typical concentrations for total nitrogen and total phosphorus of stormwater runoff for single-family residential land uses are 2.29 mg/L and 0.30 mg/L respectively. For comparison purposes, the results of the water quality analysis report indicate that values for total nitrogen ranged from 0.66 mg/L to 1.18 mg/L and values for total phosphorous ranged from 0.014 mg/L to 0.039 mg/L in samples from all three sampling points. These results indicate that nutrient levels in the three sampled lakes are very low in comparison to typical stormwater runoff for residential land use. Development at River Hall remains at about 50% buildout and therefore much of the land surface within the individual basins is relatively undisturbed and has a low potential to contribute nutrients to runoff.

Chlorophyll a and pheophytin (a breakdown product of chlorophyll) exhibited values ranging from a high of 12 mg/m³ to a low of 1.87 mg/m³. These compounds have no regulatory limits or numeric targets but are often used to evaluate levels of algal concentrations in aquatic systems. It should be noted that the highest sample result of 12 mg/m³ was from a sample collected from the shoreline area of SW-1 adjacent to the outfall of the lake.

Results of the water quality analysis reports indicate that the parameter of specific conductance is consistently within the numeric target level of less than 1250 micromhos per centimeter (umhos/cm) for Class III surface water. The specific conductance values have demonstrated a spatial trend with SW-1 having the highest levels of the three sites as shown in Figure 1 below. The specific conductance in this most downgradient lake is influenced by use of Lower Hawthorn Aquifer and Sandstone Aquifer Wells to supply a component of irrigation on the golf course. The higher specific conductance values typically occur during the dry season when the wells are used for irrigation.



Plot of Specific Conductance Values for SW-1, SW-2 and SW-3

Dissolved oxygen was slightly below the target level of 5 mg/L in all three lakes on five of six samples collected. Dissolved oxygen concentrations vary with respect to environmental conditions of the water body, which include temperature, salinity, and vegetative growth. The results show that there were no detections of the synthetic organic chemicals Glyphosate or Fipronil. Neither Fipronil nor glyphosate have specific target levels listed in Chapter 62-302.

This annual report demonstrates that the water in the lake system has relatively low nutrient and aquatic algae levels, had no quantifiable levels of the most common pesticide or herbicide used on the golf course, and that the influence of groundwater from recharge wells is reflected by trends in specific conductance. The data evaluation does not indicate exceedances of nutrient or other water quality parameters or temporal trends showing ongoing degradation of water quality. Overall, the lakes have significantly lower nutrient levels than is typical for residential stormwater systems.

Please provide a response to our request to remove Fipronil and Glyphosate from the required monitoring parameter list. Should you have any questions or would like additional information, please do not hesitate to contact Andrew McThenia or Jared Wilkey via phone or email.

Sincerely,



Andrew McThenia, P.G.
Senior Hydrogeologist
Water Science Associates, Inc.
Office: 239.529.4396
Mobile: 239.246.1972
Email: andy@wsaconsult.com



Jared Wilkey
Staff Scientist
Water Science Associates, Inc.
Office: 239. 271.2472
Mobile: 239.784.8513
Email: jared@wsaconsult.com

FIGURE 1

Map Showing Sampling Locations



Water Science Associates

PROJECT NAME: RIVER HALL GOLF COURSE

COA 30437

PROJECT NUMBER: 11317-01

APRIL 2018

FIGURE 1. MAP SHOWING SAMPLING LOCATIONS.

TABLE 1

Summary of Surface Water Quality Results

Table 1. Summary of Water Quality Results

Parameter	Units	INITIAL ANNUAL REPORT				SECOND ANNUAL REPORT											
		2/15/2018				8/27/2018				1/14/2019				3/19/2019			
		Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL
		Results				Results				Results				Results			
Nitrite	mg/L as N	ND*	ND	0.052	0.01	ND	ND	ND	0.01	ND	ND	ND	0.01				0.01
Nitrate	mg/L as N	ND	ND	ND	0.04	ND	ND	ND	0.04	ND	ND	ND	0.01				0.01
Total Nitrogen	mg/L as N	0.66	0.7	0.56	0.1	ND	ND	ND	0.1	0.79	0.98	0.54	0.1				0.1
Total Phosphorus	mg/L as P	ND	ND	ND	0.05	ND	ND	ND	0.05	ND	ND	ND	0.05	0.017	0.027	0.012	0.004
Chlorophyll a	mg/m ³	4.27	4.45	37.4	1	13.4	12	6.01	1	10	8.01	ND	1				1
Pheophytin	mg/m ³	4.7	ND	11.2	1	3.94	2.94	1.47	1	5.87	3.83	1.87	1				1
Temperature (field)	°C	26.5	27.7	28	0.1	33	33.4	32.7	0.1	21.7	24.7	22.5	0.1	28.4	28.1	26.9	0.1
pH (field)	S. U.	7.84	7.99	7.99	0.01	7.77	7.64	7.84	0.01	7.91	8.03	8.06	0.01	7.91	7.95	7.98	0.01
Conductivity	µmhos/cm	1166	720	364.9	1	977	627	318.5	1	1196	740	303.8	1	1138	654	324.2	1
Dissolved Oxygen (field)	mg/L	4.86	4.93	4.55	0.1	4.67	3.95	5.31	0.1	5.95	5.46	7.08	0.1	4.82	5.28	6.11	0.1
Fipronil	ug/L	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	0.5				0.5
Glyphosate	mg/L	.0042 U**	.0042 U	.0042 U	0.0042	.0042 U	.0042 U	.0042 U	0.0042	.0042 U	.0042 U	.0042 U	0.0042				0.0042

Parameter	Units	THIRD ANNUAL REPORT								FOURTH ANNUAL REPORT							
		9/26/2019				2/11/2020				9/16/2020				2/10/2021			
		Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL
		Results				Results				Results				Results			
Nitrite	mg/L as N	ND	ND	ND	0.03	ND	ND	ND	0.01	ND	ND	ND	0.01	ND	ND	ND	0.01
Nitrate	mg/L as N	ND	ND	0.068	0.01	0.1	ND	ND	0.01	ND	ND	ND	0.01	ND	ND	0.229	0.01
Total Nitrogen	mg/L as N	1.04	0.51	0.95	0.1	0.09	0.033U	0.033U	0.05	0.69	0.73	0.45I	0.086	1.16	0.96	1.01	0.03
Total Phosphorus	mg/L as P	ND	ND	ND	0.05	0.021	0.026	0.01	0.004	0.03	0.041	0.023	0.0028	0.0095	0.022	0.0082	0.0028
Chlorophyll a	mg/m ³	11.4	4.01	10	1	14	7.12	ND	1	10.7	20	9.35	1	ND	ND	ND	1
Pheophytin	mg/m ³	2.67	2.07	4.47	1	1.87	ND	ND	1	2.4	4.27	3.27	1	2.54	2.78	1.26	1
Temperature (field)	°C	27.7	29.1	29.3	0.1	24.1	26.1	25.2	0.1	31.7	32	30.7	0.1	22.7	23.2	23.3	0.1
pH (field)	S. U.	7.83	7.7	7.72	0.01	7.51	8.05	8.05	0.01	7.44	7.57	6.99	0.01	8.03	8.21	7.93	0.01
Conductivity	µmhos/cm	810	302.7	731	1	1229	759	277.3	1	902	614	307.2	1	927	799	348.2	1
Dissolved Oxygen (field)	mg/L	5.16	4.82	4.11	0.1	4.25	4.03	4.01	0.1	3.57	4.71	2.76	0.1	5.66	4.13	5.41	0.1
Fipronil	ug/L	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	0.5
Glyphosate	mg/L	0.0042U	0.0042U	0.0051I***	0.0042	0.0042U	0.0042U	0.0042U	0.0042	0.0042U	0.0042U	0.0042U	0.0042	0.0042U	0.0042U	0.0042U	0.0042

Parameter	Units	FIFTH ANNUAL REPORT							
		9/28/2021				3/9/2022			
		Site SW-1	Site SW-2	Site SW-3	MDL	Site SW-1	Site SW-2	Site SW-3	MDL
		Results				Results			
Nitrite	mg/L as N	ND	ND	ND	0.01	ND	ND	ND	0.01
Nitrate	mg/L as N	ND	ND	ND	0.01	ND	ND	0.15	0.01
Total Nitrogen	mg/L as N	1.18	0.66	0.98	0.03	0.75	0.89	1.05	0.03
Total Phosphorus	mg/L as P	0.039	0.015	0.014	0.0028	0.07 U	0.07 U	0.07 U	0.07
Chlorophyll a	mg/m ³	12	4.67	5.34	1	4.01	6.68	6.01	1
Pheophytin	mg/m ³	5.27	1.87	2.14	1	4.41	4.07	3.34	1
Temperature (field)	°C	31.4	31.8	31	0.1	26.3	26.3	26.7	0.1
pH (field)	S.U.	7.51	7.6	7.16	0.01	8.03	8.26	8.22	0.01
Conductivity	µmhos/cm	750	701	354.1	1	1144	896	490	1
Dissolved Oxygen (field)	mg/L	4.8	3.69	3.25	0.1	4.74	5.32	3.99	0.1
Fipronil	ug/L	<0.49	<0.48	<0.47	0.5	<0.48	<0.48	<0.48	0.5
Glyphosate	mg/L	0.0042U	0.0042U	0.0042U	0.0042	0.0042U	0.0042U	0.0042U	0.0042

ND* = Not Detected

U** = Compound was analyzed for but not detected.

