February 20, 2023

Via E-mail: *MichaelP@townofcortlandt.com*

Mr. Michael Preziosi, P.E.
Director, Department of Technical Services
Town of Cortlandt
One Heady Street
Cortlandt Manor, NY 10567

RE: Hollow Brook Golf Club
2022 Annual Monitoring Report

Dear Mr. Preziosi:

In accordance with the Hollow Brook Golf Club (HBGC) Water Quality Monitoring Program, WSP is submitting the following 2022 Annual Monitoring Report. The monitoring program is completed in accordance with the May 2002 Environmental Management Plan (EMP).

The monitoring program includes groundwater, surface-water and storm water sampling. Groundwater and surface water samples are collected twice per year in the summer and fall as per the June 2009 resolution by the Town of Cortlandt Planning Board (Resolution No. 23-09). Storm water samples are collected once per year from surface water location DS-1 in the Hollow Brook. Course samples are analyzed for inorganic and organic compounds (pesticides). The EMP requires that all compounds applied to the course in the previous 12 months be analyzed.

In February 2014, HBGC requested a modification to the sampling program. The request was made in consideration of the monitoring results up to that time and the absence of detections above applicable standards or guidance levels. On behalf of the Town, LBG (now WSP) reviewed the request and recommended the following modifications (outlined in a March 30, 2016 letter) 1) eliminate surface water sampling at locations US-1 and SW-4; 2) eliminate groundwater sampling at Monitor Well GW-2; 3) discontinue analyses for volatile organic compounds, polycyclic aromatic compounds and metals. The Town approved these modifications which became the standard sampling protocol moving forward.

In April 2020, HBGC requested additional modification to the sampling protocol in consideration of business impacts related to the COVID-19 pandemic. WSP reviewed this request on behalf of the Town and in an email dated April 27, 2020, from the Town to HBGC, the following temporary modifications were approved: 1) eliminate groundwater sampling at Monitor Wells GW-3 and GW-4; 2) eliminate surface water sampling at locations SW-3, SW-5 and SW-6 and, 3) eliminate the storm water sampling event. The approval was based on the absence of any detections above applicable standards or guidance levels over past years at these locations. At the request of HBGC, and in agreement with the Town, this protocol was continued for the 2022 season.

WSP USA
500 Summit Lake Drive, Suite 450
Valhalla, NY 10595

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wsp.com

1.0 SAMPLE DATES, LOCATIONS AND METHODOLOGIES

In 2022, sampling events for groundwater and surface-water were conducted on August 30th and December 13th. During both events, samples from surface-water station DS-1 and groundwater sample location GW-1R were analyzed for inorganic and pesticide parameters. A Site Plan showing sample locations is included as Figure 1.

The samples were analyzed for the parameters listed in the EMP and included all pesticides that have been applied to the course in the previous 12 months. The inorganic parameters were analyzed by York Analytical Laboratories (York) of Stratford, Connecticut. The pesticide compounds were analyzed by Columbia Food Laboratories (Columbia) of Portland, Oregon. Field parameters including pH, temperature and conductivity were measured by WSP in the field during each sampling event.

The analytical results for inorganics and pesticides are compared to the New York State Surface Water and Groundwater Standards per 6 NYCRR Part 703 or, alternative Response Thresholds per the EMP (Table 5-5). Additionally, pesticides are evaluated for toxicological significance by comparison to 50% of compound specific EPA HALs (Health Advisory Levels) for human health effects and 10% of LC50s (Lethal Concentration 50%) for the protection of aquatic life.

2.0 SAMPLING RESULTS

The 2022 sampling results for groundwater and surface water are discussed below and presented on Table 1. Historical results are included in previous Annual Monitoring Reports. The laboratory analytical reports are included in the Appendix. All pesticides used on the course are registered for use in New York State and were reviewed for use at Hollow Brook by the Town's consulting agronomist, Dr. Martin Petrovic.

2.1 Summer Event: August 30, 2022

2.1.1 Groundwater

The results of laboratory analysis show one pesticide detection in the groundwater sample collected from GW-1R (Table 1); flutolanil at 5.38 ug/l [micrograms per liter]). To confirm this detection, GW-1R was re-sampled on September 19, 2022. The results of the re-sampling confirmed the detection of flutolanil at a concentration of 3.00 ug/l and also detected propiconazole at 0.60 ug/l. Both of these pesticides have been detected in this well in the past. As shown on Table 1 under the Standard, Guidance or Response Threshold column, 50% of the HAL for flutolanil is 1,500 ug/l. For propiconazole the number is 300 ug/l. The detected concentrations of these compounds were well below the human health-based, toxicologically significant criteria.

All other parameters were either not detected or were below the applicable standards, guidance or response thresholds with the exception of pH, which was 6.46, slightly below the standard range lower limit of 6.50. Further discussion of pH is included in section 3.0

2.1.2 Surface Water

As shown on Table 1, there were no pesticide detections in the downstream surface water sample location DS-1 in the Hollow Brook. All other parameters were either not detected or met applicable standards, guidance or response threshold criteria (Table 1).

2.2 Fall Event: December 19, 2022

2.2.1 Groundwater

Similar to the August sampling round (and September confirmation sampling), flutolanil was detected in the sample from well GW-1R; the detected concentration was 0.90 ug/l (Table 1). Propiconazole, which was detected in September, was not detected in the December sample. The detected flutolanil concentration of 0.90 ug/l was lower than both the August (5.38 ug/l) and September (3.00 ug/l) detections indicating a declining trend. The detection was also well below 50% of the HAL of 1,500 ug/l.

All other parameters, including pH, were either not detected or met applicable standards, guidance or response threshold criteria (Table 1).

2.2.2 Surface Water

As shown on Table 1, there were no pesticide detections in the downstream Hollow Brook surface water sample DS-1. All other parameters, with the exception of pH, were either not detected or met applicable standards, guidance or response threshold criteria. The pH was 6.19, which is below the standard range lower limit of 6.50 (Table 1). There are many factors that could influence pH in the Hollow Brook. The pH of onsite groundwater from well GW-1R for this same sampling event was measured at 6.52, which is higher than that measured in the Hollow Brook and within the standard limit range. Based on this, we do not believe the lower pH in the Hollow Brook is related to the golf course.

3.0 DISCUSSION AND RESPONSES

The management response to detections groundwater or surface-water samples is described in the EMP. If certain pesticides (specifically listed in the EMP) are detected twice in the same year, the indicated response is to suspend their use. However, based on historical data, and because new pesticides are not specifically addressed in the EMP, the Town and HBGC have agreed that pesticides that are repeatedly detected in groundwater samples could continue to be used on the course under the following conditions:

- The pesticide detection is below the toxicologically significant criteria. For groundwater this is 50 percent of the respective EPA HALs.
- The pesticide is not detected in the Hollow Brook; and,
- Use of the pesticide would be restricted to spot applications until it is no longer detectable.

Flutalonil and propiconazole were detected in groundwater samples collected from GW-1R during the season. All detected concentrations were well below the respective EPA HALs, which are the human health-based toxicological criteria, and there were no pesticide detections in the Hollow Brook (Table 1). The concentration of flutolanil decreased from 5.38 ug/l to 0.90 ug/l between August and December, indicating a declining trend and that there were no new occurrences of flutolanil in groundwater after August. Based on the above protocols, and considering that there have been previous detections of flutolanil, we would recommend that it continue to be used only for spot applications until it is no longer detected.

Propiconazole was only detected once in the September re-sampling event, at a very low concentration and was not detected again in December. Based on this we do not recommend any use restrictions at this time.

Chlorantraniliprole was detected in samples in previous years but was not detected in any samples during 2022. In accordance with the original 2011 approval for the use of chlorantraniliprole by the Town's consulting agronomist, Dr. Martin Petrovic, this product is only to be used as a "last resort" after other products have failed to control the associated problem. There have not been any detections of chlorantraniliprole in groundwater since 2019, indicating the above practice is effective at minimizing migration of this product from the application sites.

pH was measured slightly outside the acceptable range in the August groundwater sample but was within the acceptable range in the December sample. All other parameters met applicable standards and there is no apparent connection between the pH readings and golf course activity. As a result, no corrective action is deemed necessary. An out-of-range pH reading in the December Hollow Brook sample from DS-1 is not considered to be related to golf course activity as discussed in Section 2.2.2.

Kind regards,

WSP USA

John Benvegna, P.G.
Vice President

cc: Chris Kehoe, AICP, T/Cortlandt
David Rambo, C/Peekskill Water Dept.
Greg Coughlin, Hollow Brook
Eugene Peterson, Hollow Brook

TABLE

TABLE 1

HOLLOW BROOK GOLF CLUB
TOWN OF CORTLANDT, NEW YORK

2022 Operational Monitoring Results

Parameters		Groundwater				Surface Water		
		GW-1R			Standard, Guidance or Response Threshold	DS-1		Standard, Guidance or Response Threshold
Field Parameters		**Aug. 30**	**Sept. 19 (re-sample)**	**Dec. 13**		**Aug. 30**	**Dec. 13**	
pH	---	6.46	NA	6.52	<6.5 or >8.5*	6.97	6.19	<6.5 or >8.5*
Temperature	Celsius	20.91	NA	11.20	NA	20.94	4.88	None
Conductivity	mS/cm	0.404	NA	0.440	NA	0.143	0.312	None
DO	mg/l	3.05	NA	4.01	NA	9.92	12.58	<6.0
Inorganics								
TDS	mg/l	316	NA	287	NA	112	304	500*
Chloride	mg/l	59.8	NA	61.6	250*	73.6	101	250*
Nitrate	mg/l	<0.05	NA	<0.05	5.0** / 10*	0.237	0.782	10*
Nitrite	mg/l	<0.05	NA	<0.05	1.0*	<0.05	<0.05	1.0*
Ammonia	mg/l	0.773	NA	0.572	2.0*	<0.05	<0.05	2.0*
Phosphorous	mg/l	2.9	NA	3.6	ST/SD**	<0.05	0.082	ST/SD**
Pesticides (detected) [1/]								
Flutolanil	ug/l	5.38	3.00	0.90	1,500^	<0.5	<0.5	250^^
Propiconazole	ug/l	<0.5	0.60	<0.5	300^	<0.5	<0.5	85^^

[1/] See laboratory reports in the Appendix for full pesticide analyte list.

mS/cm = milliseimans per centimeter; mg/l = milligrams per liter; ug/l = micrograms per liter.

