2021 Annual Report

Land & Gas Reclamation Landfill
WDNR License No. 01118
Dodge County, Wisconsin

Prepared For:

GFL GREEN FOR LIFE environmental

Glacier Ridge Landfill
N7296 Highway V
Horicon, WI 53032

Prepared By:
Environmental Sampling Corporation
P.O. Box 12
Muskego, WI 53150-0012

April 2022

GFL GREEN FOR LIFE environmental

April 13, 2022

Mr. Trevor Bannister
Wisconsin Dept. of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

RE: 2021 Annual Report
Land & Gas Reclamation Landfill, WDNR Lic. #01118
Dodge County, WI

Dear Mr. Bannister:

Pursuant to Condition #3 of the May 19, 2000, Plan of Operation Approval Modification for the facility, Glacier Ridge Landfill is providing one copy of the 2021 Annual Report for the closed Land & Gas Reclamation Landfill. An electronic copy was also provided via e-mail. If you have any questions regarding this report, please contact Frank Perugini of Environmental Sampling Corporation (ESC) at (414) 427-5033 or the undersigned at (920) 210-9311.

Sincerely,

Jacob Margelofsky
Operations Manager

Attachment

cc: Ann Bekta, WDNR-SCR Janesville
Sheila Desai, USEPA Region 5
WDNR-SCR Horicon, File Copy
WDNR Madison, File Copy
Glacier Ridge Landfill, File Copy
Lonn Walter, Glacier Ridge Landfill (electronic copy)
Tim Curry, GFL Environmental (electronic copy)
Kari Rabideau, GFL Environmental (electronic copy)
Mark Torresani, Tetra Tech (electronic copy)
Sherren Clark, SCS Engineers (electronic copy)
Frank Perugini, ESC

2021 ANNUAL REPORT
LAND & GAS RECLAMATION LANDFILL
LICENSE #01118
DODGE COUNTY, WISCONSIN

2021 ANNUAL REPORT
LAND & GAS RECLAMATION LANDFILL, LICENSE #01118
DODGE COUNTY, WISCONSIN

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2021 ANNUAL REPORT
LAND & GAS RECLAMATION LANDFILL, LICENSE #01118
DODGE COUNTY, WISCONSIN

Section 1. Introduction

This annual report addresses the 2021 annual report requirements for the former Land and Gas Reclamation Landfill (LGRL) facility. LGRL was a closed landfill located in the W ½ of Section 35, Township 12-North, Range 16-East, in the Town of Williamstown, Dodge County, Wisconsin. Beginning in 2014, in accordance with the WDNR approved LGRL Waste Relocation Project, the waste from LGRL was removed and relocated to the adjacent Glacier Ridge Landfill (GRL).

The LGRL Waste Relocation Project began during first quarter 2014. Phase A of removal began on March 3, 2014 and was completed on July 21, 2014. A total of 625,784 cubic yards of waste was relocated during Phase A of the project. Phase B of the waste relocation project began on February 3, 2015 and was completed on May 21, 2015 and a total of 523,244 cubic yards of waste were relocated. Phase C of the waste relocation project was started on January 4, 2016 and was completed on March 23, 2016 and an estimated 388,550 cubic yards of waste were relocated.

Since all waste from LGRL has been removed and relocated to the active GRL, the Department determined that several annual report requirements listed in the May 19, 2000 Plan of Operation Approval Modification dated were no longer necessary. The current reporting requirements were outlined in the May 2, 2017 correspondence regarding Annual Reports for the Glacier Ridge Landfill, (Lic. #3068), Biopile (Lic. #3792) and Land and Gas Reclamation Landfill (Lic. #1118).

The format of this 2021 annual report restates the relevant annual report requirements for LGRL. The approval references are presented below in bold italic font followed by GRL's response in normal font.

Section 2. Annual Report Requirements

Approval Reference
May 19, 2000
Plan of Operation Approval Modification, Superior Glacier Ridge Landfill (Lic. No. 3068), Biopile (Lic. No. 3792), Land and Gas Reclamation Landfill (Lic. No. 1118), and Demolition Landfill (Lic. No. 3568)

3. Superior shall submit an annual report to the Department by April 15th of each year which contains the following information about the Land and Gas Reclamation Landfill:

Response
To meet this requirement, GFL Environmental is providing the WDNR with this annual report for Land and Gas Reclamation Landfill (LGRL), which discusses the results of the 2021 environmental monitoring program for the facility. As indicated in the May 2, 2017 correspondence regarding Annual Reports for the Glacier Ridge Landfill, (Lic. #3068), Biopile (Lic. #3792) and Land and Gas Reclamation Landfill (Lic. #1118), some of the annual report requirements are no longer necessary and have been modified as indicated below.

> ***Approval Reference***
> ***May 2, 2017***
> ***Annual Reports for the Advanced Disposal Services Glacier Ridge Landfill, (Lic. #3068), Biopile (Lic. #3792) and Land and Gas Reclamation Landfill (Lic. #1118)***
>
> **…As approved by the October 13, 2013 southeast expansion plan of operation approval, the waste from LGRL was removed and relocated to the adjacent Glacier Ridge Landfill. The waste relocation project began in 2014 and was completed in 2016. All the waste has been removed and relocated; therefore some of the LGRL annual reporting requirements in the May 19, 2000 approval will not be needed in future annual reports. Reporting requirements for the LGRL final cover (conditions 3a and 3d) and gas extraction system (conditions 3c, e, f and g) are no longer necessary. However, the evaluation of the groundwater monitoring data (condition 3b), the list of monitoring points (condition 3h), and the evaluation of the effectiveness of the remedy (condition 3i) will continue to be required in annual reports to the Department.**

Annual report requirements provided as Conditions 3.b., 3 h., and 3.i. of the May 19, 2000 Approval Modification are discussed below. As indicated above, the remaining annual report requirements are no longer necessary.

Approval Reference
May 19, 2000
Plan of Operation Approval Modification, Superior Glacier Ridge Landfill (Lic. No. 3068), Biopile (Lic. No. 3792), Land and Gas Reclamation Landfill (Lic. No. 1118), and Demolition Landfill (Lic. No. 3568)

b. ***An evaluation of the monitoring data generated for the facility, including groundwater gradients and quality, leachate head and quality data, gas quality and extraction rate data, condensate volume data, and settlement data.***

Response
An evaluation of the groundwater monitoring data for the facility is summarized below. Due to the completion of the LGRL Waste Relocation Project, there was no leachate head, leachate quality, gas extraction, gas condensate, or settlement monitoring during 2021.

Groundwater Monitoring Program
The groundwater monitoring program is performed in accordance with the WDNR Plan Modification approval for monitoring at Land and Gas Reclamation Landfill dated April 14, 1995 and the WDNR Expedited Plan Modification, Land and Gas Reclamation Landfill, dated February 22, 2002. Additional groundwater monitoring was conducted, beyond the scope of the permit, in accordance with the WDNR approved Off-Site Investigation of Chlorinated VOC Plume in Bedrock, Land and Gas Reclamation Landfill, dated April 11, 2012.

The routine semi-annual monitoring is conducted in April and October. Routine annual monitoring is conducted in October. During 2021, the additional investigation monitoring was conducted in conjunction with the routine monitoring events. The LGRL groundwater monitoring network is outlined below.

- Fifteen monitoring wells are monitored semi-annually for inorganics (hardness, alkalinity, chloride, and arsenic) in addition to water elevations and field parameters (i.e. specific conductance, pH, and temperature).
- VOC analyses are conducted semi-annually at seven of these monitoring wells (MW-1RR, MW-1AR, W-3R, W-3AR, MW-210, MW-210A, and MW-210B) and annually in October at four of these monitoring wells (W-163, W-163A, W-214, and W-214A). No VOC analysis is required at the remaining four wells (MW-6R, MW-203A, MW-7R, and MW-8R).
- Three additional monitoring wells (MW-201, MW-201A, and MW-201B) are monitored semi-annually for water elevation and field parameters only.
- Investigation groundwater monitoring includes semi-annual monitoring at nine monitoring wells and piezometers (MW-1B, P-401D, P-402E, P-422B, P-423D, P-424D, P424SS, P-426D, and P-429SS) for inorganics (hardness, alkalinity, and chloride), VOCs, water elevations, and field parameters. One additional piezometer (P-430D) was added to the semi-annual monitoring program during the October 2021 event. This

piezometer was converted from a private water supply well (PW-J) that was formerly sampled as part of the GRL solid waste monitoring program.

- Investigation private well monitoring includes monthly monitoring for VOCs at one private well (PW-21RR), semi-annual monitoring for VOCs and inorganics (hardness, alkalinity, and chloride) at seven private wells (PW-19, PW-20, PW-21RR, PW-23, PW-28, PW-32, and PW-38), and annual monitoring for VOCs and inorganics at three additional private wells (PW-42, PW-43, and PW-44). Field parameters are also recorded during each sampling event.

During 2021, groundwater monitoring was conducted by Environmental Sampling Corporation (ESC) of Muskego, Wisconsin. Samples were analyzed by Pace Analytical Services of Green Bay, Wisconsin (Wisconsin Laboratory Certification No. 999407970).

SCS Engineers prepared and submitted a summary of the groundwater monitoring results and an electronic data submission for each semi-annual monitoring event. The semi-annual monitoring reports and summaries of the investigation private well monitoring results are provided as **Appendix A, Attachment A-1**. Individual private well letters including the laboratory analytical results were also provided to the homeowners and the WDNR throughout the reporting period.

Additionally, SCS Engineers prepared the following documents related to the off-site investigation during 2021. These reports provide a summary of the monitoring conducted, sample results, and other information relevant to the off-site investigation.

- Additional Investigation and Workplan Update, Chlorinated Volatile Organic Compounds in Bedrock Aquifer, Land & Gas Reclamation Landfill, February 10, 2021.
- Technical Memorandum, Land and Gas Reclamation Landfill – Changed Site Conditions, May 17, 2021.
- 2020 Annual Report, Land & Gas Reclamation Landfill/Hechimovich Sanitary Landfill Site, June 7, 2021.

Historic VOC Monitoring Results and Concentrations vs. Time Plots for cis-1,2-DCE, TCE and vinyl chloride for selected routine monitoring wells were prepared by SCS Engineers and are included as **Appendix A, Attachment A-2**. Additional discussion regarding the groundwater quality trends is provided below in response to approval condition 3.i.

In general, the groundwater flow direction trends to the north-northeast across the site with gradients ranging from 0.004 ft/ft to 0.005 ft/ft in the area of the former LGRL facility as shown on the Groundwater Table Map (**Appendix A, Figure 1**).

Approval Reference

May 19, 2000

Plan of Operation Approval Modification, Superior Glacier Ridge Landfill (Lic. No. 3068), Biopile (Lic. No. 3792), Land and Gas Reclamation Landfill (Lic. No. 1118), and Demolition Landfill (Lic. No. 3568)

h. ***A listing of all monitoring points or monitoring periods where sampling was not conducted as required. The annual report shall propose a schedule to supplement the approved monitoring program to compensate for the missing monitoring points or periods.***

Response

In accordance with the WDNR approved Waste Relocation Project, the LGRL gas collection system components, leachate head monitoring points, gas probes, and settlement hubs were abandoned prior to 2021.

Groundwater wells and staff gauges are the only monitoring points in the solid waste permit that currently remain at the facility. All groundwater wells were monitored as required during 2021; no schedule modifications were required. One staff gauge (SG-5) was found to be damaged during the October 2021 event; no staff gauge reading was obtained. The staff gauge will be replaced during the semi-annual monitoring event in April 2022.

Private well monitoring was conducted during 2021 as required by the WDNR approved off-site investigation workplan. All private well monitoring was conducted as required by the workplan; no schedule modifications were required.

Approval Reference

May 19, 2000

Plan of Operation Approval Modification, Superior Glacier Ridge Landfill (Lic. No. 3068), Biopile (Lic. No. 3792), Land and Gas Reclamation Landfill (Lic. No. 1118), and Demolition Landfill (Lic. No. 3568)

i. ***An overall evaluation of the effectiveness of the remedy in reducing environmental impacts of the site.***

Response

As of March 23, 2016, and the completion of the WDNR approved Waste Relocation Project, all of the LGRL waste has been exhumed and disposed of in the active Glacier Ridge Landfill thus removing the source of the environmental impacts.

An assessment of environmental impacts over time is presented in the Historic VOC Monitoring Results and Concentrations vs. Time Plots prepared by SCS Engineers (**Appendix A, Attachment A-2**). Plots for total cis-1,2-DCE, TCE and Vinyl Chloride show concentrations to be stable or trending downward in the samples collected from MW-1AR, MW-1RR, W-3AR, MW-210, MW-210A, and MW-214. Concentrations of 1,2-DCE and TCE in the samples collected from W-3R, MW-210B, and MW-214A have been stable or not detected, but concentrations of vinyl chloride displayed an increasing trend.

The Groundwater Monitoring Results (April and October 2021) in **Appendix A, Attachment A-1** prepared by SCS Engineers provides further data interpretation related to the April and October 2021 groundwater monitoring events. Additional evaluations were also provided by SCS Engineers during 2021 in the Additional Investigation and Workplan Update, Chlorinated Volatile Organic Compounds in Bedrock Aquifer, Land & Gas Reclamation Landfill, dated February 10, 2021, the Technical Memorandum, Land and Gas Reclamation Landfill – Changed Site Conditions, dated May 17, 2021, and the 2020 Annual Report for the off-site investigation of chlorinated volatile organic compounds in bedrock at LGRL dated June 7, 2021.

APPENDIX A

2021 Groundwater Data Assessment (SCS Engineers)

Attachment A-1

Groundwater Monitoring Results: April 2021
Water Supply Well Monitoring Results: April 2021
Groundwater Monitoring Results: October 2021
Water Supply Well Monitoring Results: October 2021

June 29, 2021
File No. 25221008.00

GEMS Data Submittal Contact – WA/5
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921

Subject: Groundwater Monitoring Results – April 2021
Land & Gas Reclamation Landfill – Horicon, Wisconsin
WDNR License #1118
FID #114052290

Dear GEMS Data Submittal Contact:

Enclosed are the electronic data file, NR 140 exceedance summary, and monitoring data certification form for monitoring performed in April 2021 at the former Land & Gas Reclamation Landfill (LGRL) site. Monitoring data in this submittal include laboratory results and associated field data from the following monitoring points in the required LGRL monitoring program:

- Monitoring wells (MW1AR through MW214A)
- Surface water staff gauges (SW2 through SW5)

The groundwater samples were collected by Environmental Sampling Corporation (ESC). Laboratory analysis was performed by Pace Analytical Services.

The data CD also includes monitoring data for some of the wells that were installed for the ongoing investigation of volatile organic compounds (VOCs) in the bedrock aquifer. Investigation wells that have been assigned Wisconsin Department of Natural Resources (WDNR) IDs are included on the data CD, including bedrock monitoring wells P-401D, P-402E, and P-423D, and deep unconsolidated aquifer monitoring wells MW-1B and P-422B. These wells are not part of the routine LGRL monitoring program. Additional investigation wells P-424D, P-424SS, P-426D, and P-429SS have not been assigned WDNR IDs and are not included on the data CD. Results for all groundwater monitoring associated with the VOC investigation will be provided to the WDNR in the next investigation update report.

This letter provides a preliminary analysis of the cause and significance of the NR 140 groundwater standard exceedances for monitoring data included in the data CD. An explanation of any deviations from the approved sampling plan is also included in the Monitoring Program Comments section of this letter.

NR 140 EXCEEDANCES

NR 140 standard exceedances for the April 2021 sampling round are listed in the attached NR 140 Exceedance Summary table. The following discussion addresses the NR 140 enforcement standard (ES) and preventive action limit (PAL) exceedances for this event.

Public Health Parameters

Arsenic was reported at concentrations less than the ES, but above the PAL of 1 microgram per liter (µg/L), in samples from the following wells: MW-1AR, MW-1RR, MW-8R, MW-203A, MW-210, MW-210A, W-3AR, and W-163A. An arsenic concentration above the ES of 10 µg/L was reported for the sample from W-163. Arsenic concentrations within this range have been detected in samples collected from many wells around the former LGRL site and the adjacent Glacier Ridge Landfill, and are likely attributable to naturally occurring arsenic.

VOCs including benzene, cis-1,2 dichloroethene (DCE), and vinyl chloride were detected at concentrations exceeding the PAL or ES, and the Limit of Quantitation (LOQ), in samples collected from the following wells: MW-1AR, MW-1B, MW-210A, MW-210B, P-402E, P-423D, W-3R, and W-3AR. The specific VOCs exceeding the PAL or ES at each well are shown in the attached NR 140 Exceedance Summary (**Table 1**). All of these wells are located downgradient from the former LGRL site, and the VOCs are likely due to LGRL.

In addition to the NR 140 standard exceedances described above, there were some VOC results reported at estimated concentrations above the PAL or ES, but below the LOQ ("J" flag). These results are not considered PAL or ES exceedances without additional confirmation in accordance with NR 140.14(3). VOCs reported at concentrations above the PAL, but below the LOQ, included 1,1-dichloroethylene, tetrahydrofuran, trichloroethylene, and/or vinyl chloride in samples from the following wells: MW-1AR, MW-1RR, MW-210, MW-210A, P-423D, and W-3AR.

These wells are located adjacent to or downgradient from the former LGRL site, and the VOCs are likely due to LGRL.

The PAL and ES exceedances and reported concentrations for VOCs were generally consistent with previous results.

Public Welfare Parameters

Chloride was reported above the NR 140 ES of 250 µg/L in the sample from MW-1AR. Chloride was reported above the PAL of 125 µg/L in the samples from MW-1B, MW-214A, and W-3AR. These wells are located downgradient of LGRL, and the chloride detections may be associated with LGRL.

MONITORING PROGRAM COMMENTS

The approved monitoring program was followed and no issues were encountered during sampling.

If you have any questions regarding this submittal, please call Sherren Clark at 608.216.7323.

Sincerely,

Sherren Clark, PE, PG
Project Director
SCS Engineers

Ryan Matzuk
Hydrogeologist
SCS Engineers

RM/AJR/SCC/EO

cc: Mark Peters, WDNR (without CD)
Lonn Walter, Glacier Ridge Landfill (2 copies of letter, 1 CD)
Kari Rabideau, GFL Environmental (via email)
Tim Curry, GFL Environmental (via email)
Frank Perugini, Environmental Sampling Corp. (via email)

Encl. Table 1 - NR 140 Exceedance Summary
Groundwater Monitoring Data Certification Form
GEMS Data CD

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Table 1
NR 140 Exceedance Summary

Site ID: **1118**
Site Name: **Land and Gas Reclamation Landfill**
Reporting Period: **April 2021**

Note: Includes NR 140 exceedances for wells in the LGRL monitoring plan approved by the WDNR Solid Waste program and additional wells in the off-site monitoring plan that have been assigned WDNR IDs

Groundwater Results Exceeding NR 140 Standards

Well	Parameter	Result *	PAL	ES	Exceedance Type
MW-001AR	Arsenic, dissolved (ug/l As)	3.5/3.3	1	10	PAL
	Chloride, dissolved (mg/l as Cl)	532/525	125	250	ES
	cis-1,2-Dichloroethene (ug/l)	926/895	7	70	ES
	Vinyl chloride (ug/l)	1780/1550	0.02	0.2	ES
MW-001B	Chloride, dissolved (mg/l as Cl)	144	125	250	PAL
	Vinyl chloride (ug/l)	2.7	0.02	0.2	ES
MW-001RR	Arsenic, dissolved (ug/l As)	4	1	10	PAL
MW-008R	Arsenic, dissolved (ug/l As)	2	1	10	PAL
MW-203A	Arsenic, dissolved (ug/l As)	6	1	10	PAL
MW-210	Arsenic, dissolved (ug/l As)	1.8	1	10	PAL
MW-210A	Arsenic, dissolved (ug/l As)	6.1	1	10	PAL
	cis-1,2-Dichloroethene (ug/l)	109	7	70	ES
	Vinyl chloride (ug/l)	37.4	0.02	0.2	ES
MW-210B	Vinyl chloride (ug/l)	4.3	0.02	0.2	ES
MW-214A	Chloride, dissolved (mg/l as Cl)	195	125	250	PAL
P-402E	cis-1,2-Dichloroethene (ug/l)	235	7	70	ES
	Vinyl chloride (ug/l)	33.1	0.02	0.2	ES
P-423D	cis-1,2-Dichloroethene (ug/l)	57.3	7	70	PAL
	Vinyl chloride (ug/l)	1.7	0.02	0.2	ES
W-003AR	Arsenic, dissolved (ug/l As)	4.4	1	10	PAL
	Benzene (ug/l)	1.2	0.5	5	PAL
	Chloride, dissolved (mg/l as Cl)	171	125	250	PAL
	cis-1,2-Dichloroethene (ug/l)	32.4	7	70	PAL
	Vinyl chloride (ug/l)	15.3	0.02	0.2	ES

Table 1
NR 140 Exceedance Summary

Site ID: **1118**
Site Name: **Land and Gas Reclamation Landfill**
Reporting Period: **April 2021**

Note: Includes NR 140 exceedances for wells in the LGRL monitoring plan approved by the WDNR Solid Waste program and additional wells in the off-site monitoring plan that have been assigned WDNR IDs

Groundwater Results Exceeding NR 140 Standards

Well	Parameter	Result *	PAL	ES	Exceedance Type
W-003R	Vinyl chloride (ug/l)	28.4	0.02	0.2	ES
W-163	Arsenic, dissolved (ug/l As)	19.3	1	10	ES
W-163A	Arsenic, dissolved (ug/l As)	2.2	1	10	PAL

Groundwater Results with Estimated Concentration Above an NR 140 PAL or ES and Below the LOQ

Note: If both the result and the PAL or ES are above the limit of detection but below the limit of quantitation, the result is not considered a PAL or ES exceedance under NR 140.14(3)(c). If the PAL or ES is below the limit of detection and the result is below the limit of quantitation, the result is not considered a PAL or ES exceedance without additional confirmation as described in NR 140.14(3)(b).