I*** = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

EXHIBIT A

Request LCDNR to Modify Parameters List 04/09/2019

From: [Werst, Lee](#)
To: [Ennis, Audra](#); [Andrew McThenia](#)
Cc: [Kreiger, Lisa](#)
Subject: Re: River Hall Annual Report
Date: Thursday, May 9, 2019 6:49:34 AM

Good Morning Audra,
It is the County's practice to review data for 5 consecutive years to look for trends,
It this young stage of monitoring, we respectfully request that the existing constitution l list
stay in place for a mini of 3 more years.
At that time we would then welcome the applicants request to review and update their
monitoring requirements.

Sent from my iPhone

On May 8, 2019, at 1:07 PM, Ennis, Audra <AEnnis@leegov.com> wrote:

Lee,
Who can address the question below?

Audra Ennis
Zoning Manager
Lee County Community Development
(239)533-8335 (Phone)
(239)485-8344 (Fax)
AEnnis@leegov.com

From: Andrew McThenia [<mailto:andy@wsaconsult.com>]
Sent: Wednesday, May 08, 2019 9:19 AM
To: Ennis, Audra
Cc: Kibbey, Keith; Werst, Lee; Carl A. Barraco; Grady Miars; SteveC@barraco.net;
Toussaint, Tracy
Subject: [EXTERNAL] RE: River Hall Annual Report

Hi Mrs. Ennis:

I was wondering if you could let me know when I might be able to expect a response to
my request for a change to the reporting parameters.

I am trying to develop a budget another year of sampling/reporting and the laboratory
fees are the most significant cost for this effort.

Thanks

Andy McThenia, P.G.



13620 Metropolis Avenue, Suite 110

Fort Myers, Florida 33912

239.529.4396 - Direct

239.246.1972 - Cell

andy@wsaconsult.com

From: Ennis, Audra [<mailto:AEnnis@leegov.com>]

Sent: Tuesday, April 9, 2019 8:11 AM

To: Andrew McThenia <andy@wsaconsult.com>

Cc: Kibbey, Keith <KKibbey@leegov.com>; Werst, Lee <LWerst@leegov.com>; Carl A. Barraco <CarlB@barraco.net>; Grady Miars <gmiars@greenpointellc.com>; SteveC@barraco.net; Toussaint, Tracy <TToussaint@leegov.com>

Subject: RE: River Hall Annual Report

Thank you Mr. McThenia,

The Department of Natural Resources will respond to the request for changes to reporting parameters.

Audra Ennis

Zoning Manager

Lee County Community Development

(239)533-8335 (Phone)

(239)485-8344 (Fax)

AEnnis@leegov.com

From: Andrew McThenia [<mailto:andy@wsaconsult.com>]

Sent: Tuesday, April 09, 2019 8:08 AM

To: Ennis, Audra

Cc: Kibbey, Keith; Werst, Lee; Carl A. Barraco; Grady Miars; SteveC@barraco.net

Subject: [EXTERNAL] River Hall Annual Report

Good Morning Ms. Ennis:

Please find attached the second annual report of surface water quality monitoring at River Hall.

Please note that we are requesting the County's approval for removal of Fipronil and Glyphosate from the list of parameters because these contaminants were undetected in each of the 3 sample events.

I appreciate the County's attention to this report and am available to answer any questions that you may have.

EXHIBIT B

Laboratory Reports of Sampling: 09/28/2021 and 03/09/2022



*Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net*

November 18, 2021

Andy McThenia
Water Science Associates
13620 Metropolis Avenue, Suite 110
Fort Myers, FL 33912
TEL:
FAX:

RE: River Hall Golf Course

Order No.: 2109A22

Dear Andy McThenia:

Sanders Laboratories, Inc received 3 sample(s) on 9/28/2021 for the analyses presented in the following report.

These results only pertain to the samples as received. These pages may include, but are not limited to: Analytical Data, Chains of Custodies, Subcontracted Data and Case Narratives for samples. Results relate only to the samples in the report.

Reports are archived for a minimum of 5 years. Copies of reports are available for a fee of \$50.00. Copies will be provided within 2 weeks of the time of the request.
Laboratory PQL's are available upon request.

Test results meet all the requirements of the NELAP standards, unless otherwise noted.
Nokomis Certificate # E84380 Fort Myers Certificate # E85457

A statement of estimated uncertainty of results is available upon request.
Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.
Sanders Laboratories follows DEP standard operating procedures for field sampling, unless otherwise noted.

Katie Strothman
Laboratory Director



*Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net*

Definition Only

WO#: 2109A22
Date: 11/18/2021

Definitions:

B: Results based upon colony counts outside the acceptable range.

G: Sample value indicates that the analyte was detected at or above the method detection limit in both the sample and the associated field blank, equipment blank, or trip blank, and the blank value was greater than 10% of the associated sample value. The value in the blank shall not be subtracted from associated samples. Also if the RPD on a field duplicate exceeds allowable control limit.

I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.

J: Estimated Value.

J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.

K: Off scale low, actual value is known to be less than the value given.

L: Off scale high, actual value is known to be greater than the value given.

NC: Not Certified. Parameter was ran but is not covered under laboratory accredited scopes.

Q: Sample held beyond acceptable holding time.

U: The compound was analyzed for, but not detected.

V: Indicates that the analyte was detected at or above the MDL in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

Y: The laboratory analysis was from an improperly preserved sample.

Z: Too many colonies were present for accurate counting.



Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net

Analytical Report

(continuous)

WO#: 2109A22

Date Reported: 11/18/2021

CLIENT: Water Science Associates

Lab Order: 2109A22

Project: River Hall Golf Course

Lab ID: 2109A22-001

Collection Date: 9/28/2021 1:32:00 PM

Client Sample ID: SW-1

Matrix: SURFACE WATER

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
NITROGEN, NITRATE + NITRITE				E353.2	Analyst: PS	
Nitrogen, Nitrate	ND	0.0100		mg/L	1	9/30/2021 10:52:00 AM
Nitrogen, Nitrate-Nitrite	ND	0.0100		mg/L	1	9/30/2021 10:52:00 AM
TOTAL NITROGEN				E351.2	Analyst: GC	
Nitrogen, Total	1.18	0.0300		mg/L	1	10/5/2021 12:18:00 PM
NITROGEN, NITRITE				A4500-NO2-B	Analyst: KR	
Nitrogen, Nitrite	ND	0.0100		mg/L	1	9/28/2021 4:04:15 PM
CHLOROPHYLL A				A10200H	Analyst: GC	
Chlorophyll A, Corrected	12.0			mg/m ³	1	9/29/2021 3:40:00 PM
Pheophytin	5.27	1.00		mg/m ³	1	9/29/2021 3:40:00 PM
FIELD PARAMETERS				FLD	Analyst:	
Conductivity, EPA 120.1	750	1.0		umhos/cm		
Dissolved Oxygen, EPA 360.1	4.80	0.10		mg/L		
pH, EPA 150.1	7.51	0.01		S.U.		
Salinity	0.36	0.01		ppt		
Temperature, EPA 170.1	31.4	0.1		deg C		
Turbidity, EPA 180.1	2.03	0.01		NTU		

Qualifiers:
H Holding times for preparation or analysis exceeded
PL Permit Limit
U Samples with CalcVal < MDL

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode



Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net

Analytical Report

(continuous)

WO#: 2109A22

Date Reported: 11/18/2021

CLIENT: Water Science Associates

Lab Order: 2109A22

Project: River Hall Golf Course

Lab ID: 2109A22-002

Collection Date: 9/28/2021 2:22:00 PM

Client Sample ID: SW-3

Matrix: SURFACE WATER

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
NITROGEN, NITRATE + NITRITE				E353.2	Analyst: PS	
Nitrogen, Nitrate	ND	0.0100		mg/L	1	9/30/2021 10:52:00 AM
Nitrogen, Nitrate-Nitrite	ND	0.0100		mg/L	1	9/30/2021 10:52:00 AM
TOTAL NITROGEN				E351.2	Analyst: GC	
Nitrogen, Total	0.980	0.0300		mg/L	1	10/5/2021 12:18:00 PM
NITROGEN, NITRITE				A4500-NO2-B	Analyst: KR	
Nitrogen, Nitrite	ND	0.0100		mg/L	1	9/28/2021 4:04:15 PM
CHLOROPHYLL A				A10200H	Analyst: GC	
Chlorophyll A, Corrected	5.34			mg/m ³	1	9/29/2021 3:40:00 PM
Pheophytin	2.14	1.00		mg/m ³	1	9/29/2021 3:40:00 PM
FIELD PARAMETERS				FLD	Analyst:	
Conductivity, EPA 120.1	354.1	1.0		umhos/cm		
Dissolved Oxygen, EPA 360.1	3.25	0.10		mg/L		
pH, EPA 150.1	7.16	0.01		S.U.		
Salinity	0.17	0.01		ppt		
Temperature, EPA 170.1	31.0	0.1		deg C		
Turbidity, EPA 180.1	2.19	0.01		NTU		

Qualifiers:
H Holding times for preparation or analysis exceeded
PL Permit Limit
U Samples with CalcVal < MDL

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode



Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net

Analytical Report

(continuous)