NA - Not Applicable

<0.05 - Indicates compound was not detected above the noted laboratory detection limit

*New York State Water Quality Standard or Guidence per 6 NYCRR Part 703

**Response Threshold as per Section 5.7.6 of the Management Plan.

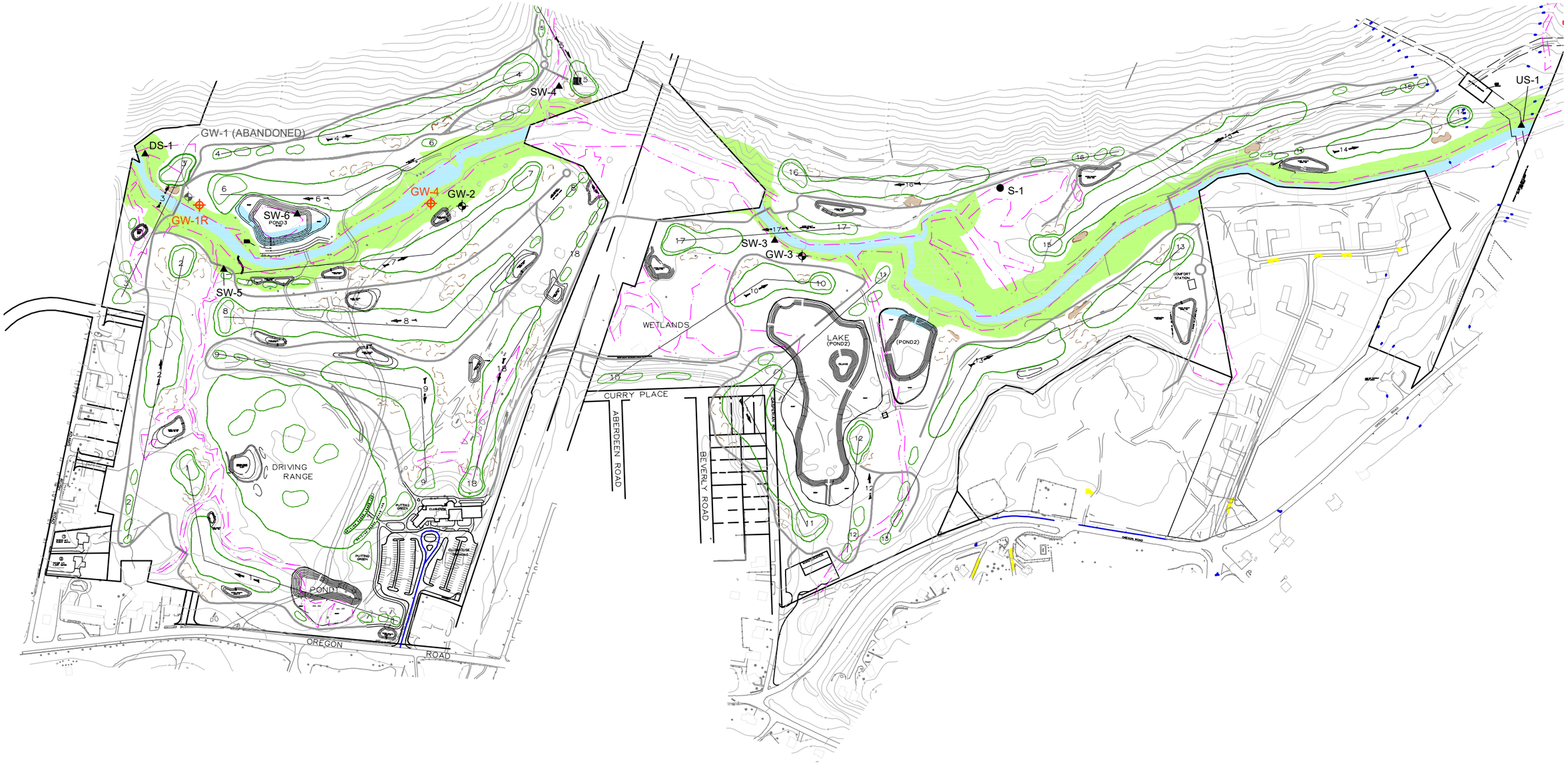
ST/SD - Statistically significant trend or two standard deviations above baseline mean, whichever is lower.

^ = 50% of the USEPA Human Health Advisory Level (HAL). The HAL is the toxicologically significant level in the absence of a State standard.

^^ = 10% of the LC50 (Leathal Concentration 50%) for protection of aquatic life. This value is applied to DS-1 if it is lower then the corresponding HAL.

Exceeds Standard, Guidence or Response Threshold.

FIGURE



LEGEND

- SW-3 — SURFACE WATER SAMPLING LOCATION
- GW-3 — MONITOR WELL LOCATION
- GW-4 — NEW MONITOR WELL LOCATION (INSTALLED SPRING 2008)
- S-1 — SEDIMENT SAMPLING LOCATION
- UNDISTURBED BUFFER

0 400
SCALE IN FEET

HOLLOW BROOK GOLF CLUB
TOWN OF CORTLANDT, NEW YORK

WATER QUALITY SAMPLING LOCATIONS

DATE	REVISED	PREPARED BY:
		WSP USA 500 Summit Lake Drive Suite 450 Valhalla, New York 10595 (914) 747-1120

DRAWN:	RAC	CHECKED:	DM	DATE:	03/21/19	FIGURE:	1

O:\DWG\Hollowbrook\2018\Figure1.dwg, Layout1, 3/21/2019 3:21:56 PM, PDF-XChange for AcroPlot Pro

APPENDIX
Laboratory Reports

Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Report Date: 09/21/2022
Client Project ID: Hollow Brook Golf Club (HBGC)
York Project (SDG) No.: 22I0010

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 09/21/2022
Client Project ID: Hollow Brook Golf Club (HBGC)
York Project (SDG) No.: 22I0010

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on September 01, 2022 and listed below. The project was identified as your project: **Hollow Brook Golf Club (HBGC)**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22I0010-01	GW-1R	Water	08/30/2022	09/01/2022
22I0010-02	DS-1	Water	08/30/2022	09/01/2022

General Notes for York Project (SDG) No.: 22I0010

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:  **Date:** 09/21/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: GW-1R **York Sample ID:** 22I0010-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22I0010	Hollow Brook Golf Club (HBGC)	Water	August 30, 2022 10:00 am	09/01/2022

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**59.8**		mg/L	2.50	5	EPA 300.0	09/06/2022 17:47	09/07/2022 04:18	ZTS
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Nitrate as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	ND	HT-01	mg/L	0.0500	1	EPA 300.0	09/01/2022 17:11	09/01/2022 20:11	ZTS
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Nitrite as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND	HT-01	mg/L	0.0500	1	EPA 300.0	09/01/2022 17:11	09/01/2022 20:11	ZTS
							Certifications: NELAC-NY10854,CTDOH,PADEP			

Ammonia Nitrogen as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	**Ammonia Nitrogen as N**	**0.773**		mg/L	0.0500	1	SM 4500-NH3 D	09/08/2022 07:57	09/08/2022 10:47	VR
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Phosphorous, total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	**2.9**		mg/L	0.50	10	SM 4500-P B5/E	09/21/2022 09:31	09/21/2022 17:19	JAMT
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Total Dissolved Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	**316**		mg/L	10.0	1	SM 2540C-2015	09/06/2022 18:50	09/06/2022 18:50	AA
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: DS-1 **York Sample ID:** 22I0010-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22I0010	Hollow Brook Golf Club (HBGC)	Water	August 30, 2022 11:00 am	09/01/2022

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**73.6**		mg/L	5.00	10	EPA 300.0	09/09/2022 15:50	09/09/2022 15:50	ZTS
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Nitrate as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	**Nitrate as N**	**0.237**	HT-01	mg/L	0.0500	1	EPA 300.0	09/01/2022 17:11	09/01/2022 21:13	ZTS
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Nitrite as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND	HT-01	mg/L	0.0500	1	EPA 300.0	09/01/2022 17:11	09/01/2022 21:13	ZTS
							Certifications: NELAC-NY10854,CTDOH,PADEP			

Ammonia Nitrogen as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	Ammonia Nitrogen as N	ND		mg/L	0.0500	1	SM 4500-NH3 D	09/08/2022 07:57	09/08/2022 10:47	VR
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Phosphorous, total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	ND		mg/L	0.050	1	SM 4500-P B5/E	09/21/2022 09:31	09/21/2022 17:19	JAMT
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Total Dissolved Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	**112**		mg/L	10.0	1	SM 2540C-2015	09/06/2022 18:50	09/06/2022 18:50	AA
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample and Data Qualifiers Relating to This Work Order

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

HT-01 This result was reported from an analysis conducted outside of the EPA recommended holding time.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon current NELAC/TNI Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22Y0010

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675

YOUR Information	Report To:	Invoice To:
Company: WSP USA	Company:	Company: Hollow Brook Golf Club
Address: 500 Summit Lake Dr Valhalla NY	Address: Same	Address: 1060 Oregon Rd Cortlandt Manor, NY 10567
Phone.: 914 329 1392	Phone.:	Phone.:
Contact: John Benvegna	Contact:	Contact: Eugene Peterson
E-mail: John.Benvegna@wsp.com	E-mail:	E-mail: EugeneP@HBGolfClub.com

YOUR Project Number:

YOUR Project Name: Hollow Brook Golf Club (HBGC) Golf Hollow Brook.com

YOUR PO#:

Turn-Around Time

RUSH - Next Day	
RUSH - Two Day	
RUSH - Three Day	
RUSH - Four Day	
Standard (5-7 Day)	X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Mike Reiff

Samples Collected by: (print AND sign your name)

Matrix Codes

S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil | Other

Samples From

New York
New Jersey X
Connecticut
Pennsylvania
Other:

Report / EDD Type (circle selections)

Summary Report | CT RCP | Standard Excel EDD
QA Report | CT RCP DQA/DUE | EQuIS (Standard)
NY ASP A Package | NJDEP Reduced | NYSDEC EQuIS
NY ASP B Package | Deliverables | NJDEP SRP HazSite
NJDKQP | Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
GW-1R	GW	8/30/22 1000	Nitrate, Nitrite, Ammonia, Chloride, TDS, Tot PHos	500mL H2SO4 500mL
DS-1	SW	1100		

Comments:

Samples iced/chilled at time of lab pickup? circle Yes or No

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction

Field Filtered
Lab to Filter

Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
	8/30/22 1130	Sold / York	09/01 10:25	Saba / York	09/01 10:25
Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
					9/1/22 1505 / 4.3 Degrees C

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-010409/D003.R000
Report Date:	09/08/2022
Purchase Order:	
Received:	08/31/22 10:54 AM
Project Name:	Hollowbrook Golf Club (HBGC)

Cover Letter

WSP USA
500 Summit Lake Drive, Suite 450
Valhalla New York 10595
United States of America (USA)

Dear John Benvegna,

Enclosed please find Columbia Laboratories analytical report for samples received as order number 22-010409 on 08/31/2022 at 10:54. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Thank you for allowing Columbia Laboratories to be of service to you, we appreciate your business.