Well	Parameter	Result	LOD/LOQ	PAL	ES
MW-001AR	Tetrahydrofuran (ug/l)	51.1/51.9 J	24.2/250	10	50
MW-001RR	Vinyl chloride (ug/l)	0.99 J	0.17/1	0.02	0.2
MW-210	Vinyl chloride (ug/l)	0.18 J	0.17/1	0.02	0.2
MW-210A	1,1-Dichloroethylene (ug/l)	0.77 J	0.61/2.5	0.7	7
	Trichloroethylene (ug/l)	1.1 J	0.64/2.5	0.5	5
P-423D	Trichloroethylene (ug/l)	0.89 J	0.32/1	0.5	5
W-003AR	Tetrahydrofuran (ug/l)	12.4 J	2.4/25	10	50

Notes:
PAL = Preventive Action Limit
ES = Enforcement Standard
LOQ = Limit of Quantitation
ug/l = micrograms per liter
mg/l = milligrams per liter
J = Result is an estimated value below the laboratory's limit of quantitation.
* = Two results indicate duplicate samples. Only results exceeding the PAL are shown.

Prepared by: AJR, 6/10/2021
Checked by: RM 6/24/2021

Save... Print... Clear Data

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Environmental Monitoring Data Certification

Form 4400-231 (R 5/17)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5, Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner)
SCS Engineers

Contact for questions about data formatting. Include data preparer's name, telephone number and Email address:

Name	Phone No. (include area code)
Ashley Radunzel	(608) 224-2830

Email
aradunzel@scsengineers.com

Facility Name
Land & Gas Reclamation Landfill

License # / Monitoring ID	Facility ID (FID)
1118	114052290

Actual sampling dates (e.g., July 2-6, 2003)	The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)
April 1, 6-9, and 29, 2021	April 2021

Type of Data Submitted (Check all that apply):

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [x] Other (specify): Staff Gauge

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Facility Representative Name (Print)	Title	Phone No. (include area code)
Sherren Clark, SCS Engineers	Project Manager	(608) 216-7323

Signature

6/24/2021
Date Signed (mm/dd/yyyy)

For DNR Use Only

Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] Found uploading problems on _____ Initials
- [ ] Notified contact of problems on _____ Uploaded data successfully on _____

EDD format(s): [ ] Diskette [ ] CD (initial submittal and follow-up) [ ] E-mail (follow-up only) [ ] Other: _____

May 21, 2021
File No. 25221008.02

Mr. Trevor Bannister
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

Mr. Mark Peters
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

Subject: Water Supply Well Monitoring Results – April 2021
Investigation of Chlorinated Volatile Organic Compounds in Groundwater in Bedrock
Land & Gas Reclamation Landfill, Dodge County, Wisconsin
BRRTS #02-14-000906
WDNR License No. 1118

Dear Mr. Bannister and Mr. Peters:

Enclosed are the water supply well results for April 2021 monitoring for the Land & Gas Reclamation Landfill (LGRL) groundwater investigation. The samples were collected by Environmental Sampling Corporation (ESC) on April 29, 2021. The samples were analyzed for field parameters, volatile organic compounds (VOCs), alkalinity, chloride, and hardness. Laboratory analysis was performed by Pace Analytical Services, Green Bay, Wisconsin, and Northern Lake Service, Inc., Crandon, Wisconsin.

Water supply well monitoring in April included the following sample locations:

- PW-19
- PW-20
- PW-21RR (untreated groundwater and post-treatment water supply)
- PW-23
- PW-28
- PW-32
- PW-38

This sampling is not required under the routine monitoring plan for LGRL, but has been performed as part of the ongoing groundwater investigation in the bedrock aquifer downgradient from LGRL. The treatment system for water supply well PW-21RR at the Oechsner farm is a CLEARADON aeration system.

The April 2021 VOC detections are summarized in the attached Water Supply Well Sampling Results Summary table. The laboratory report is also attached.

The only NR 140 groundwater standard exceedances for April 2021 were in the untreated groundwater sample from PW-21RR (A. Oechsner), where vinyl chloride was detected at a concentration above the NR 140 enforcement standard and cis-1,2-dichloroethene (cis-1,2-DCE) was detected at a concentration above the NR 140 preventive action limit (PAL). In the post-treatment sample from PW-21RR, there were no VOC detections above the PALs. The reported concentrations for untreated and treated water at PW-21RR are consistent with previous results.

The only other VOC detections in the water supply well sampling were for cis-1,2-DCE in wells PW-19 (Antonioni), PW-28 (Muche), and PW-32 (J. Oechsner). The cis-1,2-DCE concentrations detected in samples from these three wells were generally consistent with previous results and remained well below the PAL. The cis-1,2-DCE concentration in the sample from PW-28 continued a slight increasing trend at this well.

If you have any questions regarding this submittal, please call Sherren at (608) 216-7323.

Sincerely,

Sherren Clark, PE, PG
Project Director
SCS Engineers

Ryan Matzuk
Hydrogeologist
SCS Engineers

RM/AJR/SCC

cc: Jake Margelofsky, Glacier Ridge Landfill

cc via email: Environmental Program Associate, at DNRWasteManagement@Wisconsin.gov
Tim Curry, GFL Environmental
Kari Rabideau, GFL Environmental
Melissa Bachhuber, GFL Environmental
Lonn Walter, Glacier Ridge Landfill
Dan Roche, Tetra Tech
Tracy Ipavec, Environmental Sampling Corporation
Melanie Gotto, Deere & Company World Headquarters
Monica Rios, Deere & Company World Headquarters
George Marek, Quarles & Brady, LLP (for Mercury Marine)
Linda Benfeld, ESG Holdings, LLC c/o Foley & Lardner LLP (for Maysteel Corp.)
Nathan Kempke, City of Mayville
Paul Rosenfeldt, Edgarton, St. Peter, Petak & Rosenfeldt (for Mayville Engineering Corp.)

Encl. Water Supply Well Sampling Results Summary
Laboratory Report for Water Supply Well Samples

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Water Supply Well Sampling Results Summary

Site Name: **Land & Gas Reclamation Landfill Offsite Investigation**
Reporting Period: **April 2021**

Groundwater Results with Volatile Organic Compound Detections

Well	Parameter	Result	PAL	ES	Exceedance Type
PW-19	cis-1,2-Dichloroethene (µg/L)	0.48 J	7	70	No exceedance
PW-21RR untreated	cis-1,2-Dichloroethene (µg/L)	22	7	70	PAL
	trans-1,2-Dichloroethene, total (µg/L)	0.58 J	20	100	No exceedance
	Vinyl chloride (µg/L)	0.7	0.02	0.2	ES
PW-21RR treated	cis-1,2-Dichloroethene (µg/L)	1.7	7	70	No exceedance
PW-28	cis-1,2-Dichloroethene (µg/L)	3.9	7	70	No exceedance
PW-32	cis-1,2-Dichloroethene (µg/L)	0.36 J	7	70	No exceedance

Notes:
PAL = NR 140 Preventive Action Limit
ES = NR 140 Enforcement Standard
µg/L = micrograms per liter
J = Estimated concentration at or above the Limit of Detection and below the Limit of Quantitation

Prepared by: AJR, 5/17/2021
Checked by: RM, 5/19/2021

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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May 14, 2021

Lonn Walter
GFL Enviromental
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL PW
Pace Project No.: 40226075

Dear Lonn Walter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 30, 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.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

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

- Pace Analytical Services - Green Bay

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

Sincerely,

Cindy K Varga

Cindy Varga
cindy.varga@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Sherren Clark, SCS Engineers
Environmental Sampling Corporation Staff, Environmental Sampling Corporation
Jake Margelofsky, GFL Enviromental
Frank Perugini, Environmental Sampling Corporation
Kari Rabideau, GFL Environmental
Ashley Radunzel, SCS ENGINEERS

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CERTIFICATIONS

Project: LGRL PW
Pace Project No.: 40226075

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

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SAMPLE SUMMARY

Project: LGRL PW
Pace Project No.: 40226075

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40226075001	**PW-19**	Water	04/29/21 13:40	04/30/21 09:00
40226075002	**PW-20**	Water	04/29/21 12:55	04/30/21 09:00
40226075003	**PW-21RR BEFORE**	Water	04/29/21 14:25	04/30/21 09:00
40226075004	**PW-21RR AFTER**	Water	04/29/21 14:30	04/30/21 09:00
40226075005	**PW-23**	Water	04/29/21 13:20	04/30/21 09:00
40226075006	**PW-28**	Water	04/29/21 13:00	04/30/21 09:00
40226075007	**PW-32**	Water	04/29/21 12:15	04/30/21 09:00
40226075008	**PW-38**	Water	04/29/21 14:00	04/30/21 09:00
40226075009	**TRIP BLANK**	Water	04/29/21 00:00	04/30/21 09:00

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SAMPLE ANALYTE COUNT

Project: LGRL PW
Pace Project No.: 40226075

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40226075001	**PW-19**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40226075002	**PW-20**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40226075003	**PW-21RR BEFORE**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40226075004	**PW-21RR AFTER**		CKV	6	PASI-G
40226075005	**PW-23**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40226075006	**PW-28**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40226075007	**PW-32**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40226075008	**PW-38**	EPA 6010	TXW	1	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-19 **Lab ID: 40226075001** Collected: 04/29/21 13:40 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**434000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:27		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.65**	Std. Units			1		04/29/21 13:40		
Field Specific Conductance	**781**	umhos/cm			1		04/29/21 13:40		
Turbidity	**N**	NTU			1		04/29/21 13:40		
Apparent Color	**N**	no units			1		04/29/21 13:40		
Odor	**N**	no units			1		04/29/21 13:40		
Temperature, Water (C)	**12.7**	deg C			1		04/29/21 13:40		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**41.9**	mg/L	10.0	2.2	5		05/12/21 01:00	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**351**	mg/L	24.8	7.4	1		05/11/21 13:33		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-20 **Lab ID: 40226075002** Collected: 04/29/21 12:55 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**424000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:29		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.34**	Std. Units			1		04/29/21 12:55		
Field Specific Conductance	**702**	umhos/cm			1		04/29/21 12:55		
Turbidity	**N**	NTU			1		04/29/21 12:55		
Apparent Color	**N**	no units			1		04/29/21 12:55		
Odor	**N**	no units			1		04/29/21 12:55		
Temperature, Water (C)	**12.1**	deg C			1		04/29/21 12:55		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**20.4**	mg/L	2.0	0.43	1		05/12/21 01:14	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**337**	mg/L	24.8	7.4	1		05/11/21 13:34		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-21RR BEFORE **Lab ID: 40226075003** Collected: 04/29/21 14:25 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**398000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:32		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.12**	Std. Units			1		04/29/21 14:25		
Field Specific Conductance	**482**	umhos/cm			1		04/29/21 14:25		
Turbidity	**N**	NTU			1		04/29/21 14:25		
Apparent Color	**N**	no units			1		04/29/21 14:25		
Odor	**N**	no units			1		04/29/21 14:25		
Temperature, Water (C)	**15.7**	deg C			1		04/29/21 14:25		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**18.5**	mg/L	2.0	0.43	1		05/12/21 01:28	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**340**	mg/L	24.8	7.4	1		05/11/21 13:35		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-21RR AFTER **Lab ID: 40226075004** Collected: 04/29/21 14:30 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.18**	Std. Units			1		04/29/21 14:30		
Field Specific Conductance	**476**	umhos/cm			1		04/29/21 14:30		
Turbidity	**N**	NTU			1		04/29/21 14:30		
Apparent Color	**N**	no units			1		04/29/21 14:30		
Odor	**N**	no units			1		04/29/21 14:30		
Temperature, Water (C)	**16.0**	deg C			1		04/29/21 14:30		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-23 **Lab ID: 40226075005** Collected: 04/29/21 13:20 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**426000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:34		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.39**	Std. Units			1		04/29/21 13:20		
Field Specific Conductance	**1020**	umhos/cm			1		04/29/21 13:20		
Turbidity	**N**	NTU			1		04/29/21 13:20		
Apparent Color	**N**	no units			1		04/29/21 13:20		
Odor	**N**	no units			1		04/29/21 13:20		
Temperature, Water (C)	**11.5**	deg C			1		04/29/21 13:20		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**123**	mg/L	10.0	2.2	5		05/12/21 01:43	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**381**	mg/L	24.8	7.4	1		05/11/21 13:36		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-28 **Lab ID: 40226075006** Collected: 04/29/21 13:00 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**477000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:37		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.30**	Std. Units			1		04/29/21 13:00		
Field Specific Conductance	**728**	umhos/cm			1		04/29/21 13:00		
Turbidity	**N**	NTU			1		04/29/21 13:00		
Apparent Color	**N**	no units			1		04/29/21 13:00		
Odor	**N**	no units			1		04/29/21 13:00		
Temperature, Water (C)	**13.0**	deg C			1		04/29/21 13:00		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**33.4**	mg/L	2.0	0.43	1		05/12/21 01:57	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**365**	mg/L	24.8	7.4	1		05/11/21 13:37		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-32 **Lab ID: 40226075007** Collected: 04/29/21 12:15 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**455000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:39		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.35**	Std. Units			1		04/29/21 12:15		
Field Specific Conductance	**803**	umhos/cm			1		04/29/21 12:15		
Turbidity	**N**	NTU			1		04/29/21 12:15		
Apparent Color	**N**	no units			1		04/29/21 12:15		
Odor	**N**	no units			1		04/29/21 12:15		
Temperature, Water (C)	**13.3**	deg C			1		04/29/21 12:15		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**41.7**	mg/L	2.0	0.43	1		05/12/21 02:11	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**350**	mg/L	24.8	7.4	1		05/11/21 13:38		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40226075

Sample: PW-38 **Lab ID: 40226075008** Collected: 04/29/21 14:00 Received: 04/30/21 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**387000**	ug/L	2000	150	1	05/03/21 06:28	05/03/21 19:42		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.47**	Std. Units			1		04/29/21 14:00		
Field Specific Conductance	**696**	umhos/cm			1		04/29/21 14:00		
Turbidity	**N**	NTU			1		04/29/21 14:00		
Apparent Color	**N**	no units			1		04/29/21 14:00		
Odor	**N**	no units			1		04/29/21 14:00		
Temperature, Water (C)	**13.0**	deg C			1		04/29/21 14:00		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**1.7J**	mg/L	2.0	0.43	1		05/12/21 02:26	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**340**	mg/L	49.6	14.9	2		05/11/21 13:42		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40226075

QC Batch: 384016 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40226075001, 40226075002, 40226075003, 40226075005, 40226075006, 40226075007, 40226075008

METHOD BLANK: 2215633 Matrix: Water
Associated Lab Samples: 40226075001, 40226075002, 40226075003, 40226075005, 40226075006, 40226075007, 40226075008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B	ug/L	<150	2000	05/03/21 18:37	

LABORATORY CONTROL SAMPLE: 2215634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B	ug/L		34000			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2215635 2215636

Parameter	Units	40225786011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Hardness by 2340B	ug/L	1000000			1060000	1050000				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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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40226075

QC Batch: 384778 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40226075001, 40226075002, 40226075003, 40226075005, 40226075006, 40226075007, 40226075008

METHOD BLANK: 2219879 Matrix: Water
Associated Lab Samples: 40226075001, 40226075002, 40226075003, 40226075005, 40226075006, 40226075007, 40226075008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.43	2.0	05/11/21 21:38	

LABORATORY CONTROL SAMPLE: 2219880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	21.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2219881 2219882

Parameter	Units	40226093002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	786	400	400	1150	1120	91	84	90-110	2	15	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2219883 2219884

Parameter	Units	40226080003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1310	2000	2000	3410	3400	105	105	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40226075

QC Batch: 384771 — Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 — Analysis Description: 310.2 Alkalinity
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40226075001, 40226075002, 40226075003, 40226075005, 40226075006, 40226075007, 40226075008

METHOD BLANK: 2219849 — Matrix: Water
Associated Lab Samples: 40226075001, 40226075002, 40226075003, 40226075005, 40226075006, 40226075007, 40226075008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	05/11/21 13:25	

LABORATORY CONTROL SAMPLE: 2219850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	100	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2219851 — 2219852

Parameter	Units	40226075008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	340	200	200	539	540	99	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2219853 — 2219854

Parameter	Units	40226352008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	151	200	200	355	352	102	100	90-110	1	20	

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: LGRL PW
Pace Project No.: 40226075

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 LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

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 at or above the adjusted LOD.