WO#: 2109A22

Date Reported: 11/18/2021

CLIENT: Water Science Associates

Lab Order: 2109A22

Project: River Hall Golf Course

Lab ID: 2109A22-003

Collection Date: 9/28/2021 1:55:00 PM

Client Sample ID: SW-2

Matrix: SURFACE WATER

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
NITROGEN, NITRATE + NITRITE				E353.2	Analyst: PS	
Nitrogen, Nitrate	ND	0.0100		mg/L	1	9/30/2021 10:52:00 AM
Nitrogen, Nitrate-Nitrite	ND	0.0100		mg/L	1	9/30/2021 10:52:00 AM
TOTAL NITROGEN				E351.2	Analyst: GC	
Nitrogen, Total	0.660	0.0300		mg/L	1	10/5/2021 12:18:00 PM
NITROGEN, NITRITE				A4500-NO2-B	Analyst: KR	
Nitrogen, Nitrite	ND	0.0100		mg/L	1	9/28/2021 4:04:15 PM
CHLOROPHYLL A				A10200H	Analyst: GC	
Chlorophyll A, Corrected	4.67			mg/m ³	1	9/29/2021 3:40:00 PM
Pheophytin	1.87	1.00		mg/m ³	1	9/29/2021 3:40:00 PM
FIELD PARAMETERS				FLD	Analyst:	
Conductivity, EPA 120.1	701	1.0		umhos/cm		
Dissolved Oxygen, EPA 360.1	3.69	0.10		mg/L		
pH, EPA 150.1	7.60	0.01		S.U.		
Salinity	0.34	0.01		ppt		
Temperature, EPA 170.1	31.8	0.1		deg C		
Turbidity, EPA 180.1	3.22	0.01		NTU		

Qualifiers:
H Holding times for preparation or analysis exceeded
PL Permit Limit
U Samples with CalcVal < MDL

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode

CHAIN OF CUSTODY RECORD

PAGE: OF:

ADDRESS

Ft. Myers Lab02

10090 Bavaria Rd.

Fort Myers, FL 33913

TEL: (239) 590-0337

FAX: (239) 590-0536

Website: www.sanderslabs.net



2109 A22

Please Include Email Address of Report Recipient Whenever Possible!!!

SUBMITTING COMPANY: Water Science Associates				REPORT TO: Andy McThenia				BILL TO: P. O. #							
PROJECT NAME: River Hall Golf Course		PROJECT #: WSA - River Hall Golf C		QUOTE #:		COMPANY: Water Science Associates				COMPANY: Water Science Associates					
SPECIAL INSTRUCTIONS / COMMENTS:						ADDRESS: 13620 Metropolis Avenue, Suite 110				ADDRESS: 13620 Metropolis Avenue, Suite 110					
						CITY, STATE, ZIP: Fort Myers, FL. 33912				CITY, STATE, ZIP: Fort Myers, FL. ZIP#33912					
Kit #						PHONE:				EMAIL (OR FAX IF NO EMAIL AVAILABLE):					
SAMPLER'S PRINTED NAME: Mario Pineda				SAMPLER'S SIGNATURE: [Signature]				ANALYTICAL PARAMETERS				COMMENTS: Send Fiprinol to Europhins Lab			
ITEM #	SAMPLE ID	Matrix	Bottle Type	Bottle Lot #	Date/Time Sampled	pH	GRAB "C" OR COMPOSITE "C"	NUMBER OF CONTAINERS	CHLOROA	NO2 FM	NOX	SA	TN	Methanol Preserved Weights. HOT Sample Notation. Additional Sample Description etc.	
SW-1		Surface Water	250PL-NOP	8032006	9/23/21 1332					✓	✓				
SW-1		Surface Water	250PL-H2SO4	8-038-006									✓		
SW-1		Surface Water	1LAMGU	1077003					✓						
SW-1		Surface Water		407535								✓			Fiprinol - Ship to Europhins
SW-1		Surface Water	PACE BOTTLE	052520-3518								✓			SW - Glyphosate EPA 547
SW-1		Surface Water	250PL-H2SO4	8-038-006								✓			SW - Low Level TP
SW-3		Surface Water	250PL-NOP	8039006	9/23/21 1422					✓	✓				
SW-3		Surface Water	250PL-H2SO4	8-038-006									✓		
SW-3		Surface Water	1LAMGU	1077003					✓						
SW-3		Surface Water		407535								✓			Fiprinol - Ship to Europhins

Relinquished By: [Signature]	Date: 9/23/21	Time: 1545	Received By: [Signature]	Date: 9/23	Time: 1545	REPORT TRANSMITTAL DESIRED:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	☐ HARDCOPY (extra cost)	☐ FAX ☐ EMAIL ☐ ONLINE
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY	
Temp of samples: 58 °C						Attempt to Cool? y	
Comments:							
TAT: Standard ☐ RUSH ☐ Next BD ☐ 2nd BD ☐ 3rd BD ☐							
Note: RUSH requests will incur surcharges!							

PAGE:	OF:
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Website: www.sanderslabs.net

[illegible]

Relinquished By: <i>UAP</i>	Date: <i>9/20/21</i>	Time: <i>1535</i>	Received By: <i>[Signature]</i>	Date: <i>9.28</i>	Time: <i>1535</i>	REPORT TRANSMITTAL DESIRED:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	☐ HARDCOPY (extra cost)	☐ FAX ☐ EMAIL ☐ ONLINE
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY	
TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐							
Note: RUSH requests will incur surcharges!						Temp of samples _____ °C Attempt to Cool ? _____ Comments: _____ _____	



CHAIN OF CUSTODY RECORD

PAGE:	OF:
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ADDRESS

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[illegible]

Testcode to method definitions: ALK=A2320,APC=BAMCH23,APC PETRI=AOAC 990.12,APC/G=CCMEF 6.33/AOAC 966.23,APC/ML=CCFRA 2.1,APC/SWAB=AOAC 986.33,BOD=A5210B,BOD FM=A5210B,Ca Hard=EPA 215.2,CBOD=A5210B,CBOD FM=A5210B,CHLORO-A=10200H,CL- B DW=A4500-Cl-B,CL- E NP=A4500-Cl-E,CL- SOLID=FM_5-552,CL2=E330.5,C12 FM=E330.5,COLI PETRI=AOAC 991.14,COLOR=A2120B,COLOR FM=A2120B,COND=A2510B,COND FM=A2510B,EB=AOAC 2003.01,EB C=CMMEF 8.631,EC 0157=AOAC Cert #001101,EC J=AOAC 992.3,EC01572=AOAC 996.09,ECOLI=EC + MUG,Enterococcus=E1600,ENTEROLERT=Enterolert,F=A4500-F.C,F=C=A9222D,FC FM=A9222D,FC MPN=A9221E,FC MPN FM=A9221E,FC MUG=A9223B,FC MUG FM=A9223B,FC STREP=A9230C,FCMPN=A9221E,HARD=A2340C,HPC=A9215B,LEGA=Legiolert,LIST PCR=AOAC #090701,LISTERIA BR=RI030406,LMO NO PCR=010802,MOLD=FDA/BAM CH.18,MOLD G RES=ASTM D3273,MOLD ID=McCrone,NH3=E350.1,NH3 SOLID=E350.1,NH4=E350.1,NO2=E353.2,NO2 FM=A4500-NO2-B,NO3 SOLID=E353.2,NOX=E353.2,NOX Solid=E353.2,ODOR=A2150B,ODOR FM=A2150B,OPHOS=A4500-P-E,Org N=E351.2,Org N Solid=E351.2,PH=A4500-H+-B,PH F=AOAC 981.12,pH FM=A4500-H+-B,pH Sludge=E9040C,PH SOLID=E9045D,SALM PCR=010803,SIO2=A4500-SiO2 C,S04=ASTM-D516-90,STAPH=AOAC 2003.07,Strep=A9230C,SA- Subcontract PACE BC5 ALS FRC Microbac Eurofins,TC MF=A9222B,TC MF FM=A9222B,TC MUG=A9223B,TC MUG FM=A9223B,TDS=A2540C,TDS FM=A2540C,TKN=E351.2,TKN Solid=E351.2,TN=E351.2,TN Solid=E351.2,TP=E365.4,TP Diss=E365.4,TP Solid=E365.4,TS=A2540B,TS %=A2540G,TSS=A2540D,TSS FM=A2540D,TURB=E180.1,TVSS=E160.4,Un NH3=E350.1,Y M=FDA/BAM 8th Ed.

Relinquished By: <i>WP</i>	Date: <i>9/29/21</i>	Time: <i>1545</i>	Received By:	Date:	Time:	REPORT TRANSMITTAL DESIRED: ☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:		
Relinquished By:	Date:	Time:	Received By:	Date:	Time:		
TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐						FOR LAB USE ONLY Temp of samples _____ °C Attempt to Cool ? _____ Comments: _____ 	
Note: RUSH requests will incur surcharges!							