Sincerely,

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-010409/D003.R000
Report Date: 09/08/2022
Purchase Order:
Received: 08/31/22 10:54 AM

Project Name: Hollowbrook Golf Club (HBGC)

Customer: WSP USA
500 Summit Lake Drive, Suite 450
Valhalla New York 10595
United States of America (USA)

Sample ID: DS-1
Sample Matrix: Water
Laboratory ID: 22-010409-0001-00
Evidence of Cooling: Yes
Temp: 2.7 °C
Relinquished by: UPS

Sample Results

Pesticides

Multi-Residue Pesticide Profile

Analyte	Result	Units	Analyzed	Method	Notes
Multi-Residue Pesticide Profile	< LOQ for all analytes	µg/L	09/08/22	AOAC 2007.01 & EN 15662 (mod)	

WSP Hollow Brook custom

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Dithiopyr	< LOQ	µg/L	1.00	09/08/22	AOAC 2007.01 & EN 15662 (mod)	
Fenoxaprop-ethyl	< LOQ	µg/L	0.500	09/08/22	AOAC 2007.01 & EN 15662 (mod)	
Trinexapac-ethyl	< LOQ	µg/L	1.00	09/08/22	AOAC 2007.01 & EN 15662 (mod)	

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-010409/D003.R000
Report Date:	09/08/2022
Purchase Order:	
Received:	08/31/22 10:54 AM
Project Name:	Hollowbrook Golf Club (HBGC)

Customer:	WSP USA 500 Summit Lake Drive, Suite 450 Valhalla New York 10595 United States of America (USA)
Sample ID:	GW-1R
Sample Matrix:	Water
Laboratory ID:	22-010409-0002-00
Evidence of Cooling:	Yes
Temp:	2.7 °C
Relinquished by:	UPS

Sample Results

Pesticides

Multi-Residue Pesticide Profile

All compounds on the attached sheet were found to be <LOQ except those listed

WSP Hollow Brook custom

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Dithiopyr	< LOQ	µg/L	1.00	09/08/22	AOAC 2007.01 & EN 15662 (mod)	
Fenoxaprop-ethyl	< LOQ	µg/L	0.500	09/08/22	AOAC 2007.01 & EN 15662 (mod)	
Trinexapac-ethyl	< LOQ	µg/L	1.00	09/08/22	AOAC 2007.01 & EN 15662 (mod)	
Analyte	**Result**	**Units**	**LOQ**	**Analyzed**	**Method**	**Notes**
Flutolanil	5.38	µg/L	0.500	09/08/22	AOAC 2007.01 & EN 15662 (mod)	

Abbreviations

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

Units of Measure

µg/L = Micrograms per liter = parts per billion (ppb)

Approved Signatory

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-010409/D003.R000
Report Date: 09/08/2022
Purchase Order:
Received: 08/31/22 10:54 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
2,4-D	0.5	Carbophenothion-methyl	1	Desmedipham	1
2,4-DB	1	Carboxin	1	Diallate	1
2,4-DP (Dichlorprop)	1	Carfentrazone-ethyl	1	Diazinon	1
2,4,5-TP	1	Chlorantraniliprole	0.5	Diazoxon	1
Acephate	2	Chlordane, cis-	1	Dicamba	0.5
Acequinocyl	1	Chlordane, trans-	1	Dichlobenil	1
Acetamiprid	1	Chlordimeform	1	Dichlofenthion	1
Acetochlor	1	Chlorfenapyr	1	Dichlofluanid	1
Aciflorfen	1	Chlorfenson (Ovex)	1	Dichlorbenzamide	1
Acrinathrin	1	Chlorfenvinphos	1	Dichlorvos	1
Alachlor	1	Chlorimuron-ethyl	1	Diclobutrazol	1
Aldicarb	1	Chlornitrofen (CNP)	1	Diclofop-methyl	1
Aldicarb sulfoxide	1	Chlorobenzilate	1	Dicloran	1
Aldoxycarb (Aldicarb-sulfuron)	1	Chloroneb	1	Dicofol, p,p'-	1
Aldrin	1	Chlorothalonil	0.5	Dicofol, o,p'-	1
Ametryn	1	Chlorpropham (CIPC)	1	Dicrotophos	1
Aspon	1	Chlorpyrifos (Chlorpyrifos ethyl)	1	Dieldrin	1
Atrazine	1	Chlorpyrifos-methyl	1	Diethofencarb	1
Atrazine-desethyl	1	Chlorsulfuron	1	Diethyltoluamide (DEET)	1
Avermectin B1a/B1b (Abemectin)	1	Chlorthion	1	Difenoconazole	1
Azinphos-ethyl	1	Chlorthiophos	1	Diflubenzuron	1
Azinphos-methyl	1	Cinerin	1	Diflufenzopyr	1
Azoxystrobin	1	Clethodim	1	Dimethenamide	1
Benalaxyl	1	Clethodim Sulfone	1	Dimethoate	1
Bendiocarb	1	Clethodim Sulfoxide	1	Dimethomorph	1
Benfluralin	1	Clofentezine	1	Diniconazole	1
Benoxacor	1	Clomazone	1	Dinocap	1
Bensulide	1	Clopyralid	1	Dinoseb	1
Bentazone	1	Clothianidin	1	Dinotefuran	1
BHC alpha (HCH)	1	Coumaphos	1	Dioxathion	1
BHC beta (HCH)	1	Crotoxyphos	1	Diphenamid	1
BHC delta (HCH)	1	Cyanazine	1	Diphenylamine	1
Bifenazate	1	Cyanofenphos	1	Disulfoton	1
Bifenox	1	Cyanophos	1	Disulfoton sulfone	1
Bifenthrin	1	Cyantraniliprole	1	Disulfoton sulfoxide	1
Binapacryl	1	Cyazofamid	1	Dithianon	1
Bitertanol	1	Cycloate	1	Diuron	1
Boscalid (Nicobifen)	0.5	Cycloxydim	1	DNOC	1
Bromacil	1	Cyfluthrin	1	Edifenphos	1
Bromophos (Bromophos-methyl)	1	Cyhalothrin, lambda	1	Endosulfan alpha	1
Bromophos-ethyl	1	Cymoxanil	1	Endosulfan beta	1
Bromopropylate	1	Cypermethrin	1	Endosulfan sulfate	1
Bromoxynil	1	Cyprodinil	1	Endrin	1
Bromuconazole	1	Cyromazine	1	Endrin aldehyde	1
Bupirimate	1	Dacthal (Chlorthal-dimethyl)	1	EPN	1
Buprofezin	1	DDD, o,p'-	1	EPTC (Eptam)	1
Butachlor	1	DDD, p,p'-	1	Esfenvalerate/Fenvalerate	1
Butralin	1	DDE, o,p'-	1	Etaconazole	1
Butylate	1	DDE, p,p'-	1	Ethalfluralin	1
Cadusafos	1	DDT, o,p'-	1	Ethiofencarb	1
Captafol	5	DDT, p,p'-	1	Ethion	1
Captan	2	DEF (Tribufos)	1	Ethirimol	1
Carbaryl	0.5	Deltamethrin	1	Ethofumesate	1
Carbendazim	1	Demeton-S	1	Ethoprophos	1
Carbofuran	1	Demeton-Smethyl	1	Ethoxyquin	1
Carbofuran, 3-hydroxy	1	Demeton-Smethyl sulfone	1	Etofenprox	1
Carbophenothion	1				

LOQ = Limit of quantitation, µg/L (ppb)