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL PW
Pace Project No.: 40226075

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40226075001	**PW-19**	EPA 3010	384016	EPA 6010	384115
40226075002	**PW-20**	EPA 3010	384016	EPA 6010	384115
40226075003	**PW-21RR BEFORE**	EPA 3010	384016	EPA 6010	384115
40226075005	**PW-23**	EPA 3010	384016	EPA 6010	384115
40226075006	**PW-28**	EPA 3010	384016	EPA 6010	384115
40226075007	**PW-32**	EPA 3010	384016	EPA 6010	384115
40226075008	**PW-38**	EPA 3010	384016	EPA 6010	384115
40226075001	**PW-19**				
40226075002	**PW-20**				
40226075003	**PW-21RR BEFORE**				
40226075004	**PW-21RR AFTER**				
40226075005	**PW-23**				
40226075006	**PW-28**				
40226075007	**PW-32**				
40226075008	**PW-38**				
40226075001	**PW-19**	EPA 300.0	384778		
40226075002	**PW-20**	EPA 300.0	384778		
40226075003	**PW-21RR BEFORE**	EPA 300.0	384778		
40226075005	**PW-23**	EPA 300.0	384778		
40226075006	**PW-28**	EPA 300.0	384778		
40226075007	**PW-32**	EPA 300.0	384778		
40226075008	**PW-38**	EPA 300.0	384778		
40226075001	**PW-19**	EPA 310.2	384771		
40226075002	**PW-20**	EPA 310.2	384771		
40226075003	**PW-21RR BEFORE**	EPA 310.2	384771		
40226075005	**PW-23**	EPA 310.2	384771		
40226075006	**PW-28**	EPA 310.2	384771		
40226075007	**PW-32**	EPA 310.2	384771		
40226075008	**PW-38**	EPA 310.2	384771		

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

40226075

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:	Section C Invoice Information:
GFL Glacier Ridge		Report To: Kari Rabideau	Attention: Kari Rabideau
N7296 Hwy V		Copy To: Frank Perugini - ESC, ESC Staff, Sherren Clark - SCS	Company Name: GFL Glacier Ridge
Horicon, WI 53032			Address: N7296 Hwy V, Horicon, WI 53032
Email To: Kari Rabideau - ADS		Purchase Order No.: na	Pace Quote Reference: na
Phone: na	Fax: na	Project Name: LGRL PW	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:		Project Number: na	Pace Profile #: 4172 line 19

REGULATORY AGENCY

__ NPDES __ GROUND WATER _X_ DRINKING WATER

__ UST __ RCRA OTHER_____

SITE LOCATION: __GA __IL __IN __MI __NC __OH __SC _X_WI OTHER___

Filtered (Y/N): N N N

Requested Analysis: EPA 524.4 VOCs; alk, cl; 6010 hardness; Residual Chlorine (Y/N)

Section D Required Client Information

SAMPLE ID — One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE (2021)	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Ascorbic Acid/HCL	HCL	Unpreserved	HNO3	EPA 524.4 VOCs	alk, cl	6010 hardness	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	PW-19	DW	G	—	—	4/29	1340	12.7	5	3		1	1	X	X	X		001
2	PW-20	↓	↓	—	—	↓	1255	12.1	5	3		1	1	X	X	X		002
3	PW-21RR Before	↓	↓	—	—	↓	1425	15.7	5	3		1	1	X	X	X		003
4	PW-21RR After	↓	↓	—	—	↓	1430	16.0	3	3		0		X				004
5	PW-23	↓	↓	—	—	↓	1320	11.5	5	3		1	1	X	X	X		005
6	PW-28	↓	↓	—	—	↓	1300	14.0	5	3		1	1	X	X	X		006
7	PW-32	↓	↓	—	—	↓	1215	13.3	5	3		1	1	X	X	X		007
8	PW-38	DW	G	—	—	4/29	1400		5	3		1	1	X	X	X		008
9	Trip Blank	—	—	—	—	—	—	—	2		2			X				009
10																		
11																		
12																		

Additional Comments:

PW-21RR After only needs VOCs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
[signature] WSL	4/29/21	1700					Y/N	Y/N	Y/N
Waltco	4-30-21	0900	Morlie Z [illegible] Pace	4-30-21	0900	0.5/1.8	Y	Y	Y
							Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Scott Freimark

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 4/29/21

E-File,(ALLQ020rev.3,31Mar05), 13Jun2005

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: GFL

Project # 40226075

All containers needing preservation have been checked and noted below: ☒Yes ☐No ☐N/A

Lab Lot# of pH paper: 1003601

Lab Std #ID of preservation (if pH adjusted):

Initial when completed: MR

Date/ Time:

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001										1		1		3																	X		2.5 / 5 / 10
002										1		1		3																	X		2.5 / 5 / 10
003										1		1		3																	X		2.5 / 5 / 10
004														3																			2.5 / 5 / 10
005										1		1		3																	X		2.5 / 5 / 10
006										1		1		3																	X		2.5 / 5 / 10
007										1		1		3																	X		2.5 / 5 / 10
008										1		1		3																	X		2.5 / 5 / 10
009																	2										1						2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

MR 4-30-21

Exceptions to preservation check: (VOA) Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:__________ Headspace in VOA Vials (>6mm) : ☒Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres
BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4
VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI
JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO#: 40226075

40226075

Client Name: GFL

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ Waltco ☐ Client ☐ Pace Other:

Tracking #: 2829095-21-1

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

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

Thermometer Used SR-99 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0.5/1.5 /Corr: 0.5/1.5

Person examining contents:

Temp Blank Present: ☒ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Date: 4-30-21 /Initials: MH

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Labeled By Initials: CF

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2: trip blank matrix MH 4-30-21
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A		8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☒Yes ☐No ☐N/A	12.
Trip Blank Present:	☒Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 459		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

Page 2 of 2

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

NLS Project: 365416
NLS Customer: 94575
Fax: 920 469 8827 Phone: 800 736 2436

Client: Pace Analytical Services Inc (GB)
Attn: Cindy Varga
1241 Bellevue Street
Green Bay, WI 54302 2156

Project: 40226075 LGRL PW

40226075001 (PW-19) NLS ID: 1251832
COC: :1 Matrix: DW
Collected: 04/29/21 13:40 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075002 (PW-20) NLS ID: 1251833
COC: :2 Matrix: DW
Collected: 04/29/21 12:55 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075003 (PW-21RR Before) NLS ID: 1251834
COC: :3 Matrix: DW
Collected: 04/29/21 14:25 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/06/21	EPA 524.2, Rev 4.1	721026460

40226075004 (PW-21RR After) NLS ID: 1251835
COC: :4 Matrix: DW
Collected: 04/29/21 14:30 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075005 (PW-23) NLS ID: 1251836
COC: :5 Matrix: DW
Collected: 04/29/21 13:20 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075006 (PW-28) NLS ID: 1251837
COC: :6 Matrix: DW
Collected: 04/29/21 13:00 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075007 (PW-32) NLS ID: 1251838
COC: :7 Matrix: DW
Collected: 04/29/21 12:15 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075008 (PW-38) NLS ID: 1251839
COC: :8 Matrix: DW
Collected: 04/29/21 14:00 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2, Rev 4.1	721026460

40226075009 (Trip Blank) NLS ID: 1251840
COC: :9 Matrix: TB
Collected: 04/29/21 00:00 Received: 05/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					05/05/21	EPA 524.2	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

NLS Project: 365416
NLS Customer: 94575

Fax: 920 469 8827 Phone: 800 736 2436

Client: **Pace Analytical Services Inc (GB)**
Attn: Cindy Varga
1241 Bellevue Street
Green Bay, WI 54302 2156

Project: 40226075 LGRL PW

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable
DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L
MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:

Authorized by:
R. T. Krueger
President

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis

Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**

Project Description: 40226075

Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251832 40226075001 (PW-19) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	[0.48]	ug/L	1	0.35	1.2	70	J
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W** **Printed: 05/07/2021 13:02**

Sample: 1251832 40226075001 (PW-19) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	60%		1				S
1,2-Dichlorobenzene-d4 (SURR)	78%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251833 40226075002 (PW-20) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251833 40226075002 (PW-20) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	61%		1				S
1,2-Dichlorobenzene-d4 (SURR)	82%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W** **Printed: 05/07/2021 13:02**

Sample: 1251834 40226075003 (PW-21RR Before) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	22	ug/L	2	0.70	2.3	70	
trans-1,2-Dichloroethene	[0.58]	ug/L	1	0.24	0.81	100	J
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W** **Printed: 05/07/2021 13:02**

Sample: 1251834 40226075003 (PW-21RR Before) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	0.70	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	60%		1				S
1,2-Dichlorobenzene-d4 (SURR)	74%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W** **Printed: 05/07/2021 13:02**

Sample: 1251835 40226075004 (PW-21RR After) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	1.7	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251835 40226075004 (PW-21RR After) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	63%		1				S
1,2-Dichlorobenzene-d4 (SURR)	84%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251836 40226075005 (PW-23) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251836 40226075005 (PW-23) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	58%		1				S
1,2-Dichlorobenzene-d4 (SURR)	77%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251837 40226075006 (PW-28) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	3.9	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

Sample: 1251837 40226075006 (PW-28) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	69%		1				S
1,2-Dichlorobenzene-d4 (SURR)	85%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1251838 40226075007 (PW-32) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	[0.36]	ug/L	1	0.35	1.2	70	J
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251838 40226075007 (PW-32) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	65%		1				S
1,2-Dichlorobenzene-d4 (SURR)	82%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W** **Printed: 05/07/2021 13:02**

Sample: 1251839 40226075008 (PW-38) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

Sample: 1251839 40226075008 (PW-38) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	65%		1				S
1,2-Dichlorobenzene-d4 (SURR)	87%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251840 40226075009 (Trip Blank) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.43	1.4	
Bromobenzene	ND	ug/L	1	0.14	0.46	
Bromochloromethane	ND	ug/L	1	0.31	1.0	
Bromodichloromethane	ND	ug/L	1	0.42	1.4	
Bromoform	ND	ug/L	1	0.39	1.3	
Bromomethane	ND	ug/L	1	1.0	3.5	
n-Butylbenzene	ND	ug/L	1	0.49	1.6	
sec-Butylbenzene	ND	ug/L	1	0.41	1.4	
tert-Butylbenzene	ND	ug/L	1	0.51	1.7	
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	
Chlorobenzene	ND	ug/L	1	0.28	0.95	
Chloroethane	ND	ug/L	1	2.7	8.9	
Chloroform	ND	ug/L	1	0.52	1.7	
Chloromethane	ND	ug/L	1	0.40	1.3	
2-Chlorotoluene	ND	ug/L	1	0.36	1.2	
4-Chlorotoluene	ND	ug/L	1	0.40	1.3	
Dibromochloromethane	ND	ug/L	1	0.20	0.65	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8	
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95	
Dibromomethane	ND	ug/L	1	0.38	1.3	
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62	
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2	
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92	
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64	
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9	
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2	
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86	
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83	
Ethylbenzene	ND	ug/L	1	0.27	0.90	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0	
Isopropylbenzene	ND	ug/L	1	0.33	1.1	
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5	
Methylene chloride	ND	ug/L	1	1.1	3.7	
Naphthalene	ND	ug/L	1	0.59	2.0	
n-Propylbenzene	ND	ug/L	1	0.40	1.3	
Styrene	ND	ug/L	1	0.31	1.0	
ortho-Xylene	ND	ug/L	1	0.28	0.95	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0	
Tetrachloroethene	ND	ug/L	1	0.27	0.90	
Toluene	ND	ug/L	1	0.21	0.69	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	
Trichloroethene	ND	ug/L	1	0.46	1.5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 365416**
Project Description: 40226075
Project Title: LGRL PW **Template: 524W Printed: 05/07/2021 13:02**

Sample: 1251840 40226075009 (Trip Blank) Collected: 04/29/21 Analyzed: 05/05/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96	
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5	
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5	
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4	
Vinyl chloride	ND	ug/L	1	0.19	0.62	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	
MTBE	ND	ug/L	1	0.18	0.60	
4-Bromofluorobenzene (SURR)	65%		1			S
1,2-Dichlorobenzene-d4 (SURR)	81%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

Chain of Custody

PASI Green Bay Laboratory

Pace Analytical
www.pacelabs.com

Workorder: 40226075 Workorder Name: LGRL PW Results Requested By: 5/14/2021

Report / Invoice To

Cindy Varga
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302
Phone (920)469-2436
Email: cindy.varga@pacelabs.com

Subcontract To

Northern Lake Services Inc
400 N. Lake Avenue
Crandon, WI 54520

State of Sample Origin: WI LOD/LOQ

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Preserved Containers: Other	Requested Analysis: 524 VOCs	LAB USE ONLY
1	PW-19	4/29/2021 13:40	40226075001	Water		3	X	1251832
2	PW-20	4/29/2021 12:55	40226075002	Water		3	X	833
3	PW-21RR BEFORE	4/29/2021 14:25	40226075003	Water		3	X	834
4	PW-21RR AFTER	4/29/2021 14:30	40226075004	Water		3	X	835
5	PW-23	4/29/2021 13:20	40226075005	Water		3	X	836
6	PW-28	4/29/2021 13:00	40226075006	Water		3	X	837
7	PW-32	4/29/2021 12:15	40226075007	Water		3	X	838
8	PW-38	4/29/2021 14:00	40226075008	Water		3	X	839
9	TRIP BLANK	4/29/2021 00:00	40226075009	Water		2	X	840
10								
11								
12								
13								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	5/3/21 1600	[signature]	5-4-21 1115
2				
3				

Comments

see attached list
No EDD or QC Package Needed CW 5/3/21

Cooler Temperature on Receipt °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

524.2 VOC GRL/LGRL page 1 of 2
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromochloromethane
1,2-Dibromo-3-Chloropropane
1,2-Dibromoethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene

524.2 VOC GRL/LGRL page 2 of 2
p-Isopropyltoluene
Methyl tert-butyl ether
Methylene chloride
Napthalene
n-Propylbenzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride
ortho-Xylene
meta, para-Xylene

December 27, 2021
File No. 25221008.00

GEMS Data Submittal Contact – WA/5
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921

Subject: Groundwater Monitoring Results – October 2021
Land & Gas Reclamation Landfill – Horicon, Wisconsin
WDNR License #1118
FID #114052290

Dear GEMS Data Submittal Contact:

Enclosed are the electronic data file, NR 140 exceedance summary, and monitoring data certification form for monitoring performed in October 2021 at the former Land & Gas Reclamation Landfill (LGRL) site. Monitoring data in this submittal include laboratory results and associated field data from the following monitoring points in the required LGRL monitoring program:

- Monitoring wells (MW1AR through MW214A)
- Surface water staff gauges (SW2 through SW5)

The groundwater samples were collected by Environmental Sampling Corporation (ESC). Laboratory analysis was performed by Pace Analytical Services.

The data CD also includes monitoring data for some of the wells that were installed for the ongoing investigation of volatile organic compounds (VOCs) in the bedrock aquifer. Investigation wells that have been assigned Wisconsin Department of Natural Resources (WDNR) IDs are included on the data CD, including bedrock monitoring wells P-401D, P-402E, and P-423D, and deep unconsolidated aquifer monitoring wells MW-1B and P-422B. These wells are not part of the routine LGRL monitoring program. Additional investigation wells P-424D, P-424SS, P-426D, and P-429SS have not been assigned WDNR IDs and are not included on the data CD. Results for all groundwater monitoring associated with the VOC investigation will be provided to the WDNR in the next investigation update report.

This letter provides a preliminary analysis of the cause and significance of the NR 140 groundwater standard exceedances for monitoring data included in the data CD. An explanation of any deviations from the approved sampling plan is also included in the Monitoring Program Comments section of this letter.

NR 140 EXCEEDANCES

NR 140 standard exceedances for the October 2021 sampling round are listed in the attached NR 140 Exceedance Summary table. The following discussion addresses the NR 140 enforcement standard (ES) and preventive action limit (PAL) exceedances for this event.

Public Health Parameters

Arsenic was reported at concentrations less than the ES, but above the PAL of 1 microgram per liter (µg/L), in samples from the following wells: MW-1AR, MW-1RR, MW-7R, MW-8R, MW-203A, MW-210, MW-210A, W-3AR, W-163, and W-163A. Arsenic concentrations within this range have been detected in samples collected from many wells around the former LGRL site and the adjacent Glacier Ridge Landfill, and are likely attributable to naturally occurring arsenic.

VOCs including benzene, cis-1,2 dichloroethene (DCE) and vinyl chloride were detected at concentrations exceeding the PAL or ES, and the Limit of Quantitation (LOQ), in samples collected from the following wells: MW-1AR, MW-1B, MW-1RR, MW-210A, MW-210B, MW-214A, P-402E, P-423D, W-3AR, and W-3R. The specific VOCs exceeding the PAL or ES at each well are shown in the attached NR 140 Exceedance Summary (**Table 1**). All of these wells are located downgradient from the former LGRL site, and the VOCs are likely due to LGRL.

In addition to the NR 140 standard exceedances described above, there were some VOC results reported at estimated concentrations above the PAL or ES, but below the LOQ ("J" flag). These results are not considered PAL or ES exceedances without additional confirmation in accordance with NR 140.14(3). VOCs reported at concentrations above the PAL, but below the LOQ, included benzene, tetrahydrofuran, trichloroethylene and/or vinyl chloride in samples from the following wells: MW-1AR, MW-210, MW-210A, P402E, and P-423D. These wells are located adjacent to or downgradient from the former LGRL site, and the VOCs are likely due to LGRL.

The PAL and ES exceedances and reported concentrations for VOCs were generally consistent with previous results.

Public Welfare Parameters

Chloride was reported above the NR 140 ES of 250 µg/L in the sample from MW-1AR. Chloride was reported above the PAL of 125 µg/L in the samples from MW-1B, MW-214A, and W-3AR. These wells are located downgradient of LGRL, and the chloride detections may be associated with LGRL.

MONITORING PROGRAM COMMENTS

The October 2021 monitoring event was completed in accordance with the approved monitoring program, except that staff gauge SW-5 was not monitored because the gauge was missing and needs to be replaced. Site personnel plan to replace and resurvey staff gauge SW-5 prior to the April monitoring event.

If you have any questions regarding this submittal, please call Sherren Clark at 608.216.7323.

Sincerely,

Sherren Clark, PE, PG
Project Director
SCS Engineers

Eric Oelkers, PG
Senior Project Manager
SCS Engineers

SCC/AJR/EO

cc: Mark Peters, WDNR (via email)
Lonn Walter, Glacier Ridge Landfill (2 copies of letter, 1 CD)
Kari Rabideau, GFL Environmental (via email)
Tim Curry, GFL Environmental (via email)
Frank Perugini, Environmental Sampling Corp. (via email)

Encl. Table 1 - NR 140 Exceedance Summary
Groundwater Monitoring Data Certification Form
GEMS Data CD

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Table 1
NR 140 Exceedance Summary

Site ID: **1118**
Site Name: **Land and Gas Reclamation Landfill**
Reporting Period: **October 2021**

Note: Includes NR 140 exceedances for wells in the LGRL monitoring plan approved by the WDNR Solid Waste program and additional wells in the off-site monitoring plan that have been assigned WDNR IDs.

Groundwater Results Exceeding NR 140 Standards

Well	Parameter	Result *	PAL	ES	Exceedance Type
MW-001AR	Arsenic, dissolved (ug/l As)	3.1/3.3	1	10	PAL
MW-001RR	Arsenic, dissolved (ug/l As)	4.8	1	10	PAL
MW-007R	Arsenic, dissolved (ug/l As)	4.9	1	10	PAL
MW-008R	Arsenic, dissolved (ug/l As)	2.8	1	10	PAL
MW-203A	Arsenic, dissolved (ug/l As)	7.2	1	10	PAL
MW-210	Arsenic, dissolved (ug/l As)	2	1	10	PAL
MW-210A	Arsenic, dissolved (ug/l As)	6.8	1	10	PAL
W-003AR	Arsenic, dissolved (ug/l As)	4.5	1	10	PAL
W-163	Arsenic, dissolved (ug/l As)	3.3	1	10	PAL
W-163A	Arsenic, dissolved (ug/l As)	2.4	1	10	PAL
W-003AR	Benzene (ug/l)	1.4	0.5	5	PAL
MW-001AR	Chloride, dissolved (mg/l as Cl)	534/497	125	250	ES
MW-001B	Chloride, dissolved (mg/l as Cl)	149	125	250	PAL
MW-214A	Chloride, dissolved (mg/l as Cl)	196	125	250	PAL
W-003AR	Chloride, dissolved (mg/l as Cl)	185	125	250	PAL
MW-001AR	cis-1,2-Dichloroethene (ug/l)	690/737	7	70	ES
MW-210A	cis-1,2-Dichloroethene (ug/l)	102	7	70	ES
P-402E	cis-1,2-Dichloroethene (ug/l)	235	7	70	ES
P-423D	cis-1,2-Dichloroethene (ug/l)	55.7	7	70	PAL
W-003AR	cis-1,2-Dichloroethene (ug/l)	28.4	7	70	PAL
MW-001AR	Vinyl chloride (ug/l)	1250/1400	0.02	0.2	ES
MW-001B	Vinyl chloride (ug/l)	4.3	0.02	0.2	ES
MW-001RR	Vinyl chloride (ug/l)	1.7	0.02	0.2	ES
MW-210A	Vinyl chloride (ug/l)	51.6	0.02	0.2	ES
MW-210B	Vinyl chloride (ug/l)	4.8	0.02	0.2	ES

Table 1
NR 140 Exceedance Summary

Site ID: **1118**
Site Name: **Land and Gas Reclamation Landfill**
Reporting Period: **October 2021**

Note: Includes NR 140 exceedances for wells in the LGRL monitoring plan approved by the WDNR Solid Waste program and additional wells in the off-site monitoring plan that have been assigned WDNR IDs.

Groundwater Results Exceeding NR 140 Standards

Well	Parameter	Result *	PAL	ES	Exceedance Type
MW-214A	Vinyl chloride (ug/l)	46.9	0.02	0.2	ES
P-402E	Vinyl chloride (ug/l)	24.6	0.02	0.2	ES
P-423D	Vinyl chloride (ug/l)	1.7	0.02	0.2	ES
W-003AR	Vinyl chloride (ug/l)	15.3	0.02	0.2	ES
W-003R	Vinyl chloride (ug/l)	19.3	0.02	0.2	ES

Groundwater Results with Estimated Concentration Above an NR 140 PAL or ES and Below the LOQ

Note: If both the result and the PAL or ES are above the limit of detection but below the limit of quantitation, the result is not considered a PAL or ES exceedance under NR 140.14(3)(c). If the PAL or ES is below the limit of detection and the result is below the limit of quantitation, the result is not considered a PAL or ES exceedance without additional confirmation as described in NR 140.14(3)(b).