Quarterly

Date:

9/28/21

Field Tech Amy Murry

9/28/21 Mario Pineda

Location:

W.A. River Hall Golf Course

Site	Time	Flow* Ft/sec or tidal change	Total Depth ft	Sample Depth (ft)	Water Temp EPA 170.1 (C)	DO EPA 360.1 (mg/L)	DO (%)	Cond EPA 120.1 (umhos /cm)	Salinity M 250B (pp)	pH EPA 150.1 (std units)	Turbidity EPA 180.1 (NTU)	Weather		Air Temp (C)	Secchi (ft)
												Cloud Cover	Wind		
SW1	1332	No Flow	2 ft	1 ft	31.4	4.80	63.6	750	0.36	7.51	2.03	15%	NE 9 mph	30	
SW2	1354				31.8	3.69	51.0	701	0.34	7.60	3.22	1			
SW3	1422				31.0	3.25	43.3	354.1	0.17	7.10	2.19	10		31	

Tests/Bottles/Preservatives:

Lot # Preservative

250PUN	9079006	ICE	NOX
500P	7-079-006	H ₂ SO ₄	TN
1LP	8-079-006	H ₂ SO ₄	SA couple
2LP	1077003	ICE	chloro-A
Other	407535	TRIS	

Equipment Used: (circle)

Dip Stick

2

Secchi

4999

Multi

Turb

Depth

Peri Pump

Sub Pump

20A100132

18051784

6240

4116

016549

Date Revised: 5/19/2020 Form ID: FF-03 Approved by: KS

Comments:

Field Time:

700-1520

250P
250P
1 LAG
1 LAG

9/28/21
40 mL AG

TH10

SA Fipronil
SA Oxyprate

October 11, 2021

Tami Bright
Sanders Laboratories, Inc.
1050 Endeavor Court
Nokomis, FL 34275

RE: Project: 2109A22
Pace Project No.: 35666513

Dear Tami Bright:

Enclosed are the analytical results for sample(s) received by the laboratory on September 29, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brad Smith
brad.smith@pacelabs.com
(386) 672-5668
Project Manager

Enclosures

cc: Katie Strothman, Sanders
Katie Strothman, Sanders Laboratories, Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2109A22
Pace Project No.: 35666513

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236

Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

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SAMPLE SUMMARY

Project: 2109A22

Pace Project No.: 35666513

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35666513001	2109A22-001	Water	09/28/21 13:32	09/29/21 11:50
35666513002	2109A22-002	Water	09/28/21 14:22	09/29/21 11:50
35666513003	2109A22-003	Water	09/28/21 13:55	09/29/21 11:50

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SAMPLE ANALYTE COUNT

Project: 2109A22
Pace Project No.: 35666513

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35666513001	2109A22-001	EPA 547	PFG	1	PASI-O
		EPA 365.3	CLL	1	PASI-O
35666513002	2109A22-002	EPA 547	PFG	1	PASI-O
		EPA 365.3	CLL	1	PASI-O
35666513003	2109A22-003	EPA 547	PFG	1	PASI-O
		EPA 365.3	CLL	1	PASI-O

PASI-O = Pace Analytical Services - Ormond Beach

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2109A22
Pace Project No.: 35666513

Sample: 2109A22-001 **Lab ID: 35666513001** Collected: 09/28/21 13:32 Received: 09/29/21 11:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
547 HPLC Glyphosate Analytical Method: EPA 547 Pace Analytical Services - Ormond Beach									
Glyphosate	0.0042 U	mg/L	0.0060	0.0042	1		09/30/21 18:26		
365.3 Phosph. Total Low Level Analytical Method: EPA 365.3 Preparation Method: EPA 365.3 Pace Analytical Services - Ormond Beach									
Phosphorus, Total (as P) LL	0.039	mg/L	0.0040	0.0028	1	10/06/21 17:25	10/08/21 11:24	7723-14-0	

Sample: 2109A22-002 **Lab ID: 35666513002** Collected: 09/28/21 14:22 Received: 09/29/21 11:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
547 HPLC Glyphosate Analytical Method: EPA 547 Pace Analytical Services - Ormond Beach									
Glyphosate	0.0042 U	mg/L	0.0060	0.0042	1		09/30/21 19:23		
365.3 Phosph. Total Low Level Analytical Method: EPA 365.3 Preparation Method: EPA 365.3 Pace Analytical Services - Ormond Beach									
Phosphorus, Total (as P) LL	0.014	mg/L	0.0040	0.0028	1	10/06/21 17:25	10/08/21 11:25	7723-14-0	

Sample: 2109A22-003 **Lab ID: 35666513003** Collected: 09/28/21 13:55 Received: 09/29/21 11:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
547 HPLC Glyphosate Analytical Method: EPA 547 Pace Analytical Services - Ormond Beach									
Glyphosate	0.0042 U	mg/L	0.0060	0.0042	1		09/30/21 19:42		
365.3 Phosph. Total Low Level Analytical Method: EPA 365.3 Preparation Method: EPA 365.3 Pace Analytical Services - Ormond Beach									
Phosphorus, Total (as P) LL	0.015	mg/L	0.0040	0.0028	1	10/07/21 08:45	10/08/21 11:29	7723-14-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2109A22
Pace Project No.: 35666513

QC Batch:	766099	Analysis Method:	EPA 547
QC Batch Method:	EPA 547	Analysis Description:	547 HPLC Glyphosate
		Laboratory:	Pace Analytical Services - Ormond Beach

Associated Lab Samples: 35666513001, 35666513002, 35666513003

METHOD BLANK: 4187658 Matrix: Water
Associated Lab Samples: 35666513001, 35666513002, 35666513003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Glyphosate	mg/L	0.0042 U	0.0060	0.0042	09/30/21 17:48	

LABORATORY CONTROL SAMPLE: 4187659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Glyphosate	mg/L	0.05	0.050	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4187660 4187661

Parameter	Units	35666513001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Glyphosate	mg/L	0.0042 U	0.05	0.05	0.049	0.049	98	98	80-120	0	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4187662 4187663

Parameter	Units	35666199001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Glyphosate	mg/L	4.2 U ug/L	0.05	0.05	0.051	0.047	101	93	80-120	8	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2109A22

Pace Project No.: 35666513

QC Batch: 767484

QC Batch Method: EPA 365.3

Analysis Method: EPA 365.3

Analysis Description: 365.3 Low Level Total Phosphorus

Laboratory: Pace Analytical Services - Ormond Beach

Associated Lab Samples: 35666513001, 35666513002

METHOD BLANK: 4195020

Matrix: Water

Associated Lab Samples: 35666513001, 35666513002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Phosphorus, Total (as P) LL	mg/L	0.0028 U	0.0040	0.0028	10/08/21 13:43	

LABORATORY CONTROL SAMPLE: 4195021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P) LL	mg/L	0.1	0.11	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4195023 4195022

Parameter	Units	35666031002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphorus, Total (as P) LL	mg/L	1.6	0.1	0.1	1.8	1.7	218	96	80-120	7	20	J(M1)

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2109A22
Pace Project No.: 35666513

QC Batch:	767486	Analysis Method:	EPA 365.3
QC Batch Method:	EPA 365.3	Analysis Description:	365.3 Low Level Total Phosphorus
		Laboratory:	Pace Analytical Services - Ormond Beach

Associated Lab Samples: 35666513003

METHOD BLANK: 4195027 Matrix: Water

Associated Lab Samples: 35666513003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Phosphorus, Total (as P) LL	mg/L	0.0028 U	0.0040	0.0028	10/08/21 11:26	

LABORATORY CONTROL SAMPLE: 4195028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P) LL	mg/L	0.1	0.10	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4195030 4195029

Parameter	Units	35666513003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphorus, Total (as P) LL	mg/L	0.015	0.1	0.1	0.12	0.12	109	107	80-120	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 2109A22
Pace Project No.: 35666513

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

U Compound was analyzed for but not detected.

J(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2109A22

Pace Project No.: 35666513

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35666513001	2109A22-001	EPA 547	766099		
35666513002	2109A22-002	EPA 547	766099		
35666513003	2109A22-003	EPA 547	766099		
35666513001	2109A22-001	EPA 365.3	767484	EPA 365.3	768049
35666513002	2109A22-002	EPA 365.3	767484	EPA 365.3	768049
35666513003	2109A22-003	EPA 365.3	767486	EPA 365.3	768051

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CHAIN OF CUSTODY RECORD

Omega COCID 17891

PAGE: 1

OF: 1

ADDRESS

Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337
FAX: (239) 590-0536
Website: www.sanderslabs.net

W0#: 35666513
35666513

SPECIAL INSTRUCTIONS / COMMENTS:

SUB CONTRACTOR: Pace

COMPANY:

Pace Analytical

ADDRESS:

8 East Tower Circle

CITY, STATE, ZIP:

Ormond Beach, FL 32174

PHONE:

(386) 676-4837

FAX:

(386) 673-4001

EMAIL:

ACCOUNT #:

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2109A22-001E	SW-1	PACE BOTTLE	Surface Water	9/28/2021 1:32:00 PM	1	SW - Glyphosate EPA 547
	See Attached						
2	2109A22-001F	SW-1	250PL-H2SO4	Surface Water	9/28/2021 1:32:00 PM	1	SW - Low Level TP
	See Attached						
3	2109A22-002E	SW-3	PACE BOTTLE	Surface Water	9/28/2021 2:22:00 PM	1	SW - Glyphosate EPA 547
	See Attached						
4	2109A22-002F	SW-3	250PL-H2SO4	Surface Water	9/28/2021 2:22:00 PM	1	SW - Low Level TP
	See Attached						
5	2109A22-003E	SW-2	PACE BOTTLE	Surface Water	9/28/2021 1:55:00 PM	1	SW - Glyphosate EPA 547
	See Attached						
6	2109A22-003F	SW-2	250PL-H2SO4	Surface Water	9/28/2021 1:55:00 PM	1	SW - Low Level TP
	See Attached						

Relinquished By: WJ Date: 9/28 Time: Received By: JO Pace Date: 9/29/21 Time: 1:50

Relinquished By: Date: Time: Received By: Date: Time:

Relinquished By: Date: Time: Received By: Date: Time:

TAT:

Standard ☐

RUSH

Next BD ☐2nd BD ☐3rd BD ☐

Note: RUSH requests will incur surcharges!