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-010409/D003.R000
Report Date: 09/08/2022
Purchase Order:
Received: 08/31/22 10:54 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
Etoxazole	1	Hexaconazole	1	Metolachlor	1
Etridiazole	1	Hexazinone	1	Metolcarb	1
Etrimfos	1	Hexythiazox	1	Metribuzin	1
Famoxadone	1	Hydroprene	1	Metsulfuron-methyl	1
Famphur	1	Imazalil	1	Mevinphos	1
Fenamidone	1	Imazamox	1	MGK 264	1
Fenamiphos	1	Imazapic	1	Mirex	1
Fenamiphos sulfone	1	Imazapyr	1	Molinate	1
Fenamiphos sulfoxide	1	Imazaquin	1	Monocrotophos	1
Fenarimol	1	Imazethaphyr	1	Monolinuron	1
Fenbuconazole	1	Imidacloprid	1	Myclobutanil	1
Fenchlorphos	1	Imidoxone	1	Naled	1
Fenhexamid	1	Indaziflam	1	Napropamide	1
Fenitrothion	1	Indoxacarb	1	Neburon	1
Fenobucarb	1	Iprobenfos	1	Nicosulfuron	1
Fenoxycarb	1	Iprodione	0.5	Nitrapyrin	5
Fenpropathrin	1	Isazophos	1	Nitrofen	1
Fenpyroximate	1	Isobenzan	1	Norflurazon	1
Fenson	1	Isocarbophos	1	Novaluron	1
Fensulfothion	1	Isodrin	1	Nuarimol	1
Fenthion	1	Isofenphos	1	Omethoate	1
Fenuron	1	Isofenphos-methyl	1	O-Phenylphenol	1
Fipronil	1	Isofenphos OA	1	Oryzalin	1
Flonicamid	1	Isoprocarb	1	Oxadiazon	1
Fluazifop	1	Isopropalin	1	Oxadixyl	2
Fluazinam	1	Isoprothiolane	1	Oxamyl	1
Fluchloralin	1	Isoproturon	1	Oxamyl-oxime	1
Flucythrinate	1	Isoxaben	1	Oxychlordane	1
Fludioxonil	0.5	Isoxaflutole	1	Oxydemeton-Methyl	1
Flufenacet	1	Jasmolin	1	Oxyfluorfen	1
Flumioxazin	1	Kresoxim-methyl	1	Oxythioquinox	1
Fluometuron	1	Lactofen	1	Paclobutrazol	1
Fluopicolide	1	Lenacil	1	Paraoxon (Paraoxon-ethyl)	1
Fluopyram	1	Lindane (gamma BHC)	1	Paraoxon methyl	1
Fluoxastrobin	1	Linuron	1	Parathion ethyl	1
Flupyradifurone	1	Malaoxon	1	Parathion methyl	1
Fluridone	1	Malathion	1	Penconazole	1
Fluroxypyr	1	Mandipropamid	1	Pendimethalin	1
Flusilazol	1	MCPA/MCPB	1	Penflufen	1
Fluthiacet Methyl	1	Mecarbam	1	Pentachloroaniline	1
Flutolanil	0.5	Mecoprop (MCPP)	1	Pentachlorobenzene (PCB)	1
Fluvalinate	1	Mepanipyrim	1	Pentachlorophenol	1
Fluxapyroxad	1	Mesosulfuron methyl	1	Pentachlorothioanisole (PCTA)	1
Folpet	2	Mesotrione	1	Penthiopyrad	1
Fomesafen	1	Metalaxyl / Mefenoxam	0.5	Permethrin	1
Fonofos	1	Metconazole	1	Perthane	1
Foramsulfuron	1	Methacrifos	1	Phenmedipham	1
Forchlorfenuron	1	Methamidophos	1	Phenothrin	1
Formetanate	1	Methidathion	1	Phenthoate	1
Furathiocarb	1	Methiocarb	1	Phorate	1
Halosulfuron-methyl	1	Methiocarb sulfone	1	Phorate OA	1
Haloxyfop	1	Methiocarb sulfoxide	1	Phorate Sulfone	1
Heptachlor	1	Methomyl	1	Phorate Sulfoxide	1
Heptachlor epoxide	1	Methoxychlor	1	Phosalone	1
Heptenophos	1	Methoxyfenozide	1	Phosmet	1
Hexachlorobenzene	1	Metobromuron	1	Phosphamidon	1

LOQ = Limit of quantitation, µg/L (ppb)

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-010409/D003.R000
Report Date: 09/08/2022
Purchase Order:
Received: 08/31/22 10:54 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
Phoxim	1	Quinalphos	1	Terbutryn	1
Pinoxaden	1	Quinclorac	1	Tetrachlorvinphos	1
Piperonyl butoxide	1	Quinoxyfen	1	Tetraconazole	1
Pirimicarb	1	Quintozene (PCNB)	1	Tetradifon	1
Pirimiphos-methyl	1	Quizalofop	1	Tetramethrin	1
Pirimiphos-ethyl	1	Resmethrin	1	Tetrasul	1
Pirimisulfuron-methyl	1	Rimsulfuron	1	Thiabendazole	1
Prallethrin	1	Rotenone	1	Thiabendazole, 5-hydroxy	1
Prochloraz	1	S421	1	Thiacloprid	1
Procymidone	1	Saflufenacil	1	Thiamethoxam	1
Prodiamine	0.5	Sebuthylazine	1	Thifensulfuron-methyl	1
Profenofos	1	Sethoxydim	1	Thiobencarb	1
Profluralin	1	Simazine	1	Thiodicarb	1
Promecarb	1	Simetryn	1	Thiometon	1
Prometon	1	Spinetoram	1	Thionazin	1
Prometryn	1	Spinosad (Spinosyn A, D)	1	Thiophanate-methyl	1
Pronamide (Propyzamide)	1	Spirodiclofen	1	Tolclofos-methyl	1
Propachlor	1	Spiromesifen	1	Tolfenpyrad	1
Propamocarb	1	Spirotetramat	1	Tolylfluanid	1
Propanil	1	Spirotetramat enol	1	Topramezone	1
Propargite	1	Spiroxamine	1	Tralkoxydim	1
Propazine	1	Sulfallate	1	Triadimefon	0.5
Propetamphos	1	Sulfentrazone	1	Triadimenol	0.5
Propham	1	Sulfometsuron-methyl	1	Triallate	1
Propiconazole (isomers a & b)	0.5	Sulfosulfuron	1	Triasulfuron	1
Propoxur	1	Sulfotep	1	Triazophos	1
Propoxycarbazone sodium	1	Sulfoxaflor	1	Tribenuron-methyl	1
Prosulfuron	1	Sulprofos	1	Trichlopyr	1
Prothioconazole	1	tau-Fluvalinate	1	Trichlorfon	1
Prothiofos	1	Tebuconazole	0.5	Trifloxystrobin	0.5
Pymetrozine	1	Tebufenozide	1	Trifloxysulfuron	1
Pyraclostrobin	0.5	ebuthiuron T	1	Triflumizole	1
Pyrazophos	1	Tecnazene	1	Trifluralin	1
Pyrethrin	1	Tefluthrin, cis-	1	Triflusulfuron-methyl	1
Pyridaben	1	Tembotrione	1	Triforin	1
Pyridate (Metabolite)	1	Terbacil	1	Triticonazole	1
Pyrimethanil	1	Terbufos	1	Vinclozolin	0.5
Pyriproxifen	1	Terbufos sulfone	1	Zoxamide	1
Pyroxasulfone	1	Terbufos sulfoxide	1		
Pyroxsulam	1	Terbuthylazine	1		

ND = Not Detectable µg/L = parts per billion (ppb)

LOQ = Limit of Quantification, µg/L: If an amount below this level is detected (and the identity confirmed), it may be reported as "Trace".

7/10/2019

3 of 3

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-010409/D003.R000
Report Date: 09/08/2022
Purchase Order:
Received: 08/31/22 10:54 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia LABORATORIES
A Tentamus Company

Environmental Cha
Revision: 3.01 Doc
Revised: 02/20/202C

22-010409

Please inform us if you know or suspect that any part of WSP - Hollow Brook ls or chemicals.

Company: WSP USA
Contact: John Benvegna
Address: 500 Summit Lake Drive, Ste. 450
Valhalla, New York 10595
Email: john.benvegna@wsp.com
Phone: (914) 694-5711 Fax: (____)

Billing (if different): Eugene Peterson @ HBGC

Analy

P2220*	dithiopyr	fenoxaprop	trinexapac	quintozene

Preservative code: Verification of type used †

PO Number:
Project Number:
Project Name: Hollowbrook Golf Club (HBGC)
Custom Reporting: low LOQ's (< or equal to 0.5 ppb if possible
☐ Report to State:
Turn-around time: ☒ Standard ☐ Rush * ☐ Priority Rush *
*Ask for availability
Sampled by:

Lab ID	Field / Sample ID	Date	Time	Matrix ††
	DS-1	8/30/22	1100	SW
	GW-1R	↓	1000	GW

Comments

*Custom low LOQ's (< or equal to 0.5 ppb if possible)
*Add additional compounds req'd -please ask Renate
*******PLEASE INVOICE*******:
Hollowbrook Golf Club
Attn: Eugene Peterson
1060 Oregon Road
Cortlandt Manor, New York
10567
Eugenep@golfhollowbrook.com

*******Report to:
John Benvegna, WSP-USA

Relinquished By:	Date	Time	Received By:	Date	Time
	8/30/22	1130	AC	8.31	10:54

Lab Use Only:
☒ Shipped Via: VES or ☐ Client drop off
Evidence of cooling: ☒ yes | ☐ No - Temp (°C): 2.7
Sample in good condition? ☒ yes | ☐ No
☐ Cash | ☐ Check | ☐ CC | ☐ Net:
☐ Prelog storage: R44

† Preservative Codes: (If no preservative leave blank) HCL = "CL"; H_2SO_4 = "HS"; NHO3 = "N3"; NaOH = "NH"; ZnAc = "ZN"
†† Matrix Code: Drinking water (DW); Ground or Well Water (GW); Storm Water (SW); Waste Water (WW); Waste (W) ; Solid (S)

Samples submitted to CL with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms.

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-010409/D003.R000
Report Date:	09/08/2022
Purchase Order:	
Received:	08/31/22 10:54 AM
Project Name:	Hollowbrook Golf Club (HBGC)

PACKAGE RECEIVING FORM

Delivery Date: X 8-31 X **Same as Opened By Date** □ **Unsure**

How was the package delivered?

UPS FEDEX USPS DHL OTHER:_____

Tracking Number: A 382 415 7727

	CIRCLE ONE
1) Was package sealed with no evidence of holes/tampering?	YES NO
Further custody seal/tampering notes:_____	
2) Was packing material used?	YES NO
If YES: □ PEANUTS X BUBBLE □ WRAP □ FOAM PAPER	
3) Was a Complete Chain of Custody (COC) received?	YES NO
Comment (PT?, Email?):_____	
4) Sample temperature upon arrival?	2.7 °C
5) Evidence of cooling?	YES NO
If YES, What kind? X ICE □ FREEZER PACK □ DRY ICE	
Insulation? X PLASTIC COOLER □ STYROFOAM □ OTHER:	
6) Were sample containers sealed in separate plastic bags/secondary containment?	YES NO
7) Did sample containers arrive in good condition?	YES NO
If NO: □ LEAKED □ BROKEN □ OTHER:	
If NO: Suspect contamination of other samples? □ YES □NO	
8) Sample labels present?	YES NO
9) Do sample labels agree with COC?	YES NO
If NO, number of sample containers received:_____	

Sample pre-log location:

R39 R44 F44 R99 CANNA SHELF FOOD SHELF Other:_____

Other Notes:

Received By (initials): AC **Date:** 8-31 **Time:** 10:57

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-011281/D002.R000
Report Date:	09/28/2022
Purchase Order:	
Received:	09/20/22 10:25 AM
Project Name:	Hollowbrook Golf Club (HBGC)

Cover Letter

WSP USA
500 Summit Lake Drive, Suite 450
Valhalla New York 10595
United States of America (USA)

Dear John Benvegna,

Enclosed please find Columbia Laboratories analytical report for samples received as order number 22-011281 on 09/20/2022 at 10:25. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Thank you for allowing Columbia Laboratories to be of service to you, we appreciate your business.