Well	Parameter	Result	LOD/LOQ	PAL	ES
MW-210A	Benzene (ug/l)	0.5 J	24.2/250	0.5	5
MW-001AR	Tetrahydrofuran (ug/l)	41.8 J	0.17/1	10	50
MW-210A	Trichloroethylene (ug/l)	0.75 J	0.3/1	0.5	5
P-402E	Trichloroethylene (ug/l)	0.85 J	0.32/1	0.5	5
P-423D	Trichloroethylene (ug/l)	0.9 J	0.8/2.5	0.5	5
MW-210	Vinyl chloride (ug/l)	0.52 J	0.32/1	0.02	0.2

Notes:
PAL = Preventive Action Limit
ES = Enforcement Standard
LOQ = Limit of Quantitation
J = Result is an estimated value below the laboratory's limit of quantitation.
* = Two results indicate duplicate samples. Only results exceeding the PAL are shown.
ug/l = micrograms per liter
mg/l = milligrams per liter

Prepared by: AJR, 12/13/2021
Checked by: SCC, 12/17/2021

Save... Print... Clear Data

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Environmental Monitoring Data Certification

Form 4400-231 (R 5/17)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5, Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner)
SCS Engineers

Contact for questions about data formatting. Include data preparer's name, telephone number and Email address:

Name	Phone No. (include area code)
Ashley Radunzel	(608) 224-2830

Email
aradunzel@scsengineers.com

Facility Name
Land & Gas Reclamation Landfill

License # / Monitoring ID	Facility ID (FID)
1118	114052290

Actual sampling dates (e.g., July 2-6, 2003)	The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)
October 4, 6-8, & 28, 2021	October 2021

Type of Data Submitted (Check all that apply):

- ☒ Groundwater monitoring data from monitoring wells
- ☐ Groundwater monitoring data from private water supply wells
- ☐ Leachate monitoring data
- ☐ Gas monitoring data
- ☐ Air monitoring data
- ☐ Other (specify):

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
- ☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- ☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Facility Representative Name (Print)	Title	Phone No. (include area code)
Sherren Clark, SCS Engineers	Project Manager	(608) 216-7323

Signature

12/21/2021
Date Signed (mm/dd/yyyy)

For DNR Use Only

Check action taken, and record date and your initials. Describe on back side if necessary.

- ☐ Found uploading problems on _____ Initials
- ☐ Notified contact of problems on _____ Uploaded data successfully on _____

EDD format(s): ☐ Diskette ☐ CD (initial submittal and follow-up) ☐ E-mail (follow-up only) ☐ Other: _____

December 2, 2021
File No. 25221008.02

Mr. Trevor Bannister
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

Mr. Mark Peters
Wisconsin Department of Natural Resources
1027 W. St. Paul Ave
Milwaukee, WI 53233
Sent via email to Mark.Peters@wisconsin.gov

Subject: Water Supply Well Monitoring Results – October 2021
Land & Gas Reclamation Landfill
Dodge County, Wisconsin
WDNR License No. 1118

Dear Mr. Bannister and Mr. Peters:

Enclosed are the water supply well results for the October 2021 monitoring completed as part of the Land & Gas Reclamation Landfill (LGRL) groundwater investigation. The samples were collected by Environmental Sampling Corporation (ESC) on October 28 and 29, 2021, and were analyzed for field parameters, volatile organic compounds (VOCs), alkalinity, chloride, and hardness. Laboratory analysis was performed by Pace Analytical Services, Green Bay, Wisconsin, and Northern Lake Service, Inc., Crandon, Wisconsin.

Water supply well monitoring in October included the following sample locations:

- PW-19
- PW-21RR (untreated groundwater and post-treatment water supply)
- PW-20
- PW-23
- PW-28
- PW-32
- PW-38
- PW-42
- PW-43
- PW-44

This sampling is not required under the routine monitoring plan for LGRL, but has been performed as part of the ongoing groundwater investigation in the bedrock aquifer downgradient from LGRL. The treatment system for water supply well PW-21RR at the Oechsner farm is a CLEARADON aeration system.

The October 2021 VOC detections are summarized in the attached Water Supply Well Sampling Results Summary table. The laboratory report is also attached.

NR 140 groundwater standards were exceeded in the untreated groundwater sample from PW-21RR (A. Oechsner), where vinyl chloride was detected at an estimated concentration above the NR 140 enforcement standard and cis-1,2-dichloroethene (cis-1,2-DCE) was detected at a concentration above the NR 140 preventive action limit (PAL). In the post treatment sample from PW-21RR, there were no VOC detections above the PALs. The detected concentrations pre- and post-treatment were consistent with previous results.

Cis-1,2-DCE was also detected in the samples from wells PW-19, PW-28, and PW-32. The cis-1,2-DCE concentrations detected in samples from these three wells were within the range of recent results and remained below the PAL.

The sample from PW-32 also contained chloroform at a concentration exceeding the PAL and toluene at a concentration well below the PAL. These VOCs have not been detected previously and are not likely related to LGRL. Chloroform is typically formed as a byproduct of chlorination. Low levels of toluene can be due to glassware contamination, and toluene can also be associated with materials in the well, such as electrical tape. GFL plans to resample this well in December.

These sampling results will also be included in the next update report to the Wisconsin Department of Natural Resources (WDNR) Remediation and Redevelopment Program for the LGRL bedrock groundwater investigation.

If you have any questions regarding this submittal, please call Sherren Clark at (608) 225-2974.

Sincerely,

Sherren Clark, PE, PG
Project Director
SCS Engineers

Eric Oelkers, PG
Senior Hydrogeologist
SCS Engineers

SCC/AJR/EO

cc: Jake Margelofsky, Glacier Ridge Landfill (2 copies)

cc via email: Environmental Program Associate, at DNRWasteManagement@Wisconsin.gov
Tim Curry, GFL Environmental
Kari Rabideau, GFL Environmental
Dan Roche, Tetra Tech
Melanie Gotto, Deere & Company World Headquarters
Monica Rios, Deere & Company World Headquarters
George Marek, Quarles & Brady, LLP (for Mercury Marine)
Linda Benfeld, ESG Holdings, LLC c/o Foley & Lardner LLP (for Maysteel Corp.)
Nathan Kempke, City of Mayville

Paul Rosenfeldt, Edgarton, St. Peter, Petak & Rosenfeldt (for Mayville Engineering Corp.)
Tracy Ipavec, Environmental Sampling Corporation

Encl. Water Supply Well Sampling Results Summary
Laboratory Report for Water Supply Well Samples

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Water Supply Well Sampling Results Summary

Site ID: **1118**
Site Name: **Land & Gas Reclamation Landfill**
Reporting Period: **October 2021**

Groundwater Results with Volatile Organic Compound Detections

Well	Parameter	Result	PAL	ES	Exceedance Type
PW-19	cis-1,2-Dichloroethene (µg/L)	0.54 J	7	70	No exceedance
PW-21RR untreated	cis-1,2-Dichloroethene (µg/L)	20	7	70	PAL
	trans-1,2-Dichloroethene, total (µg/L)	0.57 J	20	100	No exceedance
	Vinyl chloride (µg/L)	0.56 J	0.02	0.2	Estimated > ES
PW-21RR treated	cis-1,2-Dichloroethene (µg/L)	2.0	7	70	No exceedance
PW-28	cis-1,2-Dichloroethene (µg/L)	3.6	7	70	No exceedance
PW-32	Chloroform	3.1	0.6	6	PAL
	cis-1,2-Dichloroethene (µg/L)	0.42 J	7	70	No exceedance
	Toluene	11	160	800	No exceedance

Notes:
PAL = NR 140 Preventive Action Limit
ES = NR 140 Enforcement Standard
VOCs = Volatile Organic Compounds
µg/L = micrograms per liter
J = Estimated concentration at or above the Limit of Detection and below the Limit of Quantitation

Prepared by: AJR, 11/23/2021
Checked by: SCC, 11/29/2021

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

November 22, 2021

Lonn Walter
GFL Enviromental
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL PW
Pace Project No.: 40236071

Dear Lonn Walter:

Enclosed are the analytical results for sample(s) received by the laboratory between October 29, 2021 and October 30, 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.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

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

- Pace Analytical Services - Green Bay

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

Sincerely,

Cindy K Varga

Cindy Varga
cindy.varga@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Sherren Clark, SCS Engineers
Environmental Sampling Corporation Staff, Environmental Sampling Corporation
Jake Margelofsky, GFL Enviromental
Janice Newell, SCS Engineers
Frank Perugini, Environmental Sampling Corporation
Kari Rabideau, GFL Environmental
Ashley Radunzel, SCS ENGINEERS

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: LGRL PW
Pace Project No.: 40236071

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: LGRL PW
Pace Project No.: 40236071

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40236071001	**PW-21RR BEFORE**	Water	10/28/21 13:35	10/29/21 11:00
40236071002	**PW-21RR AFTER**	Water	10/28/21 13:40	10/29/21 11:00
40236071003	**TRIP BLANK**	Water	10/28/21 00:00	10/29/21 11:00
40236103001	**PW-28**	Water	10/29/21 10:45	10/30/21 08:35
40236103002	**PW-32**	Water	10/29/21 11:10	10/30/21 08:35
40236103003	**PW-44**	Water	10/29/21 11:35	10/30/21 08:35
40236103004	**PW-43**	Water	10/29/21 11:55	10/30/21 08:35
40236103005	**PW-42**	Water	10/29/21 12:15	10/30/21 08:35
40236103006	**PW-19**	Water	10/29/21 12:35	10/30/21 08:35
40236103007	**PW-23**	Water	10/29/21 13:00	10/30/21 08:35
40236103008	**PW-38**	Water	10/29/21 13:05	10/30/21 08:35
40236103009	**PW-20**	Water	10/29/21 13:30	10/30/21 08:35
40236103010	**TRIP BLANK**	Water	10/29/21 00:00	10/30/21 08:35

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: LGRL PW
Pace Project No.: 40236071

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40236071001	**PW-21RR BEFORE**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236071002	**PW-21RR AFTER**		VGC	6	PASI-G
40236103001	**PW-28**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103002	**PW-32**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103003	**PW-44**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103004	**PW-43**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103005	**PW-42**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103006	**PW-19**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103007	**PW-23**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40236103008	**PW-38**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: LGRL PW
Pace Project No.: 40236071

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40236103009	**PW-20**	EPA 6010D	TXW	1	PASI-G
			VGC	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-21RR BEFORE **Lab ID: 40236071001** Collected: 10/28/21 13:35 Received: 10/29/21 11:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**389000**	ug/L	2000	150	1	11/02/21 12:18	11/04/21 03:28		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.15**	Std. Units			1		10/28/21 13:35		
Field Specific Conductance	**688**	umhos/cm			1		10/28/21 13:35		
Turbidity	**N**	NTU			1		10/28/21 13:35		
Apparent Color	**N**	no units			1		10/28/21 13:35		
Odor	**N**	no units			1		10/28/21 13:35		
Temperature, Water (C)	**11.7**	deg C			1		10/28/21 13:35		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**18.6**	mg/L	2.0	0.43	1		11/13/21 15:20	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**346**	mg/L	24.8	7.4	1		11/11/21 13:22		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-21RR AFTER **Lab ID: 40236071002** Collected: 10/28/21 13:40 Received: 10/29/21 11:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.78**	Std. Units			1		10/28/21 13:40		
Field Specific Conductance	**661**	umhos/cm			1		10/28/21 13:40		
Turbidity	**N**	NTU			1		10/28/21 13:40		
Apparent Color	**N**	no units			1		10/28/21 13:40		
Odor	**N**	no units			1		10/28/21 13:40		
Temperature, Water (C)	**12.1**	deg C			1		10/28/21 13:40		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-28 **Lab ID: 40236103001** Collected: 10/29/21 10:45 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**469000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:29		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.09**	Std. Units			1		10/29/21 10:45		
Field Specific Conductance	**815**	umhos/cm			1		10/29/21 10:45		
Turbidity	**N**	NTU			1		10/29/21 10:45		
Apparent Color	**N**	no units			1		10/29/21 10:45		
Odor	**N**	no units			1		10/29/21 10:45		
Temperature, Water (C)	**12.3**	deg C			1		10/29/21 10:45		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**34.1**	mg/L	2.0	0.43	1		11/13/21 18:48	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**397**	mg/L	49.6	14.9	2		11/11/21 13:29		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-32 **Lab ID: 40236103002** Collected: 10/29/21 11:10 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**482000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:31		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.28**	Std. Units			1		10/29/21 11:10		
Field Specific Conductance	**871**	umhos/cm			1		10/29/21 11:10		
Turbidity	**N**	NTU			1		10/29/21 11:10		
Apparent Color	**Y**	no units			1		10/29/21 11:10		
Odor	**Y**	no units			1		10/29/21 11:10		
Temperature, Water (C)	**16.6**	deg C			1		10/29/21 11:10		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**46.1**	mg/L	2.0	0.43	1		11/13/21 19:03	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**352**	mg/L	24.8	7.4	1		11/11/21 13:38		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-44 **Lab ID: 40236103003** Collected: 10/29/21 11:35 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**888J**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:34		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.36**	Std. Units			1		10/29/21 11:35		
Field Specific Conductance	**629**	umhos/cm			1		10/29/21 11:35		
Turbidity	**N**	NTU			1		10/29/21 11:35		
Apparent Color	**N**	no units			1		10/29/21 11:35		
Odor	**N**	no units			1		10/29/21 11:35		
Temperature, Water (C)	**14.4**	deg C			1		10/29/21 11:35		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**1.4J**	mg/L	2.0	0.43	1		11/13/21 19:18	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**338**	mg/L	24.8	7.4	1		11/11/21 13:39		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-43 **Lab ID: 40236103004** Collected: 10/29/21 11:55 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**231000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:36		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.67**	Std. Units			1		10/29/21 11:55		
Field Specific Conductance	**462**	umhos/cm			1		10/29/21 11:55		
Turbidity	**N**	NTU			1		10/29/21 11:55		
Apparent Color	**N**	no units			1		10/29/21 11:55		
Odor	**N**	no units			1		10/29/21 11:55		
Temperature, Water (C)	**11.4**	deg C			1		10/29/21 11:55		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**15.1**	mg/L	2.0	0.43	1		11/13/21 19:33	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**224**	mg/L	24.8	7.4	1		11/11/21 13:40		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-42 **Lab ID: 40236103005** Collected: 10/29/21 12:15 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**340000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:39		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.27**	Std. Units			1		10/29/21 12:15		
Field Specific Conductance	**589**	umhos/cm			1		10/29/21 12:15		
Turbidity	**N**	NTU			1		10/29/21 12:15		
Apparent Color	**N**	no units			1		10/29/21 12:15		
Odor	**N**	no units			1		10/29/21 12:15		
Temperature, Water (C)	**11.2**	deg C			1		10/29/21 12:15		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**1.2J**	mg/L	2.0	0.43	1		11/12/21 05:09	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**333**	mg/L	24.8	7.4	1		11/11/21 13:41		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-19 **Lab ID: 40236103006** Collected: 10/29/21 12:35 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**505000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:41		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.14**	Std. Units			1		10/29/21 12:35		
Field Specific Conductance	**811**	umhos/cm			1		10/29/21 12:35		
Turbidity	**N**	NTU			1		10/29/21 12:35		
Apparent Color	**N**	no units			1		10/29/21 12:35		
Odor	**N**	no units			1		10/29/21 12:35		
Temperature, Water (C)	**11.4**	deg C			1		10/29/21 12:35		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**56.5**	mg/L	10.0	2.2	5		11/12/21 05:52	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**366**	mg/L	24.8	7.4	1		11/11/21 13:42		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-23 **Lab ID: 40236103007** Collected: 10/29/21 13:00 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**439000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:48		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.10**	Std. Units			1		10/29/21 13:00		
Field Specific Conductance	**1025**	umhos/cm			1		10/29/21 13:00		
Turbidity	**N**	NTU			1		10/29/21 13:00		
Apparent Color	**N**	no units			1		10/29/21 13:00		
Odor	**N**	no units			1		10/29/21 13:00		
Temperature, Water (C)	**12.5**	deg C			1		10/29/21 13:00		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**106**	mg/L	10.0	2.2	5		11/12/21 06:07	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**395**	mg/L	24.8	7.4	1		11/11/21 13:43		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-38 **Lab ID: 40236103008** Collected: 10/29/21 13:05 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**388000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:51		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.81**	Std. Units			1		10/29/21 13:05		
Field Specific Conductance	**680**	umhos/cm			1		10/29/21 13:05		
Turbidity	**N**	NTU			1		10/29/21 13:05		
Apparent Color	**N**	no units			1		10/29/21 13:05		
Odor	**N**	no units			1		10/29/21 13:05		
Temperature, Water (C)	**12.9**	deg C			1		10/29/21 13:05		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**1.6J**	mg/L	2.0	0.43	1		11/12/21 06:21	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**346**	mg/L	24.8	7.4	1		11/11/21 13:47		

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ANALYTICAL RESULTS

Project: LGRL PW
Pace Project No.: 40236071

Sample: PW-20 **Lab ID: 40236103009** Collected: 10/29/21 13:30 Received: 10/30/21 08:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Total Hardness by 2340B	**422000**	ug/L	2000	150	1	11/02/21 13:43	11/03/21 16:53		
Field Data	Analytical Method: Pace Analytical Services - Green Bay								
Field pH	**7.37**	Std. Units			1		10/29/21 13:30		
Field Specific Conductance	**771**	umhos/cm			1		10/29/21 13:30		
Turbidity	**N**	NTU			1		10/29/21 13:30		
Apparent Color	**N**	no units			1		10/29/21 13:30		
Odor	**N**	no units			1		10/29/21 13:30		
Temperature, Water (C)	**11.5**	deg C			1		10/29/21 13:30		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Chloride	**30.1**	mg/L	2.0	0.43	1		11/12/21 07:19	16887-00-6	
310.2 Alkalinity	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	**370**	mg/L	49.6	14.9	2		11/11/21 13:48		

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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40236071

QC Batch: 400393
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40236071001

METHOD BLANK: 2312241 Matrix: Water
Associated Lab Samples: 40236071001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B	ug/L	166J	2000	11/04/21 02:32	

LABORATORY CONTROL SAMPLE: 2312242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B	ug/L		63200			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2312243 2312244

Parameter	Units	40235904003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Hardness by 2340B	ug/L	350000			436000	432000				1	20	

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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40236071

QC Batch: 400419
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40236103001, 40236103002, 40236103003, 40236103004, 40236103005, 40236103006, 40236103007, 40236103008, 40236103009

METHOD BLANK: 2312315 Matrix: Water
Associated Lab Samples: 40236103001, 40236103002, 40236103003, 40236103004, 40236103005, 40236103006, 40236103007, 40236103008, 40236103009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B	ug/L	<150	2000	11/03/21 15:37	

LABORATORY CONTROL SAMPLE: 2312316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B	ug/L		66100			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2312317 2312318

Parameter	Units	40235864001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Hardness by 2340B	ug/L	1530J			68000	66100				3	20	

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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40236071

QC Batch: 401295 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40236071001, 40236103001, 40236103002, 40236103003, 40236103004

METHOD BLANK: 2316949 Matrix: Water
Associated Lab Samples: 40236071001, 40236103001, 40236103002, 40236103003, 40236103004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.43	2.0	11/13/21 10:53	

LABORATORY CONTROL SAMPLE: 2316950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2316951 2316952

Parameter	Units	40236058006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.2	20	20	46.2	46.1	105	104	90-110	0	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2316953 2316954

Parameter	Units	40236103004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.1	20	20	36.3	36.5	106	107	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40236071

QC Batch: 401296 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40236103005, 40236103006, 40236103007, 40236103008, 40236103009

METHOD BLANK: 2316955 Matrix: Water
Associated Lab Samples: 40236103005, 40236103006, 40236103007, 40236103008, 40236103009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.43	2.0	11/12/21 04:41	

LABORATORY CONTROL SAMPLE: 2316956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	21.6	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2316957 2316958

Parameter	Units	40236103005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.2J	20	20	22.8	22.8	108	108	90-110	0	15	

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QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40236071

QC Batch: 401337
QC Batch Method: EPA 310.2
Analysis Method: EPA 310.2
Analysis Description: 310.2 Alkalinity
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40236071001, 40236103001

METHOD BLANK: 2317332 Matrix: Water
Associated Lab Samples: 40236071001, 40236103001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	11/11/21 13:00	

LABORATORY CONTROL SAMPLE: 2317333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	107	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2317334 2317335

Parameter	Units	40236058008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	140	100	100	243	241	103	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2317336 2317337

Parameter	Units	40236103001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	397	200	200	582	587	93	95	90-110	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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: LGRL PW
Pace Project No.: 40236071

QC Batch: 401339
QC Batch Method: EPA 310.2
Analysis Method: EPA 310.2
Analysis Description: 310.2 Alkalinity
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40236103002, 40236103003, 40236103004, 40236103005, 40236103006, 40236103007, 40236103008, 40236103009

METHOD BLANK: 2317341 Matrix: Water
Associated Lab Samples: 40236103002, 40236103003, 40236103004, 40236103005, 40236103006, 40236103007, 40236103008, 40236103009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	11/11/21 13:35	

LABORATORY CONTROL SAMPLE: 2317342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	101	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2317343 2317344

Parameter	Units	40236103009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	370	200	200	566	569	98	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2317345 2317346

Parameter	Units	40236359002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	573	500	500	1120	1120	110	109	90-110	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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: LGRL PW
Pace Project No.: 40236071

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 LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

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 at or above the adjusted LOD.