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost)☐ FAX☐ EMAIL☐ ONLINE

FOR LAB USE ONLY

Temp of samples

°C

Attempt to Cool ?

Comments:

Sample Condition Upon Receipt Form (SCUR)

WO#: 35666513

Project #
Project Manager:
Client:

PM: BTS Due Date: 10/06/21
CLIENT: SANLAB

Date and Initials of person:

Examining contents: AS
Label: _____
Deliver: _____
pH: _____

Thermometer Used: T-337 Date: 4/29/21 Time: 1204 Initials: AS

State of Origin: _____ ☐ For WV projects, all containers verified to $\leq 6^{\circ}\text{C}$

Cooler #1 Temp. °C 1.4 (Visual) -0.1 (Correction Factor) 1.3 (Actual) ☐ Samples on ice, cooling process has begun
Cooler #2 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #3 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #4 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #5 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #6 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Recheck for OOT °C _____ (Visual) _____ (Correction Factor) _____ (Actual) Time: _____ Initials: _____

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☒ Standard Overnight ☐ Ground ☐ International Priority
☐ Other _____

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☒ Unknown

Tracking # 8152 6470 6785

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No Ice Wet Blue Melted None

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Samples shorted to lab (If Yes, complete) Shorted Date: _____ Shorted Time: _____ Qty: _____

Comments:

Chain of Custody Present	☒ Yes ☐ No ☐ N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
Chain of Custody Filled Out	☒ Yes ☐ No ☐ N/A	
Relinquished Signature & Sampler Name COC	☒ Yes ☐ No ☐ N/A	
Samples Arrived within Hold Time	☒ Yes ☐ No ☐ N/A	
Rush TAT requested on COC	☒ Yes ☐ No ☐ N/A	
Sufficient Volume	☒ Yes ☐ No ☐ N/A	
Correct Containers Used	☒ Yes ☐ No ☐ N/A	
Containers Intact	☒ Yes ☐ No ☐ N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☒ Yes ☐ No ☐ N/A	
All containers needing acid/base preservation have been checked.	☒ Yes ☐ No ☐ N/A	
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: Vials, Microbiology, O&G, PFAS		
Headspace in VOA Vials? (>6mm):	☐ Yes ☒ No ☐ N/A	
Trip Blank Present:	☐ Yes ☒ No ☐ N/A	

Comments/ Resolution (use back for additional comments):

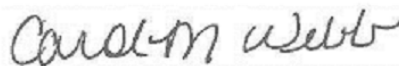
ANALYTICAL REPORT

Eurofins Eaton Analytical - South Bend
110 S Hill Street
South Bend, IN 46617
Tel: (574)233-4777

Laboratory Job ID: 810-3971-1
Client Project/Site: Sanders Labs

For:
Sanders Laboratories Inc.
10090 Bavaria Road
Fort Myers, Florida 33913

Attn: Katie Strothman



Authorized for release by:
11/17/2021 12:15:27 PM
Carol Webb, Client Program Manager
(850)471-6250
Carol.Webb@eurofinset.com

Designee for
Jessie Brasch, Senior Project Manager
(574)233-4777
jessie.brasch@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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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Definitions/Glossary

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

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

Case Narrative

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Job ID: 810-3971-1

Laboratory: Eurofins Eaton Analytical - South Bend

Narrative

Job Narrative 810-3971-1

Comments

No additional comments.

Receipt

The samples were received on 9/30/2021 8:30 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 1.4° C.

GC/MS Semi VOA

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.

Detection Summary

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Client Sample ID: 2109A22-001D/SW-1

Lab Sample ID: 810-3971-1

No Detections.

Client Sample ID: 2109A22-002D/SW-3

Lab Sample ID: 810-3971-2

No Detections.

Client Sample ID: 2109A22-003D/SW-2

Lab Sample ID: 810-3971-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical - South Bend

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Client Sample Results

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Client Sample ID: 2109A22-001D/SW-1

Lab Sample ID: 810-3971-1

Date Collected: 09/28/21 13:32

Matrix: Water

Date Received: 09/30/21 08:30

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.49		0.49	ug/L		10/05/21 07:59	11/03/21 02:12	1

Client Sample ID: 2109A22-002D/SW-3

Lab Sample ID: 810-3971-2

Date Collected: 09/28/21 14:22

Matrix: Water

Date Received: 09/30/21 08:30

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.47		0.47	ug/L		10/05/21 07:59	11/03/21 02:46	1

Client Sample ID: 2109A22-003D/SW-2

Lab Sample ID: 810-3971-3

Date Collected: 09/28/21 13:55

Matrix: Water

Date Received: 09/30/21 08:30

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.48		0.48	ug/L		10/05/21 08:56	11/03/21 03:21	1

QC Sample Results

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 810-4569/1-A
Matrix: Water
Analysis Batch: 6441

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4569

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.49		0.49	ug/L		10/05/21 07:59	11/03/21 01:37	1

Lab Sample ID: LCS 810-4569/3-A
Matrix: Water
Analysis Batch: 6441

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4569

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fipronil	4.96	6.04		ug/L		122	65 - 141

QC Association Summary

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

GC/MS Semi VOA

Prep Batch: 4569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-3971-1	2109A22-001D/SW-1	Total/NA	Water	S150	
810-3971-2	2109A22-002D/SW-3	Total/NA	Water	S150	
810-3971-3	2109A22-003D/SW-2	Total/NA	Water	S150	
MB 810-4569/1-A	Method Blank	Total/NA	Water	S150	
LCS 810-4569/3-A	Lab Control Sample	Total/NA	Water	S150	

Analysis Batch: 6441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-3971-1	2109A22-001D/SW-1	Total/NA	Water	S150	4569
810-3971-2	2109A22-002D/SW-3	Total/NA	Water	S150	4569
810-3971-3	2109A22-003D/SW-2	Total/NA	Water	S150	4569
MB 810-4569/1-A	Method Blank	Total/NA	Water	S150	4569
LCS 810-4569/3-A	Lab Control Sample	Total/NA	Water	S150	4569

Lab Chronicle

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Client Sample ID: 2109A22-001D/SW-1

Lab Sample ID: 810-3971-1

Date Collected: 09/28/21 13:32

Matrix: Water

Date Received: 09/30/21 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	S150			4569	10/05/21 07:59	AM	EA SB
Total/NA	Analysis	S150		1	6441	11/03/21 02:12	CG	EA SB

Client Sample ID: 2109A22-002D/SW-3

Lab Sample ID: 810-3971-2

Date Collected: 09/28/21 14:22

Matrix: Water

Date Received: 09/30/21 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	S150			4569	10/05/21 07:59	AM	EA SB
Total/NA	Analysis	S150		1	6441	11/03/21 02:46	CG	EA SB

Client Sample ID: 2109A22-003D/SW-2

Lab Sample ID: 810-3971-3

Date Collected: 09/28/21 13:55

Matrix: Water

Date Received: 09/30/21 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	S150			4569	10/05/21 08:56	AM	EA SB
Total/NA	Analysis	S150		1	6441	11/03/21 03:21	CG	EA SB

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: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Laboratory: Eurofins Eaton Analytical - South Bend

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87775	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
S150	S150	Water	Fipronil

Method Summary

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Method	Method Description	Protocol	Laboratory
S150	Semivolatile Organic Compounds (GC/MS)	Lab SOP	EA SB
S150	Extraction of Semivolatile Compounds	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

Sample Summary

Client: Sanders Laboratories Inc.
Project/Site: Sanders Labs

Job ID: 810-3971-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-3971-1	2109A22-001D/SW-1	Water	09/28/21 13:32	09/30/21 08:30
810-3971-2	2109A22-002D/SW-3	Water	09/28/21 14:22	09/30/21 08:30
810-3971-3	2109A22-003D/SW-2	Water	09/28/21 13:55	09/30/21 08:30



CHAIN OF CUSTODY RECORD

Omega COCID 17893

PAGE: 1

OF: 1

ADDRESS

Ft. Myers Lab02

10090 Bavaria Rd.

Fort Myers, FL 33913

TEL: (239) 590-0337

FAX: (239) 590-0536

Website: www.sanderslabs.net



1239

810-3971 COC

SUB CONTRACTOR: Eurofins		COMPANY:		SPECIAL INSTRUCTIONS / COMMENTS:					
ADDRESS:									
CITY, STATE, ZIP:									
PHONE:		FAX:						EMAIL:	
ACCOUNT #:									
ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.		
1	2109A22-001D See Attached	SW-1		Surface Water	9/28/2021 1:32:00 PM	1	Fipronil - Ship to Europhins 5150		
2	2109A22-002D See Attached	SW-3		Surface Water	9/28/2021 2:22:00 PM	1	Fipronil - Ship to Europhins		
3	2109A22-003D See Attached	SW-2		Surface Water	9/28/2021 1:55:00 PM	1	Fipronil - Ship to Europhins		

per Ballew

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	REPORT TRANSMITTAL DESIRED: ☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	
Relinquished By:	Date:	Time:	Received By: <i>K. D.</i>	Date: <i>9-30-2021</i>	Time: <i>0830</i>	
TAT:		Standard ☐	RUSH	Next BD ☐	2nd BD ☐	3rd BD ☐
Note: RUSH requests will incur surcharges!						
Temp of samples <i>1.4</i> °C						Attempt to Cool? ☐
Comments: <i>well</i>						

Login Sample Receipt Checklist

Client: Sanders Laboratories Inc.