Sincerely,

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-011281/D002.R000
Report Date:	09/28/2022
Purchase Order:	
Received:	09/20/22 10:25 AM
Project Name:	Hollowbrook Golf Club (HBGC)

Customer:	WSP USA 500 Summit Lake Drive, Suite 450 Valhalla New York 10595 United States of America (USA)
Sample ID:	GW-1R
Sample Matrix:	Water
Laboratory ID:	22-011281-0001-00
Evidence of Cooling:	Yes
Temp:	3.1 °C
Relinquished by:	UPS

Sample Results

Pesticides

Multi-Residue Pesticide Profile

All compounds on the attached sheet were found to be <LOQ except those listed

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Flutolanil	3.00	µg/L	0.500	09/28/22	AOAC 2007.01 & EN 15662 (mod)	
Propiconazole	0.600	µg/L	0.500	09/28/22	AOAC 2007.01 & EN 15662 (mod)	

Abbreviations

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

Units of Measure

µg/L = Micrograms per liter = parts per billion (ppb)

Approved Signatory

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-011281/D002.R000
Report Date: 09/28/2022
Purchase Order:
Received: 09/20/22 10:25 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
2,4-D	0.5	Carbophenothion-methyl	1	Desmedipham	1
2,4-DB	1	Carboxin	1	Diallate	1
2,4-DP (Dichlorprop)	1	Carfentrazone-ethyl	1	Diazinon	1
2,4,5-TP	1	Chlorantraniliprole	0.5	Diazoxon	1
Acephate	2	Chlordane, cis-	1	Dicamba	0.5
Acequinocyl	1	Chlordane, trans-	1	Dichlobenil	1
Acetamiprid	1	Chlordimeform	1	Dichlofenthion	1
Acetochlor	1	Chlorfenapyr	1	Dichlofluanid	1
Aciflorfen	1	Chlorfenson (Ovex)	1	Dichlorbenzamide	1
Acrinathrin	1	Chlorfenvinphos	1	Dichlorvos	1
Alachlor	1	Chlorimuron-ethyl	1	Diclobutrazol	1
Aldicarb	1	Chlornitrofen (CNP)	1	Diclofop-methyl	1
Aldicarb sulfoxide	1	Chlorobenzilate	1	Dicloran	1
Aldoxycarb (Aldicarb-sulfuron)	1	Chloroneb	1	Dicofol, p,p'-	1
Aldrin	1	Chlorothalonil	0.5	Dicofol, o,p'-	1
Ametryn	1	Chlorpropham (CIPC)	1	Dicrotophos	1
Aspon	1	Chlorpyrifos (Chlorpyrifos ethyl)	1	Dieldrin	1
Atrazine	1	Chlorpyrifos-methyl	1	Diethofencarb	1
Atrazine-desethyl	1	Chlorsulfuron	1	Diethyltoluamide (DEET)	1
Avermectin B1a/B1b (Abemectin)	1	Chlorthion	1	Difenoconazole	1
Azinphos-ethyl	1	Chlorthiophos	1	Diflubenzuron	1
Azinphos-methyl	1	Cinerin	1	Diflufenzopyr	1
Azoxystrobin	1	Clethodim	1	Dimethenamide	1
Benalaxyl	1	Clethodim Sulfone	1	Dimethoate	1
Bendiocarb	1	Clethodim Sulfoxide	1	Dimethomorph	1
Benfluralin	1	Clofentezine	1	Diniconazole	1
Benoxacor	1	Clomazone	1	Dinocap	1
Bensulide	1	Clopyralid	1	Dinoseb	1
Bentazone	1	Clothianidin	1	Dinotefuran	1
BHC alpha (HCH)	1	Coumaphos	1	Dioxathion	1
BHC beta (HCH)	1	Crotoxyphos	1	Diphenamid	1
BHC delta (HCH)	1	Cyanazine	1	Diphenylamine	1
Bifenazate	1	Cyanofenphos	1	Disulfoton	1
Bifenox	1	Cyanophos	1	Disulfoton sulfone	1
Bifenthrin	1	Cyantraniliprole	1	Disulfoton sulfoxide	1
Binapacryl	1	Cyazofamid	1	Dithianon	1
Bitertanol	1	Cycloate	1	Diuron	1
Boscalid (Nicobifen)	0.5	Cycloxydim	1	DNOC	1
Bromacil	1	Cyfluthrin	1	Edifenphos	1
Bromophos (Bromophos-methyl)	1	Cyhalothrin, lambda	1	Endosulfan alpha	1
Bromophos-ethyl	1	Cymoxanil	1	Endosulfan beta	1
Bromopropylate	1	Cypermethrin	1	Endosulfan sulfate	1
Bromoxynil	1	Cyprodinil	1	Endrin	1
Bromuconazole	1	Cyromazine	1	Endrin aldehyde	1
Bupirimate	1	Dacthal (Chlorthal-dimethyl)	1	EPN	1
Buprofezin	1	DDD, o,p'-	1	EPTC (Eptam)	1
Butachlor	1	DDD, p,p'-	1	Esfenvalerate/Fenvalerate	1
Butralin	1	DDE, o,p'-	1	Etaconazole	1
Butylate	1	DDE, p,p'-	1	Ethalfluralin	1
Cadusafos	1	DDT, o,p'-	1	Ethiofencarb	1
Captafol	5	DDT, p,p'-	1	Ethion	1
Captan	2	DEF (Tribufos)	1	Ethirimol	1
Carbaryl	0.5	Deltamethrin	1	Ethofumesate	1
Carbendazim	1	Demeton-S	1	Ethoprophos	1
Carbofuran	1	Demeton-S methyl	1	Ethoxyquin	1
Carbofuran, 3-hydroxy	1	Demeton-S methyl sulfone	1	Etofenprox	1
Carbophenothion	1				

LOQ = Limit of quantitation, µg/L (ppb)

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-011281/D002.R000
Report Date: 09/28/2022
Purchase Order:
Received: 09/20/22 10:25 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
Etoxazole	1	Hexaconazole	1	Metolachlor	1
Etridiazole	1	Hexazinone	1	Metolcarb	1
Etrimfos	1	Hexythiazox	1	Metribuzin	1
Famoxadone	1	Hydroprene	1	Metsulfuron-methyl	1
Famphur	1	Imazalil	1	Mevinphos	1
Fenamidone	1	Imazamox	1	MGK 264	1
Fenamiphos	1	Imazapic	1	Mirex	1
Fenamiphos sulfone	1	Imazapyr	1	Molinate	1
Fenamiphos sulfoxide	1	Imazaquin	1	Monocrotophos	1
Fenarimol	1	Imazethaphyr	1	Monolinuron	1
Fenbuconazole	1	Imidacloprid	1	Myclobutanil	1
Fenchlorphos	1	Imidoxone	1	Naled	1
Fenhexamid	1	Indaziflam	1	Napropamide	1
Fenitrothion	1	Indoxacarb	1	Neburon	1
Fenobucarb	1	Iprobenfos	1	Nicosulfuron	1
Fenoxycarb	1	Iprodione	0.5	Nitrapyrin	5
Fenpropathrin	1	Isazophos	1	Nitrofen	1
Fenpyroximate	1	Isobenzan	1	Norflurazon	1
Fenson	1	Isocarbophos	1	Novaluron	1
Fensulfothion	1	Isodrin	1	Nuarimol	1
Fenthion	1	Isofenphos	1	Omethoate	1
Fenuron	1	Isofenphos-methyl	1	O-Phenylphenol	1
Fipronil	1	Isofenphos OA	1	Oryzalin	1
Flonicamid	1	Isoprocarb	1	Oxadiazon	1
Fluazifop	1	Isopropalin	1	Oxadixyl	2
Fluazinam	1	Isoprothiolane	1	Oxamyl	1
Fluchloralin	1	Isoproturon	1	Oxamyl-oxime	1
Flucythrinate	1	Isoxaben	1	Oxychlordane	1
Fludioxonil	0.5	Isoxaflutole	1	Oxydemeton-Methyl	1
Flufenacet	1	Jasmolin	1	Oxyfluorfen	1
Flumioxazin	1	Kresoxim-methyl	1	Oxythioquinox	1
Fluometuron	1	Lactofen	1	Paclobutrazol	1
Fluopicolide	1	Lenacil	1	Paraoxon (Paraoxon-ethyl)	1
Fluopyram	1	Lindane (gamma BHC)	1	Paraoxon methyl	1
Fluoxastrobin	1	Linuron	1	Parathion ethyl	1
Flupyradifurone	1	Malaoxon	1	Parathion methyl	1
Fluridone	1	Malathion	1	Penconazole	1
Fluroxypyr	1	Mandipropamid	1	Pendimethalin	1
Flusilazol	1	MCPA/MCPB	1	Penflufen	1
Fluthiacet Methyl	1	Mecarbam	1	Pentachloroaniline	1
Flutolanil	0.5	Mecoprop (MCPP)	1	Pentachlorobenzene (PCB)	1
Fluvalinate	1	Mepanipyrim	1	Pentachlorophenol	1
Fluxapyroxad	1	Mesosulfuron methyl	1	Pentachlorothioanisole (PCTA)	1
Folpet	2	Mesotrione	1	Penthiopyrad	1
Fomesafen	1	Metalaxyl / Mefenoxam	0.5	Permethrin	1
Fonofos	1	Metconazole	1	Perthane	1
Foramsulfuron	1	Methacrifos	1	Phenmedipham	1
Forchlorfenuron	1	Methamidophos	1	Phenothrin	1
Formetanate	1	Methidathion	1	Phenthoate	1
Furathiocarb	1	Methiocarb	1	Phorate	1
Halosulfuron-methyl	1	Methiocarb sulfone	1	Phorate OA	1
Haloxyfop	1	Methiocarb sulfoxide	1	Phorate Sulfone	1
Heptachlor	1	Methomyl	1	Phorate Sulfoxide	1
Heptachlor epoxide	1	Methoxychlor	1	Phosalone	1
Heptenophos	1	Methoxyfenozide	1	Phosmet	1
Hexachlorobenzene	1	Metobromuron	1	Phosphamidon	1