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

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL PW
Pace Project No.: 40236071

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40236071001	PW-21RR BEFORE	EPA 3010A	400393	EPA 6010D	400543
40236103001	PW-28	EPA 3010A	400419	EPA 6010D	400551
40236103002	PW-32	EPA 3010A	400419	EPA 6010D	400551
40236103003	PW-44	EPA 3010A	400419	EPA 6010D	400551
40236103004	PW-43	EPA 3010A	400419	EPA 6010D	400551
40236103005	PW-42	EPA 3010A	400419	EPA 6010D	400551
40236103006	PW-19	EPA 3010A	400419	EPA 6010D	400551
40236103007	PW-23	EPA 3010A	400419	EPA 6010D	400551
40236103008	PW-38	EPA 3010A	400419	EPA 6010D	400551
40236103009	PW-20	EPA 3010A	400419	EPA 6010D	400551
40236071001	PW-21RR BEFORE				
40236071002	PW-21RR AFTER				
40236103001	PW-28				
40236103002	PW-32				
40236103003	PW-44				
40236103004	PW-43				
40236103005	PW-42				
40236103006	PW-19				
40236103007	PW-23				
40236103008	PW-38				
40236103009	PW-20				
40236071001	PW-21RR BEFORE	EPA 300.0	401295		
40236103001	PW-28	EPA 300.0	401295		
40236103002	PW-32	EPA 300.0	401295		
40236103003	PW-44	EPA 300.0	401295		
40236103004	PW-43	EPA 300.0	401295		
40236103005	PW-42	EPA 300.0	401296		
40236103006	PW-19	EPA 300.0	401296		
40236103007	PW-23	EPA 300.0	401296		
40236103008	PW-38	EPA 300.0	401296		
40236103009	PW-20	EPA 300.0	401296		
40236071001	PW-21RR BEFORE	EPA 310.2	401337		
40236103001	PW-28	EPA 310.2	401337		
40236103002	PW-32	EPA 310.2	401339		
40236103003	PW-44	EPA 310.2	401339		
40236103004	PW-43	EPA 310.2	401339		
40236103005	PW-42	EPA 310.2	401339		
40236103006	PW-19	EPA 310.2	401339		
40236103007	PW-23	EPA 310.2	401339		
40236103008	PW-38	EPA 310.2	401339		
40236103009	PW-20	EPA 310.2	401339		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

40236071

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
GFL Glacier Ridge	Report To: Kari Rabideau	Attention: Kari Rabideau
N7296 Hwy V	Copy To: Frank Perugini - ESC, ESC Staff, Sherren Clark - SCS	Company Name: GFL Glacier Ridge
Horicon, WI 53032		Address: N7296 Hwy V, Horicon, WI 53032
Email To: Kari Rabideau - ADS	Purchase Order No.: na	Pace Quote Reference: na
Phone: na Fax: na	Project Name: LGRL PW	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number: na	Pace Profile #: 4172 line 19

REGULATORY AGENCY

__ NPDES __GROUND WATER _X_ DRINKING WATER

__UST __RCRA OTHER_____

SITE LOCATION: __GA __IL __IN __MI __NC __OH __SC _X_ WI OTHER____

Section D Required Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Ascorbic Acid/HCL	Preservatives: HCL	Preservatives: Unpreserved	Preservatives: HNO3	Requested Analysis: EPA 524.4 VOCs	Requested Analysis: alk, cl	Requested Analysis: 6010 hardness	Requested Analysis: Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	PW-21RR Before	DW	G	—	—	10/28	1335	11.7	5	3		1	1	X	X	X		001
2	PW-21RR After	DW	G	—	—	10/28	1340	12.1	3	3				X				002
3	Trip Blank	—	—	—	—	—	—	—	2		2			X				003
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Filtered (Y/N): N N N

Additional Comments:

PW-21RR After only needs VOCs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	10/28/21	1700			
Walker	10/29/21	1100	Jason Kluge Pace	10/29/21	1100

SAMPLE CONDITIONS

	Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
	-5/1	N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Scott Krumwiede

SIGNATURE of SAMPLER: Scott Krumwiede DATE Signed (MM / DD / YY): 10/28/21

Client Name: GFL

Sample Preservation Receipt Form

Project # 60236071

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

All containers needing preservation have been checked and noted below: ☑Yes ☐No ☐N/A

Lab Lot# of pH paper: 10D0104 Lab Std #ID of preservation (if pH adjusted):

Initial when completed: SW Date/ Time:

Pace Lab #	Glass								Plastic					Vials						Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001										1		1		3			B													X		2.5 / 5 / 10
002														3			B															2.5 / 5 / 10
003																	2															2.5 / 5 / 10
004																																2.5 / 5 / 10
005																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																2.5 / 5 / 10
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014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																													10/29/21	SW		2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40236071

Client Name: GFL

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ Waltco
☐ Client ☐ Pace Other:

Tracking #: 3019420

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

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

Thermometer Used SR - 105 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 1.1.5 /Corr: 5.1

Temp Blank Present: ☒ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 10/29/21 /Initials:

Labeled By Initials:

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A		8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☐Yes ☒No ☐N/A	12.
Trip Blank Present:	☒Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 471		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

Page 2 of 2

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034
Printed: 11/11/21 Page 1 of 1
NLS Project: 375937
NLS Customer: 94575
Fax: 920 469 8827 Phone: 800 736 2436

Client: Pace Analytical Services Inc (GB)
Attn: Cindy Varga
1241 Bellevue Street
Green Bay, WI 54302 2156

Project: 40236071 LGRL PW

40236071001 (PW-21RR Before) NLS ID: 1287023
COC: :1 Matrix: DW
Collected: 10/28/21 13:35 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/09/21	EPA 524.2, Rev 4.1	721026460

40236071002 (PW-21RR After) NLS ID: 1287024
COC: :2 Matrix: DW
Collected: 10/28/21 13:40 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/08/21	EPA 524.2, Rev 4.1	721026460

40236071003 (Trip Blank) NLS ID: 1287025
COC: :3 Matrix: TB
Collected: 10/28/21 00:00 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/08/21	EPA 524.2	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.
ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable
DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L
MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:

Authorized by:
R. T. Krueger
President

For Terms and Conditions please see www.nlslab.com

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375937**
Project Description: 40236071
Project Title: LGRL PW **Template: 524W** **Printed: 11/11/2021 11:03**

Sample: 1287023 40236071001 (PW-21RR Before) Collected: 10/28/21 Analyzed: 11/08/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	20	ug/L	2	0.70	2.3	70	
trans-1,2-Dichloroethene	[0.57]	ug/L	1	0.24	0.81	100	J
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375937**
Project Description: 40236071
Project Title: LGRL PW **Template: 524W** **Printed: 11/11/2021 11:03**

Sample: 1287023 40236071001 (PW-21RR Before) Collected: 10/28/21 Analyzed: 11/08/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	[0.56]	ug/L	1	0.19	0.62	.2	J
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	77%		1				S
1,2-Dichlorobenzene-d4 (SURR)	81%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375937**
Project Description: 40236071
Project Title: LGRL PW **Template: 524W Printed: 11/11/2021 11:03**

Sample: 1287024 40236071002 (PW-21RR After) Collected: 10/28/21 Analyzed: 11/08/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	2.0	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375937**
Project Description: 40236071
Project Title: LGRL PW **Template: 524W** **Printed: 11/11/2021 11:03**

Sample: 1287024 40236071002 (PW-21RR After) Collected: 10/28/21 Analyzed: 11/08/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	80%		1				S
1,2-Dichlorobenzene-d4 (SURR)	84%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375937**
Project Description: 40236071
Project Title: LGRL PW **Template: 524W Printed: 11/11/2021 11:03**

Sample: 1287025 40236071003 (Trip Blank) Collected: 10/28/21 Analyzed: 11/08/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.43	1.4	
Bromobenzene	ND	ug/L	1	0.14	0.46	
Bromochloromethane	ND	ug/L	1	0.31	1.0	
Bromodichloromethane	ND	ug/L	1	0.42	1.4	
Bromoform	ND	ug/L	1	0.39	1.3	
Bromomethane	ND	ug/L	1	1.0	3.5	
n-Butylbenzene	ND	ug/L	1	0.49	1.6	
sec-Butylbenzene	ND	ug/L	1	0.41	1.4	
tert-Butylbenzene	ND	ug/L	1	0.51	1.7	
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	
Chlorobenzene	ND	ug/L	1	0.28	0.95	
Chloroethane	ND	ug/L	1	2.7	8.9	
Chloroform	ND	ug/L	1	0.52	1.7	
Chloromethane	ND	ug/L	1	0.40	1.3	
2-Chlorotoluene	ND	ug/L	1	0.36	1.2	
4-Chlorotoluene	ND	ug/L	1	0.40	1.3	
Dibromochloromethane	ND	ug/L	1	0.20	0.65	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8	
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95	
Dibromomethane	ND	ug/L	1	0.38	1.3	
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62	
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2	
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92	
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64	
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9	
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2	
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86	
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83	
Ethylbenzene	ND	ug/L	1	0.27	0.90	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0	
Isopropylbenzene	ND	ug/L	1	0.33	1.1	
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5	
Methylene chloride	ND	ug/L	1	1.1	3.7	
Naphthalene	ND	ug/L	1	0.59	2.0	
n-Propylbenzene	ND	ug/L	1	0.40	1.3	
Styrene	ND	ug/L	1	0.31	1.0	
ortho-Xylene	ND	ug/L	1	0.28	0.95	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0	
Tetrachloroethene	ND	ug/L	1	0.27	0.90	
Toluene	ND	ug/L	1	0.21	0.69	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	
Trichloroethene	ND	ug/L	1	0.46	1.5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375937**
Project Description: 40236071
Project Title: LGRL PW **Template: 524W Printed: 11/11/2021 11:03**

Sample: 1287025 40236071003 (Trip Blank) Collected: 10/28/21 Analyzed: 11/08/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96	
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5	
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5	
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4	
Vinyl chloride	ND	ug/L	1	0.19	0.62	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	
MTBE	ND	ug/L	1	0.18	0.60	
4-Bromofluorobenzene (SURR)	78%		1			S
1,2-Dichlorobenzene-d4 (SURR)	84%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

Chain of Custody

PASI Green Bay Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 40236071 Workorder Name: LGRL PW Results Requested By: 11/12/2021

Report / Invoice To	Subcontract To
Cindy Varga Pace Analytical Green Bay 1241 Bellevue Street Suite 9 Green Bay, WI 54302 Phone (920)469-2436 Email: cindy.varga@pacelabs.com	Northern Lake Services Inc 400 N. Lake Avenue Crandon, WI 54520

State of Sample Origin: WI LOD/LOQ

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Preserved Containers: ascorbic / hcl	Requested Analysis: 524 VOC	LAB USE ONLY
1	PW-21RR BEFORE 1287023	10/28/2021 13:35	40236071001	Water		3	X	
2	PW-21RR AFTER 824	10/28/2021 13:40	40236071002	Water		3	X	
3	TRIP BLANK 825	10/28/2021 00:00	40236071003	Water	2		X	
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1		11/12 1600		11/12/21 1600
2				
3				

Comments: See attached list
Do not need QC pkg or EDD

Cooler Temperature on Receipt 1.1 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

524.2 VOC GRL/LGRL page 1 of 2
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromochloromethane
1,2-Dibromo-3-Chloropropane
1,2-Dibromoethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene

524.2 VOC GRL/LGRL page 2 of 2
p-Isopropyltoluene
Methyl tert-butyl ether
Methylene chloride
Napthalene
n-Propylbenzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride
ortho-Xylene
meta, para-Xylene

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

NLS Project: 375934
NLS Customer: 94575

Fax: 920 469 8827 Phone: 800 736 2436

Client: Pace Analytical Services Inc (GB)
Attn: Cindy Varga
1241 Bellevue Street
Green Bay, WI 54302 2156

Project: 40236103 LGRL PW

40236103001 (PW-28) NLS ID: 1287011
COC: :1 Matrix: DW
Collected: 10/29/21 10:45 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/03/21	EPA 524.2, Rev 4.1	721026460

40236103002 (PW-32) NLS ID: 1287012
COC: :2 Matrix: DW
Collected: 10/29/21 11:10 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/03/21	EPA 524.2, Rev 4.1	721026460

40236103003 (PW-44) NLS ID: 1287013
COC: :4 Matrix: DW
Collected: 10/29/21 11:35 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/03/21	EPA 524.2, Rev 4.1	721026460

40236103004 (PW-43) NLS ID: 1287014
COC: :4 Matrix: DW
Collected: 10/29/21 11:55 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/03/21	EPA 524.2, Rev 4.1	721026460

40236103005 (PW-42) NLS ID: 1287015
COC: :5 Matrix: DW
Collected: 10/29/21 12:15 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/03/21	EPA 524.2, Rev 4.1	721026460

40236103006 (PW-19) NLS ID: 1287016
COC: :6 Matrix: DW
Collected: 10/29/21 12:35 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/04/21	EPA 524.2, Rev 4.1	721026460

40236103007 (PW-23) NLS ID: 1287017
COC: :7 Matrix: DW
Collected: 10/29/21 13:00 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/04/21	EPA 524.2, Rev 4.1	721026460

40236103008 (PW-38) NLS ID: 1287018
COC: :9 Matrix: DW
Collected: 10/29/21 13:05 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/04/21	EPA 524.2, Rev 4.1	721026460

40236103009 (PW-20) NLS ID: 1287019
COC: :9 Matrix: DW
Collected: 10/29/21 13:30 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/04/21	EPA 524.2, Rev 4.1	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

NLS Project: 375934
NLS Customer: 94575

Client: **Pace Analytical Services Inc (GB)**
Attn: Cindy Varga
1241 Bellevue Street
Green Bay, WI 54302 2156

Fax: 920 469 8827 Phone: 800 736 2436

Project: 40236103 LGRL PW

40236103010 (Trip Blank) NLS ID: 1287020
COC: :10 Matrix: TB
Collected: 10/29/21 00:00 Received: 11/02/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
SDWA Volatile Organics (VOCs) by EPA 524.2	see attached					11/04/21	EPA 524.2	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable
DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L
MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:

Authorized by:
R. T. Krueger
President

For Terms and Conditions please see www.nlslab.com

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis

Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**

Project Description: 40236103

Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287011 40236103001 (PW-28) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	3.6	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287011 40236103001 (PW-28) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	76%		1				S
1,2-Dichlorobenzene-d4 (SURR)	86%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287012 40236103002 (PW-32) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	3.1	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	[0.42]	ug/L	1	0.35	1.2	70	J
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	11	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287012 40236103002 (PW-32) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	81%		1				S
1,2-Dichlorobenzene-d4 (SURR)	82%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287013 40236103003 (PW-44) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287013 40236103003 (PW-44) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	78%		1				S
1,2-Dichlorobenzene-d4 (SURR)	83%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287014 40236103004 (PW-43) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287014 40236103004 (PW-43) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	76%		1				S
1,2-Dichlorobenzene-d4 (SURR)	84%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287015 40236103005 (PW-42) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287015 40236103005 (PW-42) Collected: 10/29/21 Analyzed: 11/03/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	78%		1				S
1,2-Dichlorobenzene-d4 (SURR)	82%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287016 40236103006 (PW-19) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	[0.54]	ug/L	1	0.35	1.2	70	J
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287016 40236103006 (PW-19) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	76%		1				S
1,2-Dichlorobenzene-d4 (SURR)	79%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W Printed: 11/08/2021 14:42**

Sample: 1287017 40236103007 (PW-23) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W** **Printed: 11/08/2021 14:42**

Sample: 1287017 40236103007 (PW-23) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	79%		1				S
1,2-Dichlorobenzene-d4 (SURR)	82%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W** **Printed: 11/08/2021 14:42**

Sample: 1287018 40236103008 (PW-38) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

Sample: 1287018 40236103008 (PW-38) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	76%		1				S
1,2-Dichlorobenzene-d4 (SURR)	81%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1287019 40236103009 (PW-20) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Benzene	ND	ug/L	1	0.43	1.4	5	
Bromobenzene	ND	ug/L	1	0.14	0.46		
Bromochloromethane	ND	ug/L	1	0.31	1.0		
Bromodichloromethane	ND	ug/L	1	0.42	1.4	80	
Bromoform	ND	ug/L	1	0.39	1.3	80	
Bromomethane	ND	ug/L	1	1.0	3.5		
n-Butylbenzene	ND	ug/L	1	0.49	1.6		
sec-Butylbenzene	ND	ug/L	1	0.41	1.4		
tert-Butylbenzene	ND	ug/L	1	0.51	1.7		
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	5	
Chlorobenzene	ND	ug/L	1	0.28	0.95	100	
Chloroethane	ND	ug/L	1	2.7	8.9		
Chloroform	ND	ug/L	1	0.52	1.7	80	
Chloromethane	ND	ug/L	1	0.40	1.3		
2-Chlorotoluene	ND	ug/L	1	0.36	1.2		
4-Chlorotoluene	ND	ug/L	1	0.40	1.3		
Dibromochloromethane	ND	ug/L	1	0.20	0.65	80	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8		
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95		
Dibromomethane	ND	ug/L	1	0.38	1.3		
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	600	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62		
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	75	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2		
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92		
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	5	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	7	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	70	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	100	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	5	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64		
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9		
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2		
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86		
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83		
Ethylbenzene	ND	ug/L	1	0.27	0.90	700	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0		
Isopropylbenzene	ND	ug/L	1	0.33	1.1		
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5		
Methylene chloride	ND	ug/L	1	1.1	3.7	5	
Naphthalene	ND	ug/L	1	0.59	2.0		
n-Propylbenzene	ND	ug/L	1	0.40	1.3		
Styrene	ND	ug/L	1	0.31	1.0	100	
ortho-Xylene	ND	ug/L	1	0.28	0.95		
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3		
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0		
Tetrachloroethene	ND	ug/L	1	0.27	0.90	5	
Toluene	ND	ug/L	1	0.21	0.69	1000	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7		
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	70	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	200	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	5	
Trichloroethene	ND	ug/L	1	0.46	1.5	5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W** **Printed: 11/08/2021 14:42**

Sample: 1287019 40236103009 (PW-20) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	MCL	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96		
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5		
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5		
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4		
Vinyl chloride	ND	ug/L	1	0.19	0.62	.2	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	10000	
MTBE	ND	ug/L	1	0.18	0.60		
4-Bromofluorobenzene (SURR)	75%		1				S
1,2-Dichlorobenzene-d4 (SURR)	83%		1				S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W** **Printed: 11/08/2021 14:42**