Job Number: 810-3971-1

Login Number: 3971

List Source: Eurofins Eaton Analytical - South Bend

List Number: 1

Creator: DePriest, Kellie

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	



*Ft. Myers Lab02
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TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net*

May 20, 2022

Andy McThenia
Water Science Associates
13620 Metropolis Avenue, Suite 110
Fort Myers, FL 33912
TEL:
FAX:

RE: River Hall Golf Course

Order No.: 2203330

Dear Andy McThenia:

Sanders Laboratories, Inc received 3 sample(s) on 3/9/2022 for the analyses presented in the following report.

These results only pertain to the samples as received. These pages may include, but are not limited to: Analytical Data, Chains of Custodies, Subcontracted Data and Case Narratives for samples. Results relate only to the samples in the report.

Reports are archived for a minimum of 5 years. Copies of reports are available for a fee of \$50.00. Copies will be provided within 2 weeks of the time of the request.
Laboratory PQL's are available upon request.

Test results meet all the requirements of the NELAP standards, unless otherwise noted.
Nokomis Certificate # E84380 Fort Myers Certificate # E85457

A statement of estimated uncertainty of results is available upon request.
Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.
Sanders Laboratories follows DEP standard operating procedures for field sampling, unless otherwise noted.

Katie Strothman
Laboratory Director



*Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net*

Definition Only

WO#: 2203330
Date: 5/20/2022

Definitions:

B: Results based upon colony counts outside the acceptable range.

G: Sample value indicates that the analyte was detected at or above the method detection limit in both the sample and the associated field blank, equipment blank, or trip blank, and the blank value was greater than 10% of the associated sample value. The value in the blank shall not be subtracted from associated samples. Also if the RPD on a field duplicate exceeds allowable control limit.

I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.

J: Estimated Value.

J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.

K: Off scale low, actual value is known to be less than the value given.

L: Off scale high, actual value is known to be greater than the value given.

NC: Not Certified. Parameter was ran but is not covered under laboratory accredited scopes.

Q: Sample held beyond acceptable holding time.

U: The compound was analyzed for, but not detected.

V: Indicates that the analyte was detected at or above the MDL in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

Y: The laboratory analysis was from an improperly preserved sample.

Z: Too many colonies were present for accurate counting.

Original



Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net

Analytical Report

(continuous)

WO#: 2203330

Date Reported: 5/20/2022

CLIENT: Water Science Associates

Lab Order: 2203330

Project: River Hall Golf Course

Lab ID: 2203330-001

Collection Date: 3/9/2022 9:10:00 AM

Client Sample ID: SW-1

Matrix: SURFACE WATER

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
NITROGEN, NITRATE + NITRITE				E353.2		Analyst: PS
Nitrogen, Nitrate	ND	0.01		mg/L	1	3/10/2022 3:43:00 PM
Nitrogen, Nitrate-Nitrite	ND	0.01		mg/L	1	3/10/2022 3:43:00 PM
TOTAL NITROGEN				E351.2		Analyst: GC
Nitrogen, Total	0.750	0.0300		mg/L	1	3/16/2022 11:27:00 AM
NITROGEN, NITRITE				A4500-NO2-B		Analyst: RV
Nitrogen, Nitrite	ND	0.0100		mg/L	1	3/9/2022 4:30:00 PM
CHLOROPHYLL A				A10200H		Analyst: GC
Chlorophyll a	4.01	1.00		mg/m ³	1	3/10/2022 2:24:00 PM
Pheophytin	4.41	1.00		mg/m ³	1	3/10/2022 2:24:00 PM
FIELD PARAMETERS				FLD		Analyst:
Conductivity, EPA 120.1	1,144	1.0		umhos/cm		
Dissolved Oxygen, EPA 360.1	4.74	0.10		mg/L		
pH, EPA 150.1	8.03	0.01		S.U.		
Salinity	0.57	0.01		ppt		
Temperature, EPA 170.1	26.3	0.1		deg C		
Turbidity, EPA 180.1	3.04	0.01		NTU		

Qualifiers:
H Holding times for preparation or analysis exceeded
PL Permit Limit
U Samples with CalcVal < MDL

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode



Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net

Analytical Report

(continuous)

WO#: 2203330

Date Reported: 5/20/2022

CLIENT: Water Science Associates

Lab Order: 2203330

Project: River Hall Golf Course

Lab ID: 2203330-002

Collection Date: 3/9/2022 10:25:00 AM

Client Sample ID: SW-3

Matrix: SURFACE WATER

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
NITROGEN, NITRATE + NITRITE				E353.2		Analyst: PS
Nitrogen, Nitrate	0.15	0.01		mg/L	1	3/10/2022 3:43:00 PM
Nitrogen, Nitrate-Nitrite	0.16	0.01		mg/L	1	3/10/2022 3:43:00 PM
TOTAL NITROGEN				E351.2		Analyst: GC
Nitrogen, Total	1.05	0.0300		mg/L	1	3/16/2022 11:27:00 AM
NITROGEN, NITRITE				A4500-NO2-B		Analyst: RV
Nitrogen, Nitrite	ND	0.0100		mg/L	1	3/9/2022 4:30:00 PM
CHLOROPHYLL A				A10200H		Analyst: GC
Chlorophyll a	6.01	1.00		mg/m ³	1	3/10/2022 2:24:00 PM
Pheophytin	3.34	1.00		mg/m ³	1	3/10/2022 2:24:00 PM
FIELD PARAMETERS				FLD		Analyst:
Conductivity, EPA 120.1	490	1.0		umhos/cm		
Dissolved Oxygen, EPA 360.1	3.99	0.10		mg/L		
pH, EPA 150.1	8.22	0.01		S.U.		
Salinity	0.23	0.01		ppt		
Temperature, EPA 170.1	26.7	0.1		deg C		
Turbidity, EPA 180.1	1.63	0.01		NTU		

Qualifiers:
H Holding times for preparation or analysis exceeded
PL Permit Limit
U Samples with CalcVal < MDL

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode



Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337 FAX: (239) 590-0536
Website: www.sanderslabs.net

Analytical Report

(continuous)

WO#: 2203330

Date Reported: 5/20/2022

CLIENT: Water Science Associates

Lab Order: 2203330

Project: River Hall Golf Course

Lab ID: 2203330-003

Collection Date: 3/9/2022 9:50:00 AM

Client Sample ID: SW-2

Matrix: SURFACE WATER

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
NITROGEN, NITRATE + NITRITE				E353.2	Analyst: PS	
Nitrogen, Nitrate	ND	0.01		mg/L	1	3/10/2022 3:43:00 PM
Nitrogen, Nitrate-Nitrite	ND	0.01		mg/L	1	3/10/2022 3:43:00 PM
TOTAL NITROGEN				E351.2	Analyst: GC	
Nitrogen, Total	0.890	0.0300		mg/L	1	3/16/2022 11:27:00 AM
NITROGEN, NITRITE				A4500-NO2-B	Analyst: RV	
Nitrogen, Nitrite	ND	0.0100		mg/L	1	3/9/2022 4:30:00 PM
CHLOROPHYLL A				A10200H	Analyst: GC	
Chlorophyll a	6.68	1.00		mg/m ³	1	3/10/2022 2:24:00 PM
Pheophytin	4.07	1.00		mg/m ³	1	3/10/2022 2:24:00 PM
FIELD PARAMETERS				FLD	Analyst:	
Conductivity, EPA 120.1	896	1.0		umhos/cm		
Dissolved Oxygen, EPA 360.1	5.32	0.10		mg/L		
pH, EPA 150.1	8.26	0.01		S.U.		
Salinity	0.44	0.01		ppt		
Temperature, EPA 170.1	26.3	0.1		deg C		
Turbidity, EPA 180.1	4.50	0.01		NTU		

Qualifiers:
H Holding times for preparation or analysis exceeded
PL Permit Limit
U Samples with CalcVal < MDL

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode

PAGE: 1	OF: 3
---------	-------

Fl. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337
FAX: (239) 590-0536
Site: www.sanderslabs.net

[illegible]

PAGE: 2 OF: 3

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[illegible]Page 8 of 37

PAGE: 3	OF: 3
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Fl. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337
FAX: (239) 590-0536
ite: www.sanderslabs.net

[illegible]

Relinquished By: <i>[Signature]</i>	Date: <i>7/9/12</i>	Time: <i>11:20</i>	Received By: <i>[Signature]</i>	Date: <i>3/9</i>	Time: <i>1130</i>	REPORT TRANSMITTAL DESIRED:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	☐ HARDCOPY (extra cost)	☐ FAX
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	☐ EMAIL	☐ ONLINE
TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐						FOR LAB USE ONLY	
Note: RUSH requests will incur surcharges!						Temp of samples <i>4.7</i> °C Attempt to Cool? <i>Y</i>	
Comments:							

Page 10 of 37



Date:

3/9/20

Field Tech: Jason Goyanus

Location: USA Riverbank

Site	Time	Flow* Ft/sec or tidal change	Total Depth ft	Sample Depth (ft)	Water Temp EPA 170.1 (C)	DO EPA 360.1 (mg/L)	DO (%)	Cond EPA 120.1 (umhos /cm)	Salinity SM 250B (ppt)	pH EPA 150.1 (std units)	Turbidity EPA 180.1 (NTU)	Weather		Air Temp (C)	Secchi (ft)
												Cloud Cover	Wind		
SW-1	09:10	no flow	2ft	1ft	26.3	4.74	57.9	1,144	0.57	8.03	3.04	10% cover	513 mph	23.88	
SW-2	09:50	1	2 1/2 ft	1ft	26.3	5.32	66.1	896	0.44	8.26	4.50	1	514 mph	27.22	
SW-3	10:25	1	1 1/2 ft	1ft	26.7	3.99	49.8	490	0.23	8.22	1.63	1	514 mph	27.77	