LOQ = Limit of quantitation, µg/L (ppb)

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-011281/D002.R000
Report Date: 09/28/2022
Purchase Order:
Received: 09/20/22 10:25 AM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
Phoxim	1	Quinalphos	1	Terbutryn	1
Pinoxaden	1	Quinclorac	1	Tetrachlorvinphos	1
Piperonyl butoxide	1	Quinoxyfen	1	Tetraconazole	1
Pirimicarb	1	Quintozene (PCNB)	1	Tetradifon	1
Pirimiphos-methyl	1	Quizalofop	1	Tetramethrin	1
Pirimiphos-ethyl	1	Resmethrin	1	Tetrasul	1
Pirimisulfuron-methyl	1	Rimsulfuron	1	Thiabendazole	1
Prallethrin	1	Rotenone	1	Thiabendazole, 5-hydroxy	1
Prochloraz	1	S421	1	Thiacloprid	1
Procymidone	1	Saflufenacil	1	Thiamethoxam	1
Prodiamine	0.5	Sebuthylazine	1	Thifensulfuron-methyl	1
Profenofos	1	Sethoxydim	1	Thiobencarb	1
Profluralin	1	Simazine	1	Thiodicarb	1
Promecarb	1	Simetryn	1	Thiometon	1
Prometon	1	Spinetoram	1	Thionazin	1
Prometryn	1	Spinosad (Spinosyn A, D)	1	Thiophanate-methyl	1
Pronamide (Propyzamide)	1	Spirodiclofen	1	Tolclofos-methyl	1
Propachlor	1	Spiromesifen	1	Tolfenpyrad	1
Propamocarb	1	Spirotetramat	1	Tolylfluanid	1
Propanil	1	Spirotetramat enol	1	Topramezone	1
Propargite	1	Spiroxamine	1	Tralkoxydim	1
Propazine	1	Sulfallate	1	Triadimefon	0.5
Propetamphos	1	Sulfentrazone	1	Triadimenol	0.5
Propham	1	Sulfometsuron-methyl	1	Triallate	1
Propiconazole (isomers a & b)	0.5	Sulfosulfuron	1	Triasulfuron	1
Propoxur	1	Sulfotep	1	Triazophos	1
Propoxycarbazone sodium	1	Sulfoxaflor	1	Tribenuron-methyl	1
Prosulfuron	1	Sulprofos	1	Trichlopyr	1
Prothioconazole	1	tau-Fluvalinate	1	Trichlorfon	1
Prothiofos	1	Tebuconazole	0.5	Trifloxystrobin	0.5
Pymetrozine	1	Tebufenozide	1	Trifloxysulfuron	1
Pyraclostrobin	0.5	ebuthiuron T	1	Triflumizole	1
Pyrazophos	1	Tecnazene	1	Trifluralin	1
Pyrethrin	1	Tefluthrin, cis-	1	Triflusulfuron-methyl	1
Pyridaben	1	Tembotrione	1	Triforin	1
Pyridate (Metabolite)	1	Terbacil	1	Triticonazole	1
Pyrimethanil	1	Terbufos	1	Vinclozolin	0.5
Pyriproxifen	1	Terbufos sulfone	1	Zoxamide	1
Pyroxasulfone	1	Terbufos sulfoxide	1	Trinexapac-ethyl	0.5
Pyroxsulam	1	Terbuthylazine	1	DIthiopyr	0.5
				Fenoxaprop-ethyl	0.5

ND = Not Detectable µg/L = parts per billion (ppb)

LOQ = Limit of Quantification, µg/L: If an amount below this level is detected (and the identity confirmed), it may be reported as "Trace".

9/19/2022

3 of 3

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-011281/D002.R000
Report Date: 09/28/2022
Purchase Order:
Received: 09/20/22 10:25 AM

Project Name: Hollowbrook Golf Club (HBGC)

22-011281

Columbia LABORATORIES
A Tentamus Company

Environmental Chain of Custoc

Revision: 3.01 Document Control: CF00
Revised: 02/20/2020 Effective: 02/26/20

WSP - Hollow Brook

Please inform us if you know or suspect that any part of your sample may contain hazardous materials or chemicals.

Company: WSP USA
Contact: John Benvegna
Address: 500 Summit Lake Drive, Ste. 450
Valhalla, New York 10595
Email: john.benvegna@wsp.com
Phone: (914) 694-5711 Fax: (____) _____

Billing (if different): Eugene Peterson @ HBGC

Analysis Requested

P2220*

Preservative code: Verification of type used †

PO Number: _____
Project Number: _____
Project Name: Hollowbrook Golf Club (HBGC)
Custom Reporting: low LOQ's (< or equal to 0.5 ppb if possibl
☐ Report to State: _____
Turn-around time: ☒ Standard ☐ Rush * ☐ Priority Rush *
*Ask for availability
Sampled by: _____

Lab ID	Field / Sample ID	Date/Time		P2220*	Matrix ††	Comments
	GW-1R	09/19/22	0930	X		*Custom low LOQ's (< or equal to 0.5 ppb if possible) *Add additional compounds req'd -please ask Renate *******PLEASE INVOICE*******: Hollowbrook Golf Club Attn: Eugene Peterson 1060 Oregon Road Cortlandt Manor, New York 10567 lot 8368 Eugenep@golfhollowbrook.com *******Report to: John Benvegna, WSP-USA

Relinquished By:	Date	Time	Received By:	Date	Time	Lab Use Only:
[signature] WSP	09/19/22	1600	DS	9/20/22	10:25	☐ Shipped Via: UPS or ☐ Client drop off Evidence of cooling: ☐ yes | ☐ No - Temp (°C): 3.1° C Sample in good condition: ☐ yes | ☐ No _____ ☐ Cash | ☐ Check | ☐ CC | ☐ Net: _____ ☐ Prelog storage: _____

† Preservative Codes: (If no preservative leave blank) HCL = "CL"; H_2SO_4 = "HS"; NHO3 = "N3"; NaOH = "NH"; ZnAc = "ZN"

†† Matrix Code: Drinking water (DW); Ground or Well Water (GW); Storm Water (SW); Waste Water (WW); Waste (W) ; Solid (S)

Samples submitted to CL with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms.

Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Report Date: 12/21/2022
Client Project ID: Hollow Brook Golf Club (HBGC)
York Project (SDG) No.: 22L0860

Report Date: 12/21/2022
Client Project ID: Hollow Brook Golf Club (HBGC)
York Project (SDG) No.: 22L0860

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 14, 2022 and listed below. The project was identified as your project: **Hollow Brook Golf Club (HBGC)**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22L0860-01	MW-1R	Water	12/13/2022	12/14/2022
22L0860-02	DS-1	Water	12/13/2022	12/14/2022

General Notes for York Project (SDG) No.: 22L0860

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:  **Date:** 12/21/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: MW-1R

York Sample ID: 22L0860-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L0860	Hollow Brook Golf Club (HBGC)	Water	December 13, 2022 11:35 am	12/14/2022

Chloride

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**61.6**		mg/L	5.00	10	EPA 300.0	12/16/2022 03:50	12/16/2022 03:50	NJO
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP		

Nitrate as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	ND		mg/L	0.0500	1	EPA 300.0	12/14/2022 23:41	12/14/2022 23:41	NJO
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Nitrite as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0	12/14/2022 23:41	12/14/2022 23:41	NJO
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,PADEP		

Ammonia Nitrogen as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	**Ammonia Nitrogen as N**	**0.572**		mg/L	0.0500	1	SM 4500-NH3 D	12/20/2022 08:43	12/20/2022 12:34	VR
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Phosphorous, total

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	**3.6**		mg/L	0.50	10	SM 4500-P B5/E	12/20/2022 14:46	12/20/2022 19:01	ZTS
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Total Dissolved Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	**287**		mg/L	10.0	1	SM 2540C-2015	12/19/2022 19:10	12/19/2022 19:10	AA
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Sample Information

Client Sample ID: DS-1 **York Sample ID:** 22L0860-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22L0860	Hollow Brook Golf Club (HBGC)	Water	December 13, 2022 12:15 pm	12/14/2022

Chloride

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**101**		mg/L	5.00	10	EPA 300.0	12/16/2022 03:59	12/16/2022 03:59	NJO
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP,PADEP		

Nitrate as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	**Nitrate as N**	**0.782**		mg/L	0.0500	1	EPA 300.0	12/15/2022 02:23	12/15/2022 02:23	NJO
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Nitrite as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0	12/15/2022 02:23	12/15/2022 02:23	NJO
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,PADEP		

Ammonia Nitrogen as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	Ammonia Nitrogen as N	ND		mg/L	0.0500	1	SM 4500-NH3 D	12/20/2022 08:43	12/20/2022 12:34	VR
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Phosphorous, total

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	**0.082**		mg/L	0.050	1	SM 4500-P B5/E	12/20/2022 14:46	12/20/2022 19:01	ZTS
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Total Dissolved Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	**304**		mg/L	10.0	1	SM 2540C-2015	12/19/2022 19:10	12/19/2022 19:10	AA
							Certifications:	NELAC-NY10854,CTDOH-PH-0723,NJDEP,PADEP		

Sample and Data Qualifiers Relating to This Work Order

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon current NELAC/TNI Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22L0760