Sample: 1287020 40236103010 (Trip Blank) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.43	1.4	
Bromobenzene	ND	ug/L	1	0.14	0.46	
Bromochloromethane	ND	ug/L	1	0.31	1.0	
Bromodichloromethane	ND	ug/L	1	0.42	1.4	
Bromoform	ND	ug/L	1	0.39	1.3	
Bromomethane	ND	ug/L	1	1.0	3.5	
n-Butylbenzene	ND	ug/L	1	0.49	1.6	
sec-Butylbenzene	ND	ug/L	1	0.41	1.4	
tert-Butylbenzene	ND	ug/L	1	0.51	1.7	
Carbon Tetrachloride	ND	ug/L	1	0.28	0.93	
Chlorobenzene	ND	ug/L	1	0.28	0.95	
Chloroethane	ND	ug/L	1	2.7	8.9	
Chloroform	ND	ug/L	1	0.52	1.7	
Chloromethane	ND	ug/L	1	0.40	1.3	
2-Chlorotoluene	ND	ug/L	1	0.36	1.2	
4-Chlorotoluene	ND	ug/L	1	0.40	1.3	
Dibromochloromethane	ND	ug/L	1	0.20	0.65	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.53	1.8	
1,2-Dibromoethane	ND	ug/L	1	0.28	0.95	
Dibromomethane	ND	ug/L	1	0.38	1.3	
1,2-Dichlorobenzene	ND	ug/L	1	0.12	0.40	
1,3-Dichlorobenzene	ND	ug/L	1	0.19	0.62	
1,4-Dichlorobenzene	ND	ug/L	1	0.22	0.73	
Dichlorodifluoromethane	ND	ug/L	1	0.35	1.2	
1,1-Dichloroethane	ND	ug/L	1	0.28	0.92	
1,2-Dichloroethane	ND	ug/L	1	0.43	1.4	
1,1-Dichloroethene	ND	ug/L	1	0.28	0.94	
cis-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2	
trans-1,2-Dichloroethene	ND	ug/L	1	0.24	0.81	
1,2-Dichloropropane	ND	ug/L	1	0.63	2.1	
1,3-Dichloropropane	ND	ug/L	1	0.19	0.64	
2,2-Dichloropropane	ND	ug/L	1	0.87	2.9	
1,1-Dichloropropene	ND	ug/L	1	0.35	1.2	
cis-1,3-Dichloropropene	ND	ug/L	1	0.26	0.86	
trans-1,3-Dichloropropene	ND	ug/L	1	0.25	0.83	
Ethylbenzene	ND	ug/L	1	0.27	0.90	
Hexachlorobutadiene	ND	ug/L	1	0.60	2.0	
Isopropylbenzene	ND	ug/L	1	0.33	1.1	
p-Isopropyltoluene	ND	ug/L	1	0.46	1.5	
Methylene chloride	ND	ug/L	1	1.1	3.7	
Naphthalene	ND	ug/L	1	0.59	2.0	
n-Propylbenzene	ND	ug/L	1	0.40	1.3	
Styrene	ND	ug/L	1	0.31	1.0	
ortho-Xylene	ND	ug/L	1	0.28	0.95	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.38	1.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.60	2.0	
Tetrachloroethene	ND	ug/L	1	0.27	0.90	
Toluene	ND	ug/L	1	0.21	0.69	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.51	1.7	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.44	1.5	
1,1,1-Trichloroethane	ND	ug/L	1	0.44	1.5	
1,1,2-Trichloroethane	ND	ug/L	1	0.53	1.8	
Trichloroethene	ND	ug/L	1	0.46	1.5	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis
Customer: Pace Analytical Services Inc (GB) **NLS Project: 375934**
Project Description: 40236103
Project Title: LGRL PW **Template: 524W** **Printed: 11/08/2021 14:42**

Sample: 1287020 40236103010 (Trip Blank) Collected: 10/29/21 Analyzed: 11/04/21 - Analytes: 60

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichlorofluoromethane	ND	ug/L	1	0.29	0.96	
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5	
1,2,4-Trimethylbenzene	ND	ug/L	1	0.45	1.5	
1,3,5-Trimethylbenzene	ND	ug/L	1	0.43	1.4	
Vinyl chloride	ND	ug/L	1	0.19	0.62	
meta,para-Xylene	ND	ug/L	1	0.59	2.0	
MTBE	ND	ug/L	1	0.18	0.60	
4-Bromofluorobenzene (SURR)	74%		1			S
1,2-Dichlorobenzene-d4 (SURR)	84%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

Chain of Custody

PASI Green Bay Laboratory

Pace Analytical
www.pacelabs.com

Workorder: 40236103 Workorder Name: LGRL PW Results Requested By: 11/15/2021

Report / Invoice To	Subcontract To
Cindy Varga Pace Analytical Green Bay 1241 Bellevue Street Suite 9 Green Bay, WI 54302 Phone (920)469-2436 Email: cindy.varga@pacelabs.com	Northern Lake Services Inc 400 N. Lake Avenue Crandon, WI 54520

State of Sample Origin: WI LOD/LOQ

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Preserved Containers: ascorbic / hcl	Requested Analysis: 524 VOCs	LAB USE ONLY
1	PW-28 12870111	10/29/2021 10:45	40236103001	Water		3	X	
2	PW-32 012	10/29/2021 11:10	40236103002	Water		3	X	
3	PW-44 013	10/29/2021 11:35	40236103003	Water		3	X	
4	PW-43 014	10/29/2021 11:55	40236103004	Water		3	X	
5	PW-42 015	10/29/2021 12:15	40236103005	Water		3	X	
6	PW-19 016	10/29/2021 12:35	40236103006	Water		3	X	
7	PW-23 017	10/29/2021 13:00	40236103007	Water		3	X	
8	PW-38 018	10/29/2021 13:05	40236103008	Water		3	X	
9	PW-20 019	10/29/2021 13:30	40236103009	Water		3	X	
10	TRIP BLANK 020	10/29/2021 00:00	40236103010	Water	4		X	
11								
12								
13								
14								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	11/1/2116	[illegible]	11/2/21
2				
3				

Comments

Do not need QC pkg or EDD

see attached list

Cooler Temperature on Receipt 1.1 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

524.2 VOC GRL/LGRL page 1 of 2
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromochloromethane
1,2-Dibromo-3-Chloropropane
1,2-Dibromoethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene

524.2 VOC GRL/LGRL page 2 of 2
p-Isopropyltoluene
Methyl tert-butyl ether
Methylene chloride
Napthalene
n-Propylbenzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride
ortho-Xylene
meta, para-Xylene

Attachment A-2

Historic VOC Monitoring Results and Concentrations vs. Time Plots

Historic VOC Monitoring Results
Land and Gas Reclamation Landfill
(concentrations in ug/L)

MW-1RR				MW-1AR			
Date	**cis-1,2-DCE**	**TCE**	**VC**	**Date**	**cis-1,2-DCE**	**TCE**	**VC**
NR 140 ES	**70**	**5**	**0.2**	**NR 140 ES**	**70**	**5**	**0.2**
11/21/1991		1,900	2,900	11/19/1991		130	3,000
5/29/1992		2,800	4,300	5/29/1992		100	2,800
6/17/1993		580	1,800	6/17/1993		30	2,200
6/21/1994		10.7	198	6/21/1994		24.9	1,160
4/14/1995	1,500	2,000	3,800	4/14/1995	7,100	200	2,900
10/4/1995	6,400	620	3,400	10/4/1995	6,100	180	2,800
4/4/1996	1,900	130	1,300	4/4/1996	6,600	150	2,600
10/12/1996	16,000	1,600	3,600	10/12/1996	8,500	200	2,300
4/10/1997	3,800	80	3,100	4/10/1997	6,000	86	2,400
10/3/1997	2,500	190	1,600	10/3/1997	6,300	0	2,700
4/10/1998	2,800	120	2,300	4/10/1998	7,200	150	2,500
10/14/1998	11,000	820	3,100	10/15/1998	6,500	95	1,900
4/6/1999	2,100	0	2,300	4/6/1999	5,500	0	2,300
10/7/1999	13,000	6,800	3,400	10/8/1999	6,100	0	2,000
4/3/2000	2,400	77	1,500	4/3/2000	5,700	54	2,200
10/4/2000	4,600	0	1,210	10/5/2000	4,920	0	1,190
4/4/2001	2,260	0	1,240	4/4/2001	5,040	0	1,300
10/3/2001	6,090	411	2,300	10/3/2001	4,910	0	2,000
4/3/2002	4,890	274	535	4/3/2002	5,320	0	795
10/1/2002	4,800	525	1,180	10/1/2002	5,660	0	1,220
4/2/2003	1,260	29.2	593	4/2/2003	4,860	17	1,100
10/9/2003	2,020	0	700	10/9/2003	4,470	0	1,200
4/5/2004	1,220	26.7	1,220	4/5/2004	4,130	16.8	1,550
10/4/2004	4,590	440	2,060	10/4/2004	3,950	0	1,800
4/1/2005	2,510	0	736	4/1/2005	3,990	0	882
10/1/2005	5,130	351	1,150	10/1/2005	4,420	0	951
4/6/2006	2,680	0	785	4/6/2006	3,820	0	659
10/5/2006	4,340	295	1,160	10/5/2006	3,590	0	1,020
4/5/2007	708	0	360	4/5/2007	2,020	0	887
10/22/2007	605	8.46	351	10/22/2007	2,280	<20	1,060
4/10/2008	265	1.92	207	4/10/2008	590	0.51	196
10/9/2008	199	<4	221	10/9/2008	2,020	<40	1,070
4/8/2009	145	<4.0	245	4/8/2009	2,260	<4.0	1,780
10/6/2009	90.2	<4	232	10/6/2009	1,610	<40	1,520
4/6/10	77.5	<4	152	4/6/10 [1]	24,000	<4.0	17,500
10/26/10	94.4	1.41	190	10/26/10	2,370	1.49	1,630
4/7/11	63.6	<4	137	4/7/11	1,700	<40	1,170
10/5/11	90.3	<4	168	10/5/11	1,400	<40	1,110
4/12/12	62.7	<4	136	4/12/12	2,090	<4	1,620
10/2/12	49.9	0.68	107	10/2/12	2,090	<4.8	1,390
4/1/13	23.1	0.58	75.1	4/1/13	1,940	<12	1,310
10/3/13	29.5	0.65	85.7	10/1/13	1,620	<3.6	1,580
4/2/14	13.1	0.37	63.7	4/2/14	1,610	<3.3	1,630
10/6/14	8.4	<0.33	35.9	10/6/14	1,720	<6.6	1,400
4/16/15	14.4	0.53	56.6	4/16/15	1,450	<3.3	1,190
10/7/15	3.9	<0.33	18.3	10/8/15	808	<3.3	1,050
4/6/16	2.4	<0.33	11.6	4/6/16	1,240	<3.3	1,960
10/5/16	4.8	<0.33	24	10/5/16	1,050	<3.3	1,980
4/6/17	1.3	<0.33	5.2	4/6/17	1,140	<3.3	1,540
10/5/17	<0.26	<0.33	2.5	10/5/17	1,030	<3.3	1,480
4/5/18	1.4	<0.50	6.9	4/5/18	1,060	<3.3	1,600
10/3/18	1.4	<0.26	5.2	10/3/18	1,050	<2.6	1,670
4/4/19	0.94	<5.1	5.8	4/4/19	808	<0.33	1,500
10/1/19	0.93	<0.26	4.5	10/1/19	524	<1.3	1,280
4/1/20	<0.27	<0.26	0.68	4/1/20	673	0.32	1,630
10/1/20	18.5	<0.26	75.9	10/1/20	701	<5.1	1,000
4/1/21	<0.47	<0.47	0.99	4/1/21	926	<4.1	1,780
10/1/21	<0.47	<0.41	1.7	10/1/21	690	<8.2	1,250

Historic VOC Monitoring Results
Land and Gas Reclamation Landfill
(concentrations in ug/L)

W-3R				W-3AR			
Date	**cis-1,2-DCE**	**TCE**	**VC**	**Date**	**cis-1,2-DCE**	**TCE**	**VC**
NR 140 ES	**70**	**5**	**0.2**	**NR 140 ES**	**70**	**5**	**0.2**
11/13/1991		0	0	11/14/1991		5	770
5/29/1992		0	0	5/29/1992		78	1,000
6/17/1993		0	0.5	6/17/1993		57	1,300
6/21/1994		0	0	6/21/1994		12	720
4/14/1995	0	0	2.2	4/14/1995	1,200	6.6	110
10/4/1995	0	0	1.2	10/4/1995	1,200	12	1,400
4/4/1996	0	0	0	4/4/1996	1,000	0	550
10/12/1996	0	0	4	10/12/1996	1,800	13	1,100
4/10/1997	0	0	0.56	4/10/1997	1,100	0	740
10/3/1997	0	0	1.5	10/3/1997	1,200	0	780
4/7/1998	0.44	0	0.89	4/7/1998	1,000	0	720
10/14/1998	0	0	6.4	10/14/1998	1,200	0	660
4/6/1999	0.3	0	0.65	4/6/1999	900	0	710
10/6/1999	0.27	0	2.9	10/7/1999	1,200	0	650
4/3/2000	0.29	0	0.17	4/3/2000	1,000	0	890
10/3/2000	0	0	0.133	10/3/2000	1,100	0	404
4/3/2001	0	0	0	4/3/2001	1,050	0	554
10/2/2001	0	0	2.74	10/2/2001	1,130	0	901
4/4/2002	0	0	0	4/4/2002	1,150	0	375
10/1/2002	0	0	14.1	10/1/2002	1,230	0	446
4/1/2003	0	0	0.703	4/1/2003	674	0	601
10/8/2003	0	0	1.98	10/8/2003	712	0	407
4/7/2004	0	0	0	4/7/2004	753	0	519
10/4/2004	0	0	0	10/4/2004	685	0	626
4/1/2005	0	0	0	4/1/2005	567	0	265
10/1/2005	0	0	0	10/1/2005	628	0	258
4/6/2006	0	0	0	4/6/2006	700	1.15	352
10/5/2006	0	0	0	10/4/2006	450	0	279
4/4/2007	0	0	0	4/4/2007	418	0	402
10/22/2007	<0.2	<0.2	3.20	10/22/2007	421	<2	410
4/11/2008	<0.3	<0.4	14.30	4/11/2008	476	<4	382
10/9/2008	<0.3	<0.4	5.32	10/9/2008	322	<4	281
4/7/2009	<0.3	<0.4	2.48	4/7/2009	351	0.8	357
10/7/2009	<0.4	<0.4	<0.2	10/7/2009	339	<4.0	358
4/7/10	<0.4	<0.4	0.95	4/7/10	339	<4	334
10/27/10	<0.4	<0.4	2.46	10/27/10	257	<4	194
4/6/11	<0.4	<0.4	3.14	4/6/11	201	0.51	256
10/5/11	<0.4	<0.4	1.45	10/5/11	170	<4	181
4/11/12	<0.4	<0.4	3.18	4/11/12	190	0.51	205
10/2/12	<0.83	<0.48	18.50	10/2/12	183	0.55	190
4/1/13	<0.83	<0.48	2.90	4/4/13	164	<0.48	146
10/3/13	<0.42	<0.36	3.40	10/3/13	87.8	<0.33	99.3
1/9/14	<0.42	<0.36	3.70	1/9/14	146	<0.36	211
4/2/14	0.26	<0.33	2.00	4/2/14	145	0.39	175
10/7/14	0.35	<0.33	4.00	10/7/14	145	<0.33	196
4/17/15	<0.26	<0.33	1.50	4/17/15	111	<0.33	112
10/7/15	0.27	<0.33	1.70	10/7/15	110	<0.33	118
4/6/16	<0.26	<0.33	<0.18	4/6/16	121	<0.33	129
10/6/16	0.39	<0.33	2.5	10/6/16	125	0.5	178
4/5/17	<0.26	<0.33	5.10	4/5/17	92.6	<0.33	78.4
10/3/17	<0.26	<0.33	12.90	10/3/17	53.5	<0.33	47.7
4/5/18	<0.26	<0.33	5.60	4/5/18	88.9	<0.66	63.3
10/4/18	<0.27	<0.26	6.40	10/4/18	74.5	0.36	60.7
4/4/19	<0.27	<0.26	20.3	4/1/19	42.1	0.27	23.1
10/1/19	<0.27	<0.26	30.7	10/1/19	55.6	0.31	34.6
4/1/20	<0.27	<0.26	42.40	4/1/20	37.6	0.35	18.4
10/1/20	<0.27	<0.26	27.10	10/1/20	38.2	<0.26	18.8
4/1/21	<0.47	<0.41	28.40	4/1/21	32.4	<0.41	15.3
10/1/21	<0.47	<0.41	19.30	10/1/21	28.4	<0.41	15.3

Historic VOC Monitoring Results
Land and Gas Reclamation Landfill
(concentrations in ug/L)

MW-210				MW-210A				MW-210B			
Date	**cis-1,2-DCE**	**TCE**	**VC**	**Date**	**cis-1,2-DCE**	**TCE**	**VC**	**Date**	**cis-1,2-DCE**	**TCE**	**VC**
NR 140 ES	**70**	**5**	**0.2**	**NR 140 ES**	**70**	**5**	**0.2**	**NR 140 ES**	**70**	**5**	**0.2**
12/6/1991		0	0	12/6/1991		0	180	12/6/1991		0	0
5/28/1992		0	0	5/28/1992		0	200	5/27/1992		0	0
				6/17/1993		7	370				
7/6/1994		0	28.3	7/6/1994		8.6	220	7/6/1994		0	0
4/14/1995	41	0	27	4/14/1995	1,400	13	350	4/14/1995	0	0	0
10/4/1995	26	0	22	10/4/1995	1,600	20	600	10/4/1995	0	0	0
4/4/1996	32	0	27	4/4/1996	1,900	35	450	4/4/1996	0	0	0
10/12/1996	12	0	7.9	10/12/1996	2,300	47	670	10/12/1996	0	0	0
4/10/1997	13	0	20	4/10/1997	1,900	38	420	4/10/1997	0	0	0
10/3/1997	10	0	23	10/3/1997	1,700	66	480	10/3/1997	0	0	0
4/7/1998	6.5	0	14	4/7/1998	1,600	57	540	4/7/1998	0	0	0
10/15/1998	46	0	44	10/15/1998	1,600	47	510	10/15/1998	0	0	no data
4/6/1999	7.3	0	10	4/6/1999	1,200	40	500	4/6/1999	0	0	0
10/11/1999	98	0	240	10/11/1999	800	40	440	10/11/1999	0	0	0
4/4/2000	2.9	0	6.3	4/4/2000	820	32	440	4/4/2000	0	0	0
10/5/2000	1.61	0	5.3	10/5/2000	372	0	157	10/5/2000	0	0	0
4/5/2001	1.12	0	2.47	4/5/2001	421	0	214	4/5/2001	0	0	0
10/3/2001	1.21	0	13.2	10/3/2001	520	55.9	425	10/3/2001	0	0	0
4/4/2002	0.384	0	3.22	4/4/2002	730	0	206	4/4/2002	0	0	0
10/3/2002	1.59	0	12.8	10/3/2002	940	0	327	10/3/2002	0	0	0
4/2/2003	0	0	0.386	4/2/2003	401	0	233	4/2/2003	0	0	0.591
10/8/2003	0	0	1.02	10/8/2003	293	10	29.2	10/8/2003	0	0	0.274
4/7/2004	0	0	0.383	4/7/2004	272	0	76.3	4/7/2004	0	0	0.891
10/5/2004	0	0	1.46	10/5/2004	230	7.38	45.6	10/5/2004	0	0	1.15
4/1/2005	0	0	0	4/1/2005	220	0	52.7	4/1/2005	0	0	0.549
10/1/2005	0	0	0	10/1/2005	220	0	29.5	10/1/2005	0	0	0.706
5/6/2006	0.82	0	0	5/6/2006	252	7.32	109	5/6/2006	0	0	1.13
10/4/2006	0.49	0	0.45	10/4/2006	184	5.62	45.2	10/4/2006	0	0	1.65
5/30/2007	0.28	0	0.23	5/30/2007	198	5.66	33.7	5/30/2007	0	0	1.42
10/25/2007	0.23	<0.2	<0.2	10/25/2007	251	5.71	73.2	10/25/2007	<2	<2	<2
5/27/2008	<0.3	<0.4	<0.2	5/27/2008	237	8.1	74.1	5/27/2008	0.51	<0.4	<0.2
10/9/2008	0.41	<0.4	<0.2	10/9/2008	325	7.72	124	10/9/2008	<0.3	<0.4	2.26
10/7/2009	0.63	<0.4	0.65	10/7/2009	284	5.3	125	10/7/2009	<0.4	<0.4	2.72
4/7/10	0.56	<0.4	0.43	4/7/10	222	4.66	111	4/7/10	<0.4	<0.4	2.64
11/29/10	0.64	<0.4	<0.2	11/29/10	192	<4	87.6	11/29/10	<0.4	<0.4	2.5
4/8/11	0.66	<0.4	0.46	4/8/11	163	<4	94.7	4/8/11	<0.4	<0.4	2.76
10/6/11	0.64	<0.4	0.48	10/6/11	177	<4	120	10/6/11	<0.4	<0.4	2.52
4/11/12	0.66	<0.4	0.54	4/11/12	164	3.54	74.3	4/11/12	<0.4	<0.4	2.5
10/1/12	<0.83	<0.48	1.1	10/1/12	182	3.8	28.3	10/1/12	<0.83	<0.48	2.2
4/2/13	<0.83	<0.48	0.21	4/2/13	169	2.6	102	4/2/13	<0.2	<0.48	3.5
10/2/13	<0.42	<0.36	0.19	10/2/13	221	2.2	97.4	10/2/13	<0.29	<0.36	3.4
5/20/14	0.32	<0.33	<0.18	5/20/14	215	2.1	95.3	5/20/14	<0.26	<0.33	3.6
10/8/14	0.43	<0.33	<0.18	10/8/14	235	2.3	103	10/8/14	<0.26	<0.33	3.2
4/16/15	<0.50	<0.33	<0.18	4/16/15	296	1.7	149	4/16/15	<0.26	<0.33	4.1
10/9/15	<0.26	<0.33	<0.18	10/9/15	332	1.5	124	10/9/15	<0.26	<0.33	3.3
4/7/16	0.36	<0.33	0.19	4/7/16	360	1.9	104	4/7/16	<0.26	<0.33	3.6
10/6/16	0.44	<0.33	0.23	10/6/16	542	2.4	85.5	10/6/16	<0.26	<0.33	4.4
4/5/17	<0.26	<0.33	<0.18	4/5/17	461	2	71.7	4/5/17	<0.26	<0.33	3.7
10/6/17	0.32	<0.33	0.2	10/6/17	440	2.3	64.7	10/6/17	<0.26	<0.33	3.4
4/5/18	0.39	<0.33	<0.18	4/5/18	330	1.9	86	4/5/18	<0.26	<0.33	4.3
7/26/19	0.45	<0.26	<0.17	7/26/19	239	1.5	42.2	7/26/19	<0.27	<0.26	3.9
7/1/20	0.3	<0.26	0.34	7/1/20	137	1.1	44.9	7/1/20	<0.27	<0.26	4.5
10/1/20	0.39	<0.26	0.43	10/1/20	90.3	<0.64	110	10/1/20	<0.27	<0.26	4
4/1/21	<0.27	<0.33	0.18	4/1/21	109	<0.82	37.4	4/1/21	<0.27	<0.33	4.3
10/1/21	<0.47	<0.41	0.52	10/1/21	102	<0.41	51.6	10/1/21	<0.47	<0.41	4.8

Note: Monitoring wells MW-210, MW-210A, and MW-210B could not be sampled in 10/18, 4/19, 10/19, or 4/20 due to standing water around the wells, but samples were collected during 7/19 and 7/20.