Tests/Bottles/Preservatives:

Lot # Preservative

250P 6038006 Ice No. 1 X3
 500 P250 6-035-006 Hazy T. 1 low level
 1LP 6A 1246001 Ice Chlorophyll
 2LP 1L 6A 81001239 Trizma Fluor. X3
 Other 4M Glyphosate Na₂S₂O₃

Equipment Used: (circle)

Dip Stick (1) Secchi 4999
 Multi Turb Depth Peri Pump Sub Pump
 13E103015 20012585 6602 5105 002917

Comments:

March 23, 2022

Tami Bright
Sanders Laboratories, Inc.
1050 Endeavor Court
Nokomis, FL 34275

RE: Project: 2203330
Pace Project No.: 35704044

Dear Tami Bright:

Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brad Smith
brad.smith@pacelabs.com
(386) 672-5668
Project Manager

Enclosures

cc: Sanders Labs Reporting (Email), Sanders Laboratories,
Inc.
Katie Strothman, Sanders
Katie Strothman, Sanders Laboratories, Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2203330
Pace Project No.: 35704044

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236

Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 2203330

Pace Project No.: 35704044

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35704044001	2203330-001	Water	03/09/22 09:10	03/10/22 10:21
35704044002	2203330-002	Water	03/09/22 10:25	03/10/22 10:21
35704044003	2203330-003	Water	03/09/22 09:50	03/10/22 10:21

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 2203330
Pace Project No.: 35704044

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35704044001	2203330-001	EPA 547	PFG	1	PASI-O
		EPA 365.4	AVW	1	PASI-O
35704044002	2203330-002	EPA 547	PFG	1	PASI-O
		EPA 365.4	AVW	1	PASI-O
35704044003	2203330-003	EPA 547	PFG	1	PASI-O
		EPA 365.4	AVW	1	PASI-O

PASI-O = Pace Analytical Services - Ormond Beach

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2203330
Pace Project No.: 35704044

Sample: 2203330-001		Lab ID: 35704044001		Collected: 03/09/22 09:10		Received: 03/10/22 10:21		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
547 HPLC Glyphosate		Analytical Method: EPA 547 Pace Analytical Services - Ormond Beach							
Glyphosate	0.0042 U	mg/L	0.0060	0.0042	1		03/18/22 16:51		
365.4 Phosphorus, Total		Analytical Method: EPA 365.4 Preparation Method: EPA 365.4 Pace Analytical Services - Ormond Beach							
Phosphorus, Total (as P)	0.070 U	mg/L	0.10	0.070	1	03/22/22 11:51	03/23/22 11:54	7723-14-0	
Sample: 2203330-002		Lab ID: 35704044002		Collected: 03/09/22 10:25		Received: 03/10/22 10:21		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
547 HPLC Glyphosate		Analytical Method: EPA 547 Pace Analytical Services - Ormond Beach							
Glyphosate	0.0042 U	mg/L	0.0060	0.0042	1		03/18/22 18:07		
365.4 Phosphorus, Total		Analytical Method: EPA 365.4 Preparation Method: EPA 365.4 Pace Analytical Services - Ormond Beach							
Phosphorus, Total (as P)	0.070 U	mg/L	0.10	0.070	1	03/22/22 11:51	03/23/22 11:55	7723-14-0	
Sample: 2203330-003		Lab ID: 35704044003		Collected: 03/09/22 09:50		Received: 03/10/22 10:21		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
547 HPLC Glyphosate		Analytical Method: EPA 547 Pace Analytical Services - Ormond Beach							
Glyphosate	0.0042 U	mg/L	0.0060	0.0042	1		03/18/22 17:48		
365.4 Phosphorus, Total		Analytical Method: EPA 365.4 Preparation Method: EPA 365.4 Pace Analytical Services - Ormond Beach							
Phosphorus, Total (as P)	0.070 U	mg/L	0.10	0.070	1	03/22/22 11:51	03/23/22 11:56	7723-14-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2203330
Pace Project No.: 35704044

QC Batch:	809007	Analysis Method:	EPA 547
QC Batch Method:	EPA 547	Analysis Description:	547 HPLC Glyphosate
		Laboratory:	Pace Analytical Services - Ormond Beach

Associated Lab Samples: 35704044001, 35704044002, 35704044003

METHOD BLANK: 4442138 Matrix: Water
Associated Lab Samples: 35704044001, 35704044002, 35704044003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Glyphosate	mg/L	0.0042 U	0.0060	0.0042	03/18/22 16:13	

LABORATORY CONTROL SAMPLE: 4442139

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Glyphosate	mg/L	0.05	0.048	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4442140 4442141

Parameter	Units	35704044001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Glyphosate	mg/L	0.0042 U	0.05	0.05	0.046	0.045	92	91	80-120	1	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4442142 4442143

Parameter	Units	35704261003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Glyphosate	mg/L	4.2 U ug/L	0.05	0.05	0.045	0.046	91	91	80-120	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2203330
Pace Project No.: 35704044

QC Batch:	809655	Analysis Method:	EPA 365.4
QC Batch Method:	EPA 365.4	Analysis Description:	365.4 Phosphorus
		Laboratory:	Pace Analytical Services - Ormond Beach

Associated Lab Samples: 35704044001, 35704044002, 35704044003

METHOD BLANK: 4445890 Matrix: Water
Associated Lab Samples: 35704044001, 35704044002, 35704044003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Phosphorus, Total (as P)	mg/L	0.070 U	0.10	0.070	03/23/22 11:45	

LABORATORY CONTROL SAMPLE: 4445891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P)	mg/L	4	3.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4445893 4445892

Parameter	Units	35700795001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphorus, Total (as P)	mg/L	0.30	4	4	4.5	4.5	106	106	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4445895 4445894

Parameter	Units	35702550002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphorus, Total (as P)	mg/L	5.2	8	8	13.1	13.5	99	103	80-120	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 2203330
Pace Project No.: 35704044

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

U Compound was analyzed for but not detected.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2203330
Pace Project No.: 35704044

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35704044001	2203330-001	EPA 547	809007		
35704044002	2203330-002	EPA 547	809007		
35704044003	2203330-003	EPA 547	809007		
35704044001	2203330-001	EPA 365.4	809655	EPA 365.4	810224
35704044002	2203330-002	EPA 365.4	809655	EPA 365.4	810224
35704044003	2203330-003	EPA 365.4	809655	EPA 365.4	810224

REPORT OF LABORATORY ANALYSIS

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WO#: 35704044



35704044

CHAIN OF CUSTODY RECORD

Omega COCID 19090

PAGE: 1

OF: 1

ADDRESS

Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337
FAX: (239) 590-0536
Website: www.sanderslabs.net

SUB CONTRACTOR: Pace		COMPANY: Pace Analytical		SPECIAL INSTRUCTIONS / COMMENTS:			
ADDRESS: 8 East Tower Circle							
CITY, STATE, ZIP: Ormond Beach, FL 32174							
PHONE: (386) 676-4837 FAX: (386) 673-4001 EMAIL:							
ACCOUNT #:							

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description
1	2203330-001E See Attached	SW-1	PACE BOTTLE	Surface Water	3/9/2022 9:10:00 AM	1	SW - Glyphosate EPA 547
2	2203330-001F See Attached	SW-1	250PL-H2SO4	Surface Water	3/9/2022 9:10:00 AM	1	SW - Low Level TP
3	2203330-002E See Attached	SW-3	PACE BOTTLE	Surface Water	3/9/2022 10:25:00 AM	1	SW - Glyphosate EPA 547
4	2203330-002F See Attached	SW-3	250PL-H2SO4	Surface Water	3/9/2022 10:25:00 AM	1	SW - Low Level TP
5	2203330-003E See Attached	SW-2	PACE BOTTLE	Surface Water	3/9/2022 9:50:00 AM	1	SW - Glyphosate EPA 547
6	2203330-003F See Attached	SW-2	250PL-H2SO4	Surface Water	3/9/2022 9:50:00 AM	1	SW - Low Level TP

Relinquished By: <i>[Signature]</i>	Date: <i>3/9</i>	Time:	Received By: <i>[Signature]</i>	Date: <i>3/10/22</i>	Time: <i>10:21</i>	REPORT TRANSMITTAL DESIRED:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY	
TAT: Standard ☐ RUSH ☐ Next BD ☐ 2nd BD ☐ 3rd BD ☐						Temp of samples <i>1.2</i> °C Attempt to Cool? ☐	
Note: RUSH requests will incur surcharges!						Comments:	

Sample Condition Upon Receipt Form (SCUR)

Pace

Project #
Project Manager:
Client:

WO#: 35704044

PM: BTS Due Date: 03/24/22
CLIENT: SANLAB

Date and Initials of person:

Examining contents: AS
Label: _____
Deliver: _____
pH: _____

Thermometer Used: T-394Date: 3-10-22 Time: 11:02 Initials: CCJ

State of Origin: _____

☐ For WV projects, all containers verified to ≤6 °CCooler #1 Temp. °C 1.4 (Visual) -0.2 (Correction Factor) 1.2 (Actual)

Cooler #2 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #3 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #4 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #5 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Cooler #6 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

Recheck for OOT °C _____ (Visual) _____ (Correction Factor) _____ (Actual) Time: _____ Initials: _____