120 Research Drive Stratford, CT 06615 - 132-02 89th Ave Queens, NY 11418 - 56 Church Hill Rd. #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: WSP	Company: ← SAME	Company: HOLLOW BROOK GOLF CLUB		RUSH - Next Day
Address: 500 SUMMIT LAKE DR. VALHALLA, NY 10595	Address:	Address: 1060 OREGON RD. CORTLANDT MANOR, NY 10567		RUSH - Two Day
Phone.: 914 461 2961	Phone.:	Phone.:	YOUR Project Name: HOLLOW BROOK GOLF CLUB (HBGC)	RUSH - Three Day
Contact: JOHN.BENVENGA@WSP.COM	Contact:	Contact: EUGENE PETERSON		RUSH - Four Day
E-mail:	E-mail:	E-mail: EUGENEA@GOLFHOLLOWBROOK.COM	YOUR PO#:	Standard (5-7 Day) X
				(7-10 for PFAS)

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

MICHAEL K DEFELICE

Samples Collected by: (print AND sign your name)

Matrix Codes

S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil | Other

Samples From

New York X
New Jersey
Connecticut
Pennsylvania
Other:

Report / EDD Type (circle selections)

Summary Report | CT RCP | EQuIS (Standard)
QA Report | CT RCP DQA/DUE | NYSDEC EQuIS
Standard Excel EDD | NJDEP Reduced Deliverables | NJDKQP
NY ASP B Package | NJDEP SRP HazSite
Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analyses Requested	Container Type	No.
MW-1R	GW	12/13/22 1135	NITRATE-NITRITE, AMMONIA	1 500 mL A-UNP 1 500 mL P-H2SO4	2
DS-1	GW	12/13/22 1215	CHLORIDE, TDS, TOT. PHOS.	1 500 mL P-H2SO4	1

Comments:

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH X
ZnAc ___ Ascorbic Acid ___ Other: ___

Samples iced/chilled at time of lab pickup? circle Yes or No

Special Instruction

Field Filtered
Lab to Filter

1. Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
WSP	12/14/22	Andrew S. York	12/14/22 12:32	Andrew S. York	12/14/22 1745
2. Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
4. Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
				MH	12/14/22 1745 / 5.1 Degrees C

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-015304/D002.R000
Report Date:	12/28/2022
Purchase Order:	
Received:	12/14/22 12:29 PM
Project Name:	Hollowbrook Golf Club (HBGC)

Cover Letter

WSP USA
500 Summit Lake Drive, Suite 450
Valhalla New York 10595
United States of America (USA)

Dear John Benvegna,

Enclosed please find Columbia Laboratories analytical report for samples received as order number 22-015304 on 12/14/2022 at 12:29. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Thank you for allowing Columbia Laboratories to be of service to you, we appreciate your business.

Sincerely,

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-015304/D002.R000
Report Date:	12/28/2022
Purchase Order:	
Received:	12/14/22 12:29 PM
Project Name:	Hollowbrook Golf Club (HBGC)

Customer:	WSP USA 500 Summit Lake Drive, Suite 450 Valhalla New York 10595 United States of America (USA)
Sample ID:	DS-1
Sample Matrix:	Water
Laboratory ID:	22-015304-0001-00
Evidence of Cooling:	Yes
Temp:	2.3 °C
Relinquished by:	ups

Sample Results

Pesticides

Multi-Residue Pesticide Profile

All compounds on the attached sheet were found to be <LOQ except those listed

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Dithiopyr	< LOQ	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Fenoxaprop-ethyl	< LOQ	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Quintozene	< LOQ	µg/L	1.00	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Trinexapac-ethyl	< LOQ	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	22-015304/D002.R000
Report Date:	12/28/2022
Purchase Order:	
Received:	12/14/22 12:29 PM
Project Name:	Hollowbrook Golf Club (HBGC)

Customer:	WSP USA 500 Summit Lake Drive, Suite 450 Valhalla New York 10595 United States of America (USA)
Sample ID:	GW-1R
Sample Matrix:	Water
Laboratory ID:	22-015304-0002-00
Evidence of Cooling:	Yes
Temp:	2.3 °C
Relinquished by:	ups

Sample Results

Pesticides

Multi-Residue Pesticide Profile

All compounds on the attached sheet were found to be <LOQ except those listed

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Dithiopyr	< LOQ	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Fenoxaprop-ethyl	< LOQ	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Flutolanil	0.900	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Quintozene	< LOQ	µg/L	1.00	12/28/22	AOAC 2007.01 & EN 15662 (mod)	
Trinexapac-ethyl	< LOQ	µg/L	0.500	12/28/22	AOAC 2007.01 & EN 15662 (mod)	

Abbreviations

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

Units of Measure

µg/L = Micrograms per liter = parts per billion (ppb)

Approved Signatory

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-015304/D002.R000
Report Date: 12/28/2022
Purchase Order:
Received: 12/14/22 12:29 PM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
2,4-D	0.5	Carbophenothion-methyl	1	Desmedipham	1
2,4-DB	1	Carboxin	1	Diallate	1
2,4-DP (Dichlorprop)	1	Carfentrazone-ethyl	1	Diazinon	1
2,4,5-TP	1	Chlorantraniliprole	0.5	Diazoxon	1
Acephate	2	Chlordane, cis-	1	Dicamba	0.5
Acequinocyl	1	Chlordane, trans-	1	Dichlobenil	1
Acetamiprid	1	Chlordimeform	1	Dichlofenthion	1
Acetochlor	1	Chlorfenapyr	1	Dichlofluanid	1
Aciflorfen	1	Chlorfenson (Ovex)	1	Dichlorbenzamide	1
Acrinathrin	1	Chlorfenvinphos	1	Dichlorvos	1
Alachlor	1	Chlorimuron-ethyl	1	Diclobutrazol	1
Aldicarb	1	Chlornitrofen (CNP)	1	Diclofop-methyl	1
Aldicarb sulfoxide	1	Chlorobenzilate	1	Dicloran	1
Aldoxycarb (Aldicarb-sulfuron)	1	Chloroneb	1	Dicofol, p,p'-	1
Aldrin	1	Chlorothalonil	0.5	Dicofol, o,p'-	1
Ametryn	1	Chlorpropham (CIPC)	1	Dicrotophos	1
Aspon	1	Chlorpyrifos (Chlorpyrifos ethyl)	1	Dieldrin	1
Atrazine	1	Chlorpyrifos-methyl	1	Diethofencarb	1
Atrazine-desethyl	1	Chlorsulfuron	1	Diethyltoluamide (DEET)	1
Avermectin B1a/B1b (Abemectin)	1	Chlorthion	1	Difenoconazole	1
Azinphos-ethyl	1	Chlorthiophos	1	Diflubenzuron	1
Azinphos-methyl	1	Cinerin	1	Diflufenzopyr	1
Azoxystrobin	1	Clethodim	1	Dimethenamide	1
Benalaxyl	1	Clethodim Sulfone	1	Dimethoate	1
Bendiocarb	1	Clethodim Sulfoxide	1	Dimethomorph	1
Benfluralin	1	Clofentezine	1	Diniconazole	1
Benoxacor	1	Clomazone	1	Dinocap	1
Bensulide	1	Clopyralid	1	Dinoseb	1
Bentazone	1	Clothianidin	1	Dinotefuran	1
BHC alpha (HCH)	1	Coumaphos	1	Dioxathion	1
BHC beta (HCH)	1	Crotoxyphos	1	Diphenamid	1
BHC delta (HCH)	1	Cyanazine	1	Diphenylamine	1
Bifenazate	1	Cyanofenphos	1	Disulfoton	1
Bifenox	1	Cyanophos	1	Disulfoton sulfone	1
Bifenthrin	1	Cyantraniliprole	1	Disulfoton sulfoxide	1
Binapacryl	1	Cyazofamid	1	Dithianon	1
Bitertanol	1	Cycloate	1	Diuron	1
Boscalid (Nicobifen)	0.5	Cycloxydim	1	DNOC	1
Bromacil	1	Cyfluthrin	1	Edifenphos	1
Bromophos (Bromophos-methyl)	1	Cyhalothrin, lambda	1	Endosulfan alpha	1
Bromophos-ethyl	1	Cymoxanil	1	Endosulfan beta	1
Bromopropylate	1	Cypermethrin	1	Endosulfan sulfate	1
Bromoxynil	1	Cyprodinil	1	Endrin	1
Bromuconazole	1	Cyromazine	1	Endrin aldehyde	1
Bupirimate	1	Dacthal (Chlorthal-dimethyl)	1	EPN	1
Buprofezin	1	DDD, o,p'-	1	EPTC (Eptam)	1
Butachlor	1	DDD, p,p'-	1	Esfenvalerate/Fenvalerate	1
Butralin	1	DDE, o,p'-	1	Etaconazole	1
Butylate	1	DDE, p,p'-	1	Ethalfluralin	1
Cadusafos	1	DDT, o,p'-	1	Ethiofencarb	1
Captafol	5	DDT, p,p'-	1	Ethion	1
Captan	2	DEF (Tribufos)	1	Ethirimol	1
Carbaryl	0.5	Deltamethrin	1	Ethofumesate	1
Carbendazim	1	Demeton-S	1	Ethoprophos	1
Carbofuran	1	Demeton-S methyl	1	Ethoxyquin	1
Carbofuran, 3-hydroxy	1	Demeton-S methyl sulfone	1	Etofenprox	1
Carbophenothion	1				

LOQ = Limit of quantitation, µg/L (ppb)