Historic VOC Monitoring Results
Land and Gas Reclamation Landfill
(concentrations in ug/L)

MW-214				MW-214A			
Date	**cis-1,2-DCE**	**TCE**	**VC**	**Date**	**cis-1,2-DCE**	**TCE**	**VC**
NR 140 ES	**70**	**5**	**0.2**	**NR 140 ES**	**70**	**5**	**0.2**
6/9/1992		0	0	6/9/1992		0	0
7/6/1994		0	0	7/6/1994		0	0
10/4/1995	0	0	0	10/4/1995	0	0	0
4/4/1996	0	0	0	4/4/1996	0	0	0
10/12/1996	0	0	0	10/12/1996	0	0	0
4/10/1997	0	0	0	4/10/1997	0	0	0
4/7/1998	0	0	0	4/7/1998	0	0	0
4/6/1999	0	0	0	4/6/1999	0	0	0
4/6/2000	0	0	0	4/6/2000	0	0	0
10/4/2001	0	0	0	10/4/2001	0	0	0
10/3/2002	0	0	0	10/3/2002	0	0	0
10/8/2003	0	0	0	10/8/2003	0	0	0.225
10/6/2004	0	0	0	10/6/2004	0	0	0.912
10/1/2005	0	0	0	10/1/2005	0	0	0.488
10/5/2006	0	0	0	10/4/2006	0	0	1.67
10/24/07 [2]	<0.2	<0.2	2.93	10/24/07 [2]	<0.2	<0.2	<0.2
3/14/2008	<0.3	<0.4	<0.2	3/14/2008	<0.3	<0.4	4.74
10/9/2008	<0.3	<0.3	<0.4	10/9/2008	<0.3	<0.4	6.54
10/7/2009	<0.4	<0.4	<0.2	10/7/2009	<0.4	<0.4	15.1
10/27/10	<0.4	<0.4	<0.2	10/27/10	<0.4	<0.4	16.9
10/6/11	<0.4	<0.4	<0.2	10/3/11	<0.4	<0.4	23.4
10/1/12	<0.83	<0.48	<0.18	10/1/12	<0.83	<0.48	29.6
10/3/13	<0.42	<0.36	<0.18	10/1/13	<0.42	<0.36	19.3
10/7/14	<0.26	<0.33	<0.18	10/7/14	<0.26	<0.33	45.6
10/7/15	<0.26	<0.33	<0.18	10/7/15	<0.26	<0.33	37
10/6/16	<0.26	<0.33	<0.18	10/6/16	<0.26	<0.33	34.5
10/3/17	<0.26	<0.33	<0.18	10/3/17	<0.26	<0.33	41
10/4/18	<0.27	<0.26	<0.17	10/4/18	<0.27	<0.26	44.5
10/1/19	<0.27	<0.26	<0.17	10/1/19	<0.27	<0.26	39
10/1/20	<0.27	<0.26	<0.17	10/1/20	0.93	<0.26	40.6
10/1/21	<0.47	<0.41	<0.17	10/1/21	0.67	<0.41	46.9

Historic VOC Monitoring Results
Land and Gas Reclamation Landfill
(concentrations in ug/L)

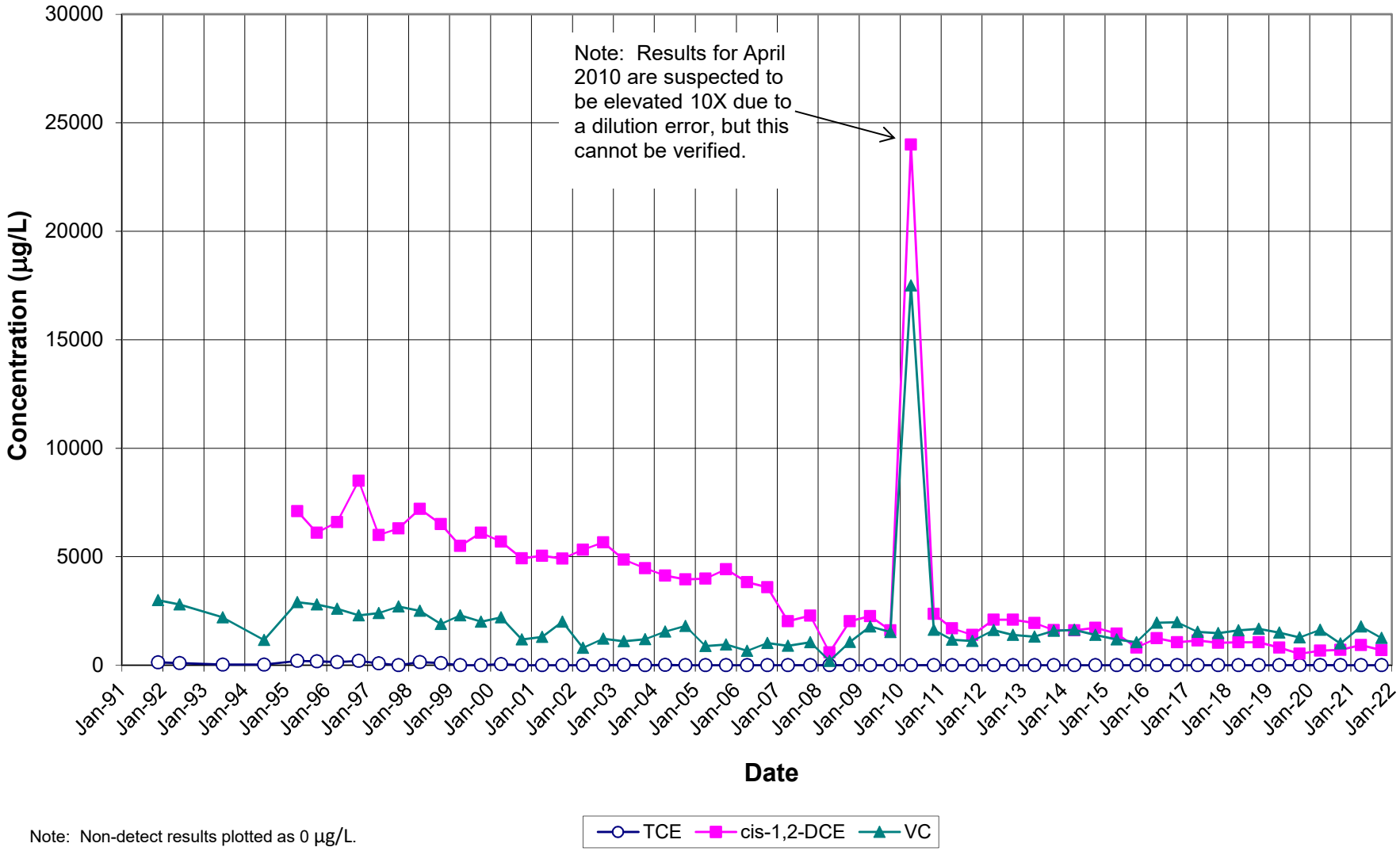
Notes: (1) Results for MW-1AR for April 2010 are suspected to be elevated 10 times due to a dilution error, but this cannot be verified.
(2) Based on sample results for MW-214 and MW-214A for October 2007, it appears that the sample vials were switched, but this cannot be confirmed.

J = Estimated value below the limit of quantitation

Updated for 2021 by:	AJR, 4/6/2022	Shaded cell indicates well was not sampled on a date
Checked for 2021 by:	EO, 4/8/2022	when one or more other wells in the table was sampled
Reviewed for 2021 by:	SCC, 4/8/2022	

C:\Users\3506scc\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\HSYEH2EA\[LGRL VOC graphs 2021.xls]Data Table for Report