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____Shipping Method: ☐ First Overnight ☐ Priority Overnight ☒ Standard Overnight ☐ Ground ☐ International Priority
☐ Other _____Billing: ☒ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☐ UnknownTracking # 8152 6470 5414Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☐ No Ice: Wet Blue Melted NonePacking Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ One ☐ Other _____

Samples shorted to lab (If Yes, complete) Shorted Date: _____ Shorted Time: _____ Qty: _____

Comments:

Chain of Custody Present	☒ Yes ☐ No ☐ N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
Chain of Custody Filled Out	☒ Yes ☐ No ☐ N/A	
Relinquished Signature & Sampler Name COC	☒ Yes ☐ No ☐ N/A	
Samples Arrived within Hold Time	☒ Yes ☐ No ☐ N/A	
Rush TAT requested on COC	☐ Yes ☒ No ☐ N/A	
Sufficient Volume	☒ Yes ☐ No ☐ N/A	
Correct Containers Used	☒ Yes ☐ No ☐ N/A	
Containers Intact	☒ Yes ☐ No ☐ N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☒ Yes ☐ No ☐ N/A	
All containers needing acid/base preservation have been checked.	☒ Yes ☐ No ☐ N/A	
All Containers needing preservation are found to be in compliance with EPA recommendation:	☒ Yes ☐ No ☐ N/A	
Exceptions: Vials, Microbiology, O&G, PFAS		
Headspace in VOA Vials? (>6mm):	☐ Yes ☐ No ☒ N/A	
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	

Comments/ Resolution (use back for additional comments):

ANALYTICAL REPORT

Eurofins Eaton South Bend
110 S Hill Street
South Bend, IN 46617
Tel: (574)233-4777

Laboratory Job ID: 810-17459-1
Client Project/Site: 2203330

For:

Sanders Laboratories Inc.
10090 Bavaria Road
Fort Myers, Florida 33913

Attn: Katie Strothman



*Authorized for release by:
3/21/2022 12:37:19 PM*

Jessie Brasch, Senior Project Manager
(574)233-4777
jessie.brasch@eurofinset.com

LINKS

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results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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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Definitions/Glossary

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

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: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Client Sample ID: 2203330-001D

Lab Sample ID: 810-17459-1

No Detections.

Client Sample ID: 2203330-002D

Lab Sample ID: 810-17459-2

No Detections.

Client Sample ID: 2203330-003D

Lab Sample ID: 810-17459-3

No Detections.

This Detection Summary does not include radiochemical test results.

Page 28 of 37
Eurofins Eaton South Bend

Client Sample Results

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Client Sample ID: 2203330-001D

Lab Sample ID: 810-17459-1

Date Collected: 03/09/22 09:10

Matrix: Water

Date Received: 03/10/22 10:00

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.48		0.48	ug/L		03/16/22 07:43	03/17/22 00:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Triphenylphosphate	114		70 - 130			03/16/22 07:43	03/17/22 00:41	1

Client Sample ID: 2203330-002D

Lab Sample ID: 810-17459-2

Date Collected: 03/09/22 10:25

Matrix: Water

Date Received: 03/10/22 10:00

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.48		0.48	ug/L		03/16/22 07:43	03/17/22 01:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Triphenylphosphate	110		70 - 130			03/16/22 07:43	03/17/22 01:12	1

Client Sample ID: 2203330-003D

Lab Sample ID: 810-17459-3

Date Collected: 03/09/22 09:50

Matrix: Water

Date Received: 03/10/22 10:00

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.48		0.48	ug/L		03/16/22 07:43	03/17/22 01:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Triphenylphosphate	116		70 - 130			03/16/22 07:43	03/17/22 01:44	1

Surrogate Summary

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPP (70-130)
810-17459-1	2203330-001D	114
810-17459-2	2203330-002D	110
810-17459-3	2203330-003D	116
LCS 810-14936/2-A	Lab Control Sample	117
LCS 810-14936/3-A	Lab Control Sample	114
LCS 810-14936/4-A	Lab Control Sample	112
MB 810-14936/1-A	Method Blank	107
Surrogate Legend		
TPP = Triphenylphosphate		

QC Sample Results

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Method: S150 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 810-14936/1-A

Matrix: Water

Analysis Batch: 15014

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14936

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fipronil	<0.49		0.49	ug/L		03/16/22 07:43	03/17/22 00:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Triphenylphosphate	107		70 - 130			03/16/22 07:43	03/17/22 00:09	1

Lab Sample ID: LCS 810-14936/2-A

Matrix: Water

Analysis Batch: 15014

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14936

Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Triphenylphosphate	117		70 - 130					

Lab Sample ID: LCS 810-14936/3-A

Matrix: Water

Analysis Batch: 15014

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Fipronil	4.89	5.88		ug/L		120	65 - 141	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Triphenylphosphate	114		70 - 130					

Lab Sample ID: LCS 810-14936/4-A

Matrix: Water

Analysis Batch: 15014

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14936

Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Triphenylphosphate	112		70 - 130					

QC Association Summary

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

GC/MS Semi VOA

Prep Batch: 14936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-17459-1	2203330-001D	Total/NA	Water	S150	
810-17459-2	2203330-002D	Total/NA	Water	S150	
810-17459-3	2203330-003D	Total/NA	Water	S150	
MB 810-14936/1-A	Method Blank	Total/NA	Water	S150	
LCS 810-14936/2-A	Lab Control Sample	Total/NA	Water	S150	
LCS 810-14936/3-A	Lab Control Sample	Total/NA	Water	S150	
LCS 810-14936/4-A	Lab Control Sample	Total/NA	Water	S150	

Analysis Batch: 15014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-17459-1	2203330-001D	Total/NA	Water	S150	14936
810-17459-2	2203330-002D	Total/NA	Water	S150	14936
810-17459-3	2203330-003D	Total/NA	Water	S150	14936
MB 810-14936/1-A	Method Blank	Total/NA	Water	S150	14936
LCS 810-14936/2-A	Lab Control Sample	Total/NA	Water	S150	14936
LCS 810-14936/3-A	Lab Control Sample	Total/NA	Water	S150	14936
LCS 810-14936/4-A	Lab Control Sample	Total/NA	Water	S150	14936

Lab Chronicle

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Client Sample ID: 2203330-001D

Lab Sample ID: 810-17459-1

Date Collected: 03/09/22 09:10

Matrix: Water

Date Received: 03/10/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	S150			14936	03/16/22 07:43	SC	EA SB
Total/NA	Analysis	S150		1	15014	03/17/22 00:41	CG	EA SB

Client Sample ID: 2203330-002D

Lab Sample ID: 810-17459-2

Date Collected: 03/09/22 10:25

Matrix: Water

Date Received: 03/10/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	S150			14936	03/16/22 07:43	SC	EA SB
Total/NA	Analysis	S150		1	15014	03/17/22 01:12	CG	EA SB

Client Sample ID: 2203330-003D

Lab Sample ID: 810-17459-3

Date Collected: 03/09/22 09:50

Matrix: Water

Date Received: 03/10/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	S150			14936	03/16/22 07:43	SC	EA SB
Total/NA	Analysis	S150		1	15014	03/17/22 01:44	CG	EA SB

Laboratory References:

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

Accreditation/Certification Summary

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Laboratory: Eurofins Eaton South Bend

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87775	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
S150	S150	Water	Fipronil

Method Summary

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Method	Method Description	Protocol	Laboratory
S150	Semivolatile Organic Compounds (GC/MS)	Lab SOP	EA SB
S150	Extraction of Semivolatile Compounds	Lab SOP	EA SB

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Sanders Laboratories Inc.
Project/Site: 2203330

Job ID: 810-17459-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-17459-1	2203330-001D	Water	03/09/22 09:10	03/10/22 10:00
810-17459-2	2203330-002D	Water	03/09/22 10:25	03/10/22 10:00
810-17459-3	2203330-003D	Water	03/09/22 09:50	03/10/22 10:00

1

2

3

4

5

6

7

8

9

10

11

12

13



CHAIN OF CUSTODY RECORD



810-17459 Chain of Custody

Omega COCID 19088

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OF: 1

ADDRESS

Ft. Myers Lab02
10090 Bavaria Rd.
Fort Myers, FL 33913
TEL: (239) 590-0337
FAX: (239) 590-0536

Website: www.sanderslabs.net

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3/21/2022

SUB CONTRACTOR: Eurofins		COMPANY:		SPECIAL INSTRUCTIONS / COMMENTS:			
ADDRESS:							
CITY, STATE, ZIP:							
PHONE:		FAX:		EMAIL:			
ACCOUNT #:							
ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2203330-001D See Attached	SW-1		Surface Water	3/9/2022 9:10:00 AM	1	Fipronil - Ship to Europhins
2	2203330-002D See Attached	SW-3		Surface Water	3/9/2022 10:25:00 AM	1	Fipronil - Ship to Europhins
3	2203330-003D See Attached	SW-2		Surface Water	3/9/2022 9:50:00 AM	1	Fipronil - Ship to Europhins

Relinquished By: <i>u</i>	Date: 3/9/22	Time:	Received By: <i>Penny Peltig Wylt</i>	Date: 3/10/22	Time: 1000	REPORT TRANSMITTAL DESIRED:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY	
TAT: Standard ☐ RUSH ☐ Next BD ☐ 2nd BD ☐ 3rd BD ☐						Temp of samples <i>-1.0</i> °C Attempt to Cool? <i>Yes</i>	
Note: RUSH requests will incur surcharges!						Comments:	

No additional ppwk received ppw 03/10/22