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-015304/D002.R000
Report Date: 12/28/2022
Purchase Order:
Received: 12/14/22 12:29 PM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
Etoxazole	1	Hexaconazole	1	Metolachlor	1
Etridiazole	1	Hexazinone	1	Metolcarb	1
Etrimfos	1	Hexythiazox	1	Metribuzin	1
Famoxadone	1	Hydroprene	1	Metsulfuron-methyl	1
Famphur	1	Imazalil	1	Mevinphos	1
Fenamidone	1	Imazamox	1	MGK 264	1
Fenamiphos	1	Imazapic	1	Mirex	1
Fenamiphos sulfone	1	Imazapyr	1	Molinate	1
Fenamiphos sulfoxide	1	Imazaquin	1	Monocrotophos	1
Fenarimol	1	Imazethaphyr	1	Monolinuron	1
Fenbuconazole	1	Imidacloprid	1	Myclobutanil	1
Fenchlorphos	1	Imidoxone	1	Naled	1
Fenhexamid	1	Indaziflam	1	Napropamide	1
Fenitrothion	1	Indoxacarb	1	Neburon	1
Fenobucarb	1	Iprobenfos	1	Nicosulfuron	1
Fenoxycarb	1	Iprodione	0.5	Nitrapyrin	5
Fenpropathrin	1	Isazophos	1	Nitrofen	1
Fenpyroximate	1	Isobenzan	1	Norflurazon	1
Fenson	1	Isocarbophos	1	Novaluron	1
Fensulfothion	1	Isodrin	1	Nuarimol	1
Fenthion	1	Isofenphos	1	Omethoate	1
Fenuron	1	Isofenphos-methyl	1	O-Phenylphenol	1
Fipronil	1	Isofenphos OA	1	Oryzalin	1
Flonicamid	1	Isoprocarb	1	Oxadiazon	1
Fluazifop	1	Isopropalin	1	Oxadixyl	2
Fluazinam	1	Isoprothiolane	1	Oxamyl	1
Fluchloralin	1	Isoproturon	1	Oxamyl-oxime	1
Flucythrinate	1	Isoxaben	1	Oxychlordane	1
Fludioxonil	0.5	Isoxaflutole	1	Oxydemeton-Methyl	1
Flufenacet	1	Jasmolin	1	Oxyfluorfen	1
Flumioxazin	1	Kresoxim-methyl	1	Oxythioquinox	1
Fluometuron	1	Lactofen	1	Paclobutrazol	1
Fluopicolide	1	Lenacil	1	Paraoxon (Paraoxon-ethyl)	1
Fluopyram	1	Lindane (gamma BHC)	1	Paraoxon methyl	1
Fluoxastrobin	1	Linuron	1	Parathion ethyl	1
Flupyradifurone	1	Malaoxon	1	Parathion methyl	1
Fluridone	1	Malathion	1	Penconazole	1
Fluroxypyr	1	Mandipropamid	1	Pendimethalin	1
Flusilazol	1	MCPA/MCPB	1	Penflufen	1
Fluthiacet Methyl	1	Mecarbam	1	Pentachloroaniline	1
Flutolanil	0.5	Mecoprop (MCPP)	1	Pentachlorobenzene (PCB)	1
Fluvalinate	1	Mepanipyrim	1	Pentachlorophenol	1
Fluxapyroxad	1	Mesosulfuron methyl	1	Pentachlorothioanisole (PCTA)	1
Folpet	2	Mesotrione	1	Penthiopyrad	1
Fomesafen	1	Metalaxyl / Mefenoxam	0.5	Permethrin	1
Fonofos	1	Metconazole	1	Perthane	1
Foramsulfuron	1	Methacrifos	1	Phenmedipham	1
Forchlorfenuron	1	Methamidophos	1	Phenothrin	1
Formetanate	1	Methidathion	1	Phenthoate	1
Furathiocarb	1	Methiocarb	1	Phorate	1
Halosulfuron-methyl	1	Methiocarb sulfone	1	Phorate OA	1
Haloxyfop	1	Methiocarb sulfoxide	1	Phorate Sulfone	1
Heptachlor	1	Methomyl	1	Phorate Sulfoxide	1
Heptachlor epoxide	1	Methoxychlor	1	Phosalone	1
Heptenophos	1	Methoxyfenozide	1	Phosmet	1
Hexachlorobenzene	1	Metobromuron	1	Phosphamidon	1

LOQ = Limit of quantitation, µg/L (ppb)

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-015304/D002.R000
Report Date: 12/28/2022
Purchase Order:
Received: 12/14/22 12:29 PM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia Food Laboratories, Inc
P2220 Multi-Residue Profile in Water

Compound	LOQ	Compound	LOQ	Compound	LOQ
Phoxim	1	Quinalphos	1	Terbutryn	1
Pinoxaden	1	Quinclorac	1	Tetrachlorvinphos	1
Piperonyl butoxide	1	Quinoxyfen	1	Tetraconazole	1
Pirimicarb	1	Quintozene (PCNB)	1	Tetradifon	1
Pirimiphos-methyl	1	Quizalofop	1	Tetramethrin	1
Pirimiphos-ethyl	1	Resmethrin	1	Tetrasul	1
Pirimisulfuron-methyl	1	Rimsulfuron	1	Thiabendazole	1
Prallethrin	1	Rotenone	1	Thiabendazole, 5-hydroxy	1
Prochloraz	1	S421	1	Thiacloprid	1
Procymidone	1	Saflufenacil	1	Thiamethoxam	1
Prodiamine	0.5	Sebuthylazine	1	Thifensulfuron-methyl	1
Profenofos	1	Sethoxydim	1	Thiobencarb	1
Profluralin	1	Simazine	1	Thiodicarb	1
Promecarb	1	Simetryn	1	Thiometon	1
Prometon	1	Spinetoram	1	Thionazin	1
Prometryn	1	Spinosad (Spinosyn A, D)	1	Thiophanate-methyl	1
Pronamide (Propyzamide)	1	Spirodiclofen	1	Tolclofos-methyl	1
Propachlor	1	Spiromesifen	1	Tolfenpyrad	1
Propamocarb	1	Spirotetramat	1	Tolylfluanid	1
Propanil	1	Spirotetramat enol	1	Topramezone	1
Propargite	1	Spiroxamine	1	Tralkoxydim	1
Propazine	1	Sulfallate	1	Triadimefon	0.5
Propetamphos	1	Sulfentrazone	1	Triadimenol	0.5
Propham	1	Sulfometsuron-methyl	1	Triallate	1
Propiconazole (isomers a & b)	0.5	Sulfosulfuron	1	Triasulfuron	1
Propoxur	1	Sulfotep	1	Triazophos	1
Propoxycarbazone sodium	1	Sulfoxaflor	1	Tribenuron-methyl	1
Prosulfuron	1	Sulprofos	1	Trichlopyr	1
Prothioconazole	1	tau-Fluvalinate	1	Trichlorfon	1
Prothiofos	1	Tebuconazole	0.5	Trifloxystrobin	0.5
Pymetrozine	1	Tebufenozide	1	Trifloxysulfuron	1
Pyraclostrobin	0.5	ebuthiuron T	1	Triflumizole	1
Pyrazophos	1	Tecnazene	1	Trifluralin	1
Pyrethrin	1	Tefluthrin, cis-	1	Triflusulfuron-methyl	1
Pyridaben	1	Tembotrione	1	Triforin	1
Pyridate (Metabolite)	1	Terbacil	1	Triticonazole	1
Pyrimethanil	1	Terbufos	1	Vinclozolin	0.5
Pyriproxifen	1	Terbufos sulfone	1	Zoxamide	1
Pyroxasulfone	1	Terbufos sulfoxide	1	Trinexapac-ethyl	0.5
Pyroxsulam	1	Terbuthylazine	1	DIthiopyr	0.5
				Fenoxaprop-ethyl	0.5

ND = Not Detectable µg/L = parts per billion (ppb)

LOQ = Limit of Quantification, µg/L: If an amount below this level is detected (and the identity confirmed), it may be reported as "Trace".

9/19/2022

3 of 3

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 22-015304/D002.R000
Report Date: 12/28/2022
Purchase Order:
Received: 12/14/22 12:29 PM

Project Name: Hollowbrook Golf Club (HBGC)

Columbia LABORATORIES
A Tentamus Company

Environmental Chain of Cust

Revision: 3.01 Document Control:
Revised: 02/20/2020 Effective: 02/

WSPUSA 22-015304 WSP USA

Please inform us if you know or suspect that any part of your sample ... als.

Company: WSP USA
Contact: John Benvegna
Address: 500 Summit Lake Drive, Ste. 450
Valhalla, New York 10595
Email: john.benvegna@wsp.com
Phone: (914) 694-5711 Fax: (____)

Billing (If different): Eugene Peterson @ HBGC

PO Number:
Project Number:
Project Name: Hollowbrook Golf Club (HBGC)
Custom Reporting: low LOQ's (< or equal to 0.5 ppb if possibl
☐ Report to State:
Turn-around time: ☒ Standard ☐ Rush * ☐ Priority Rush *
*Ask for availability
Sampled by:

Lab ID	Field / Sample ID	Date/Time		P2220*	dithiopyr	fenoxaprop	trinexapac	quintozene					Matrix ††	Comments
				Analysis Requested / Preservative code: Verification of type used †										
	DS-1	12/13/22	1215	X	X	X	X	X						*Custom low LOQ's (< or equal to 0.5 ppb if possible) *Add additional compounds req'd -please ask Renate *******PLEASE INVOICE*******: Hollowbrook Golf Club Attn: Eugene Peterson 1060 Oregon Road Cortlandt Manor, New York 10567 Eugenep@golfhollowbrook.com *******Report to: John Benvegna, WSP-USA
	GW-1R	↓	1135	X	X	X	X	X						

Relinquished By:	Date	Time	Received By:	Date	Time	Lab Use Only:
Mark K Defelice WSP	12/14/22		RBS	12/14/22	1229	☒ Shipped Via: UPS or ☐ Client drop off Evidence of cooling: ☒ yes | ☐ No - Temp (°C): 2.3 Sample in good condition: ☐ yes | ☐ No ☐ Cash | ☐ Check | ☐ CC | ☐ Net: ☐ Prelog storage: R44

† Preservative Codes: (If no preservative leave blank) HCL = "CL"; H_2SO_4 = "HS"; NHO3 = "N3"; NaOH = "NH"; ZnAc = "ZN"

†† Matrix Code: Drinking water (DW); Ground or Well Water (GW); Storm Water (SW); Waste Water (WW); Waste (W) ; Solid (S)

Samples submitted to CL with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms.

12423 NE Whitaker Way
Portland, OR 97230

P: (503) 254-1794 | Fax: (503) 254-1452
info@columbialaboratories.com

Page ____1___of____1___
www.columbialaboratories.com