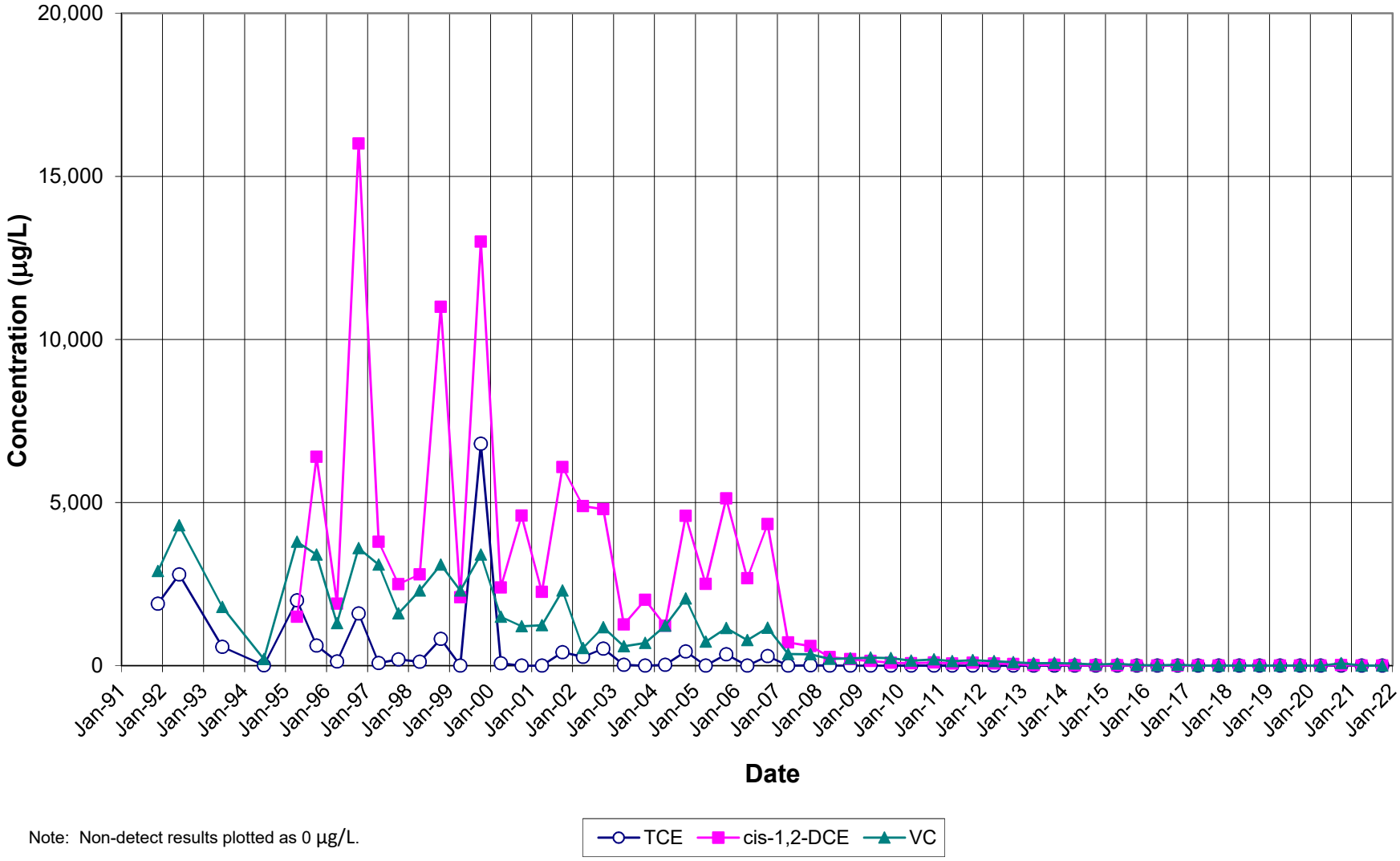
MW-1AR



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

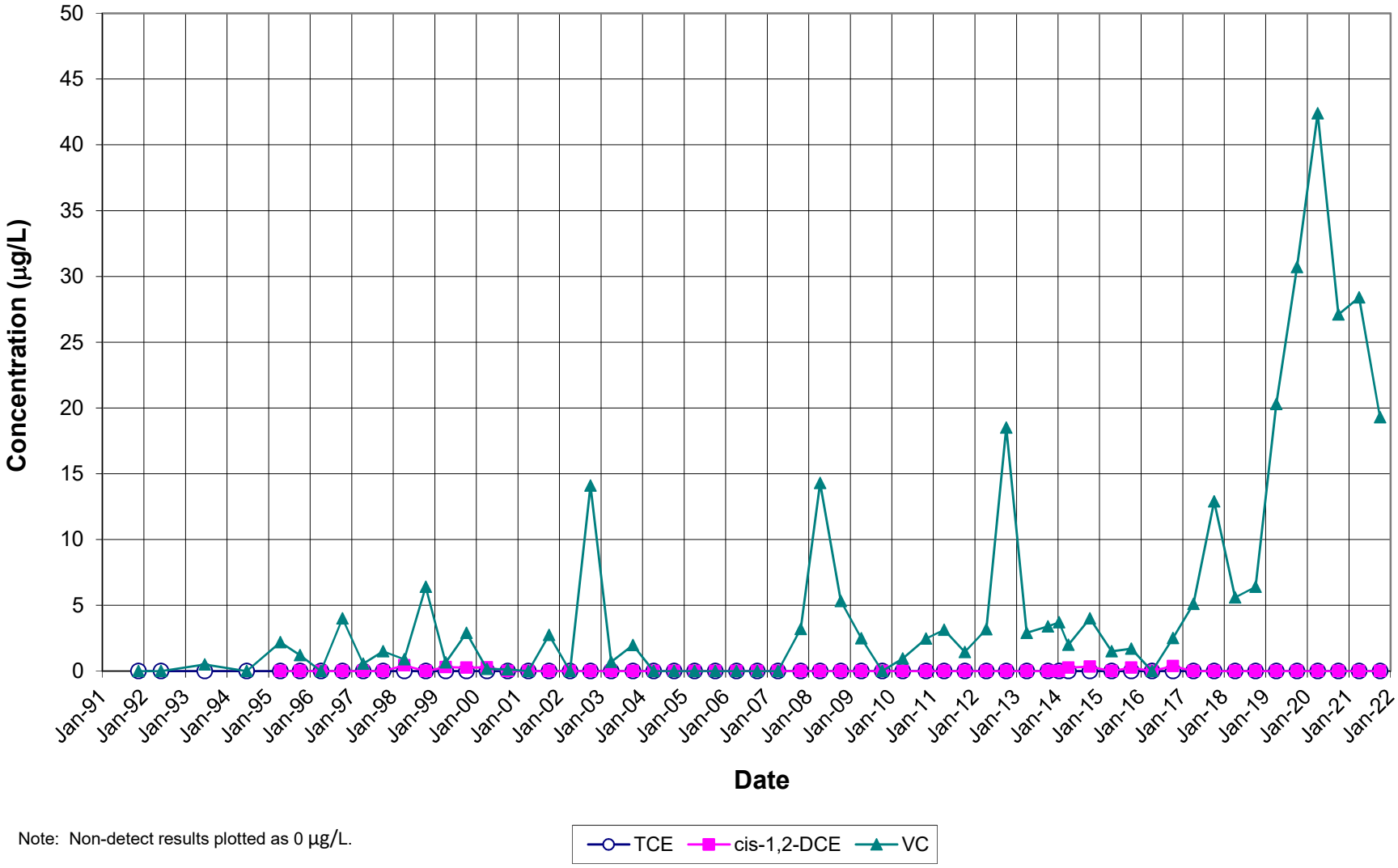
MW-1RR



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

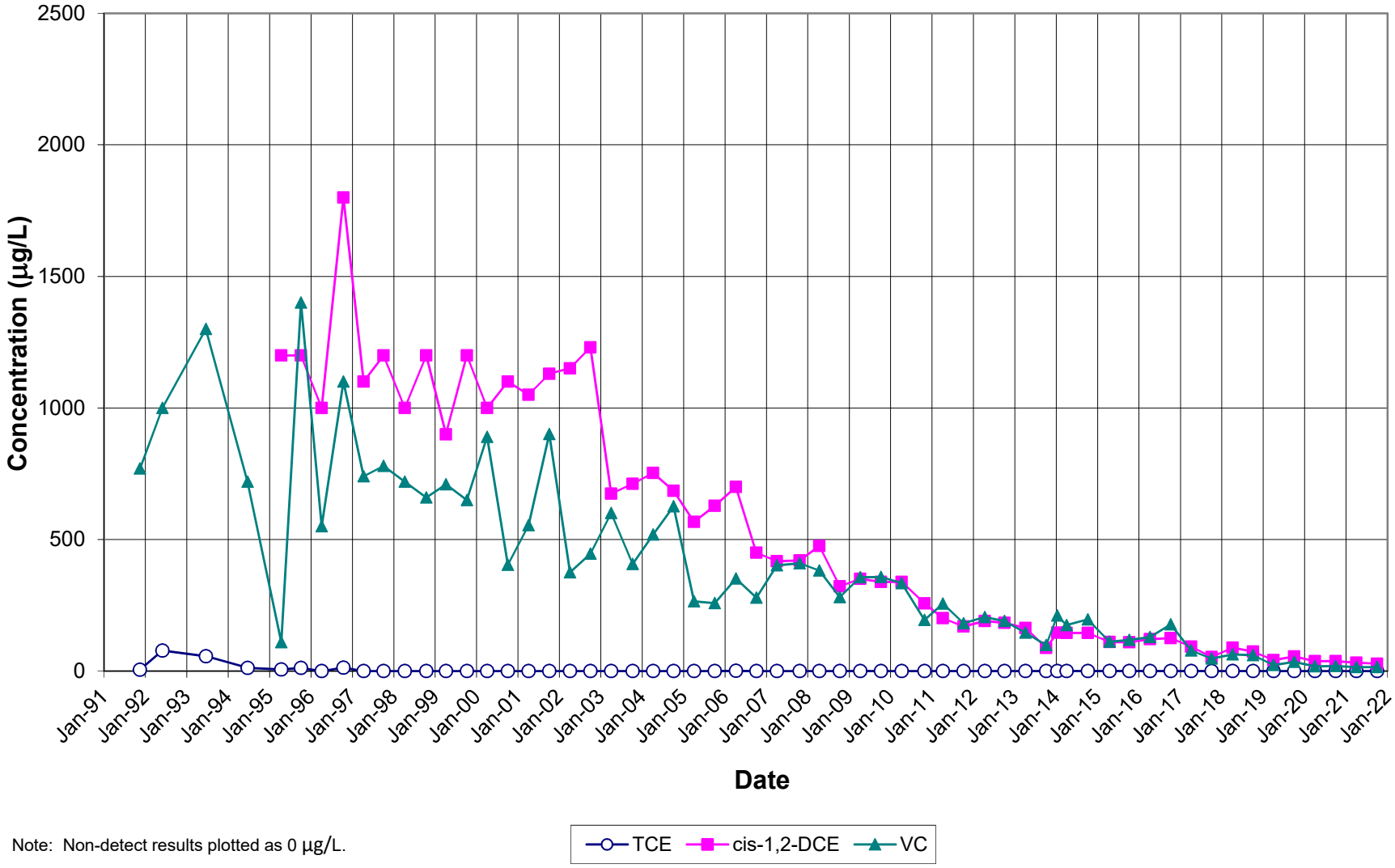
W-3R



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

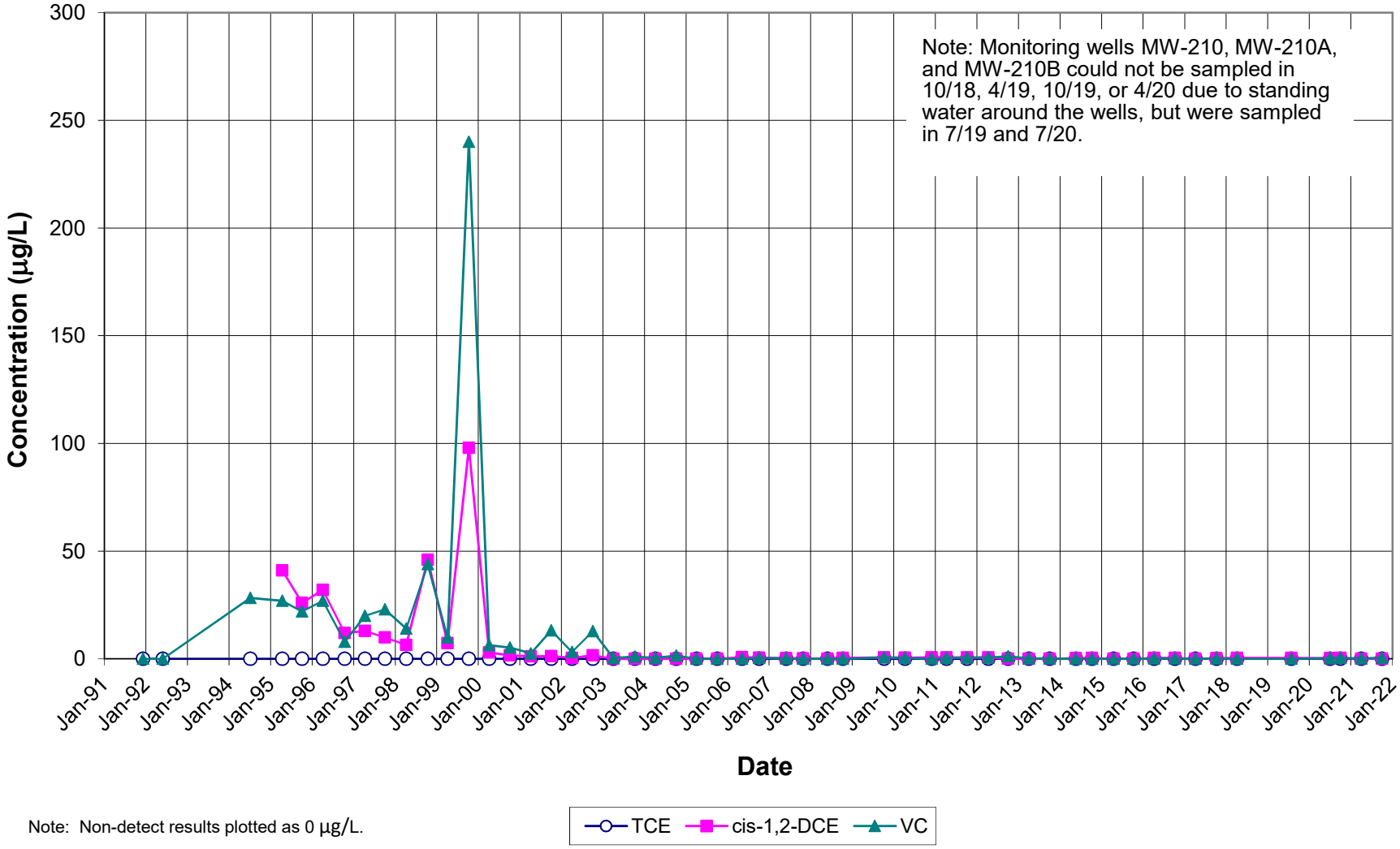
W-3AR



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

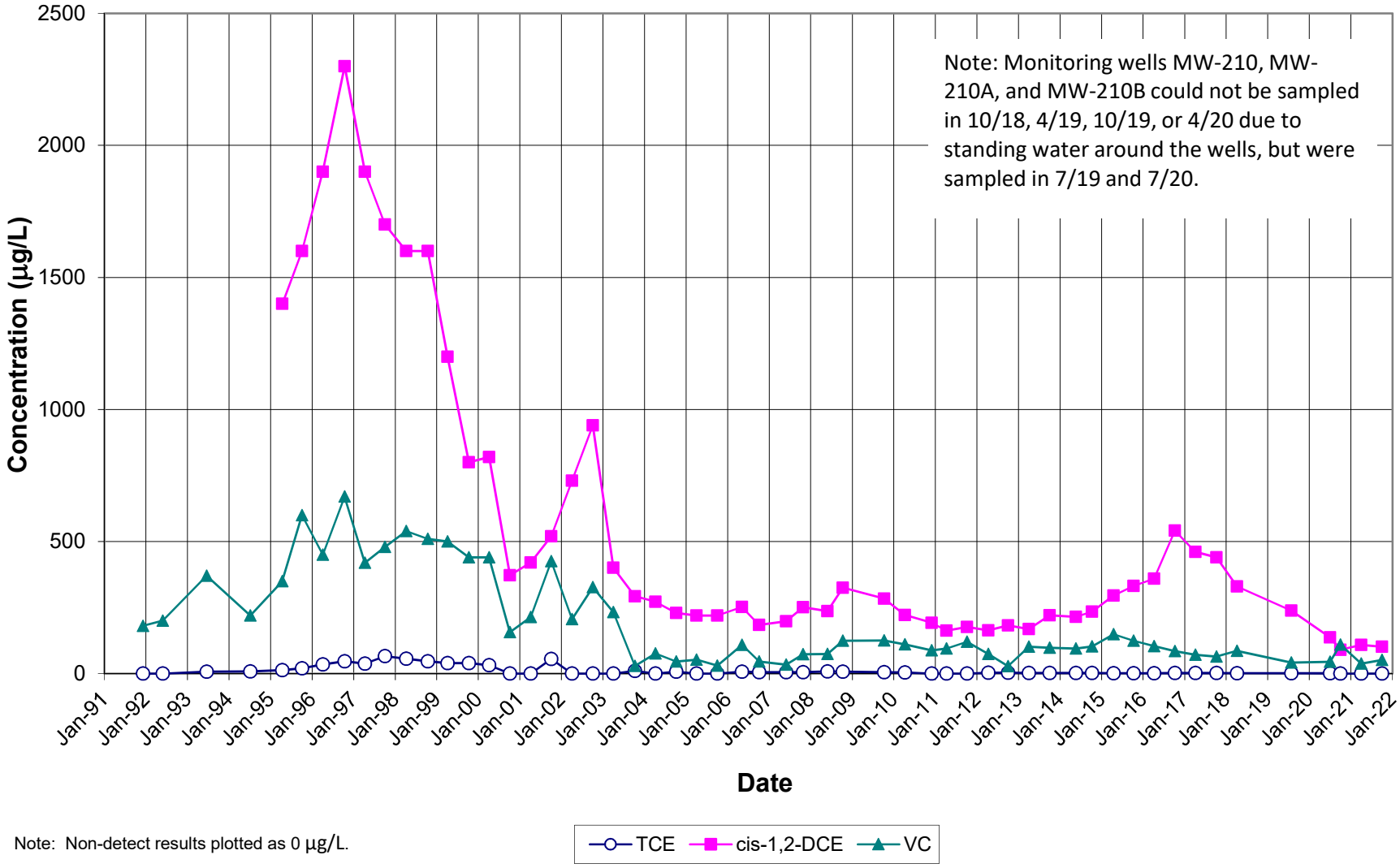
MW-210



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

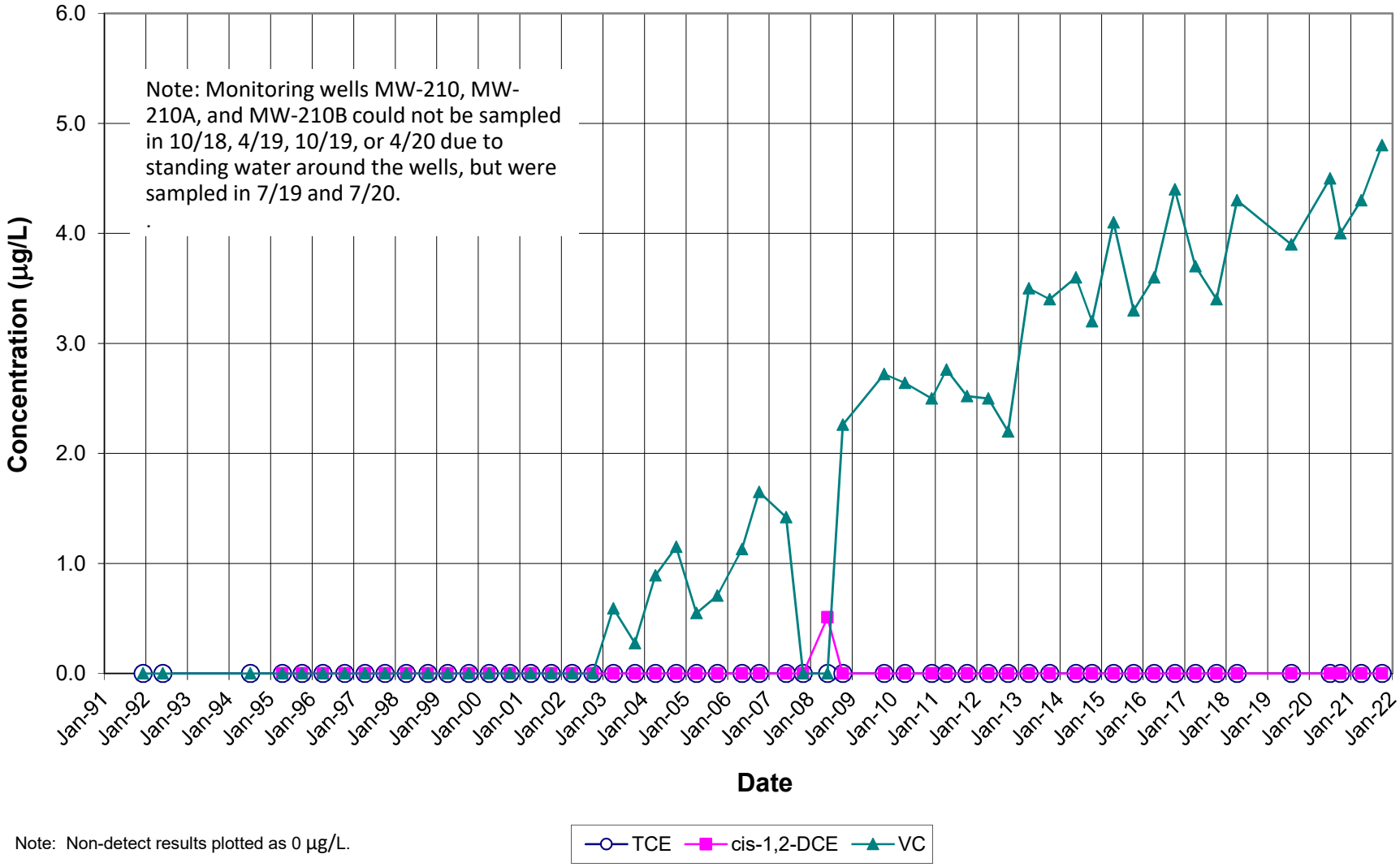
MW-210A



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

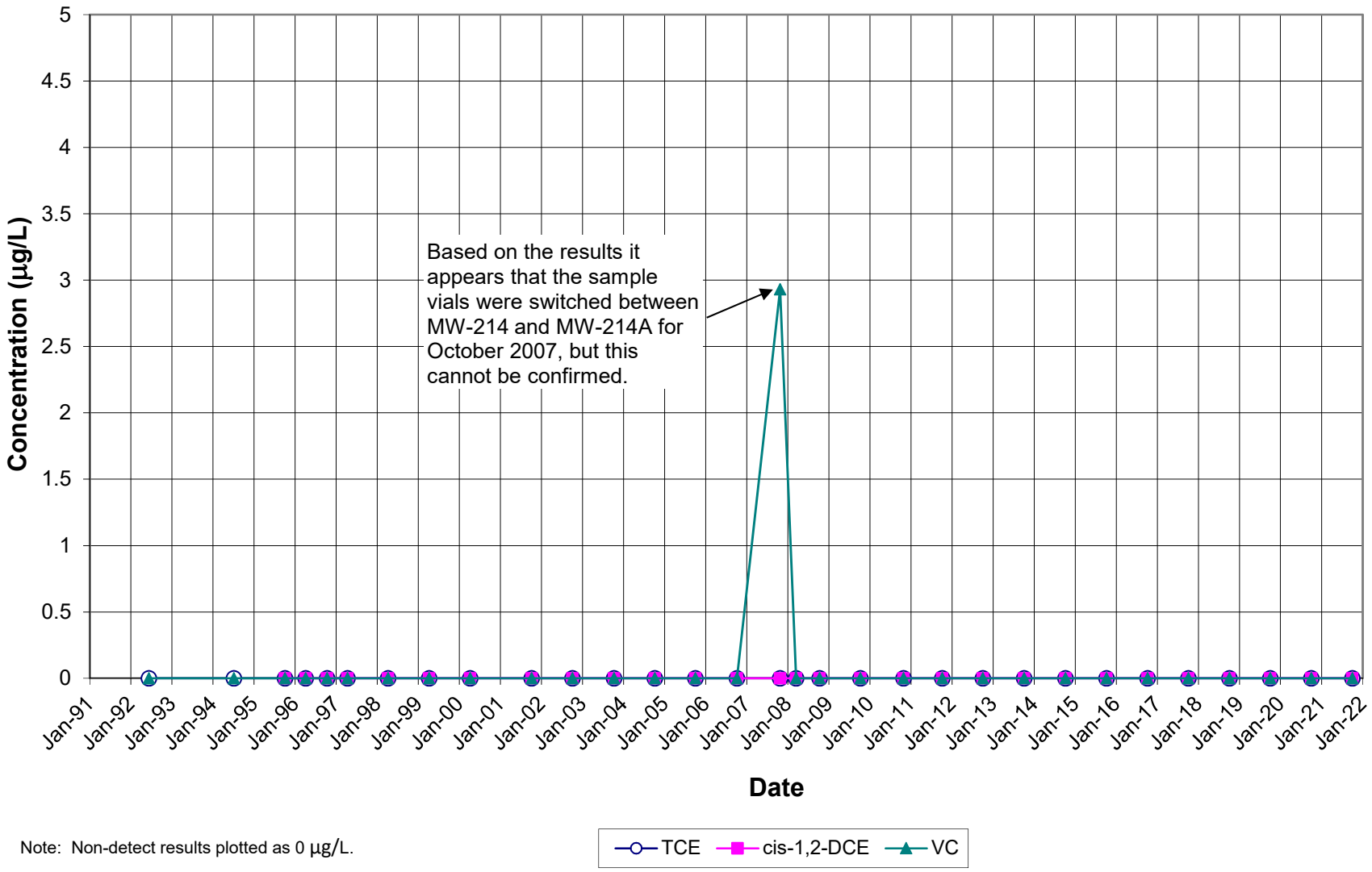
MW-210B



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

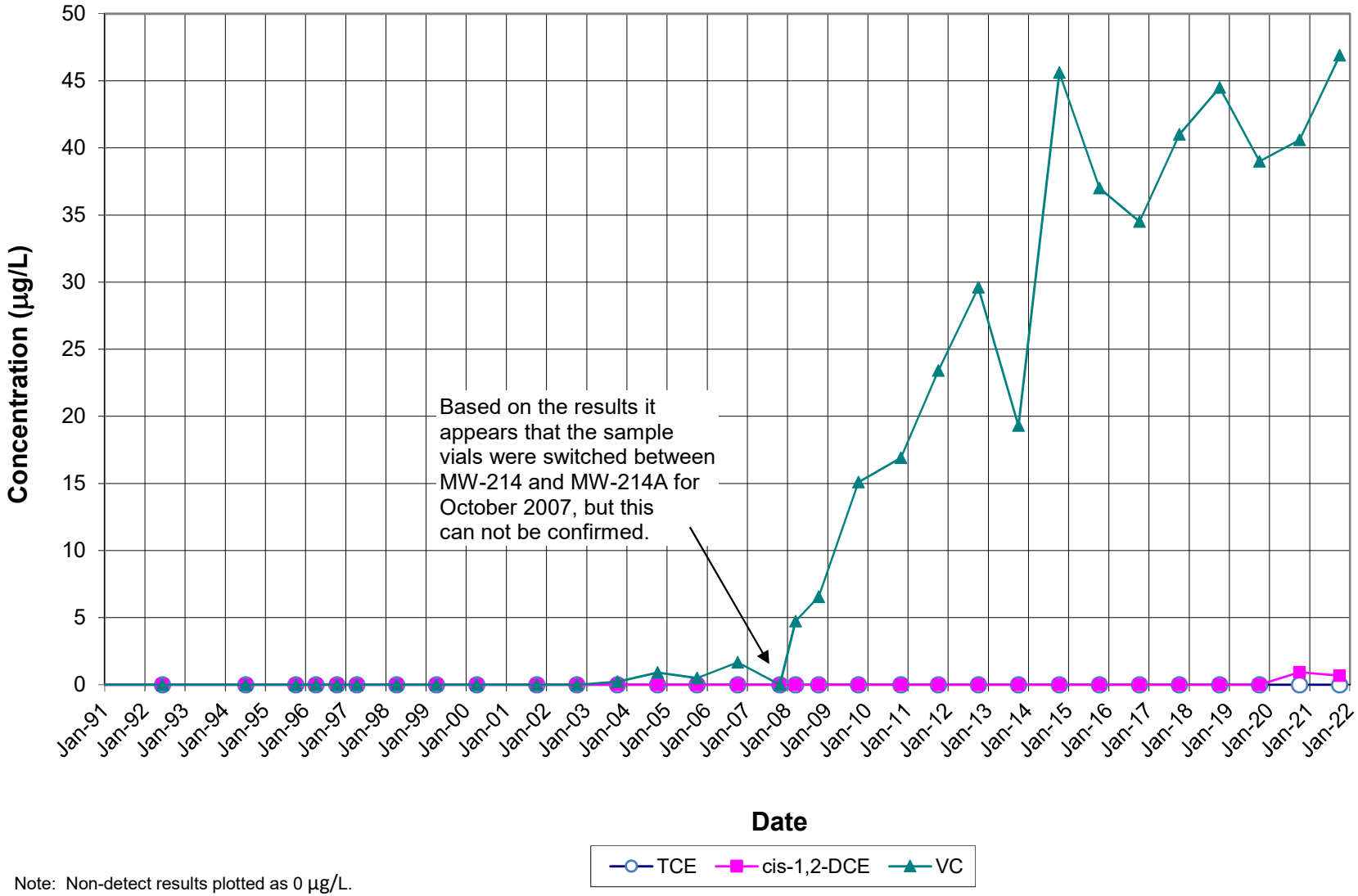
MW-214



Note: Non-detect results plotted as 0 µg/L.

4/8/2022

MW-214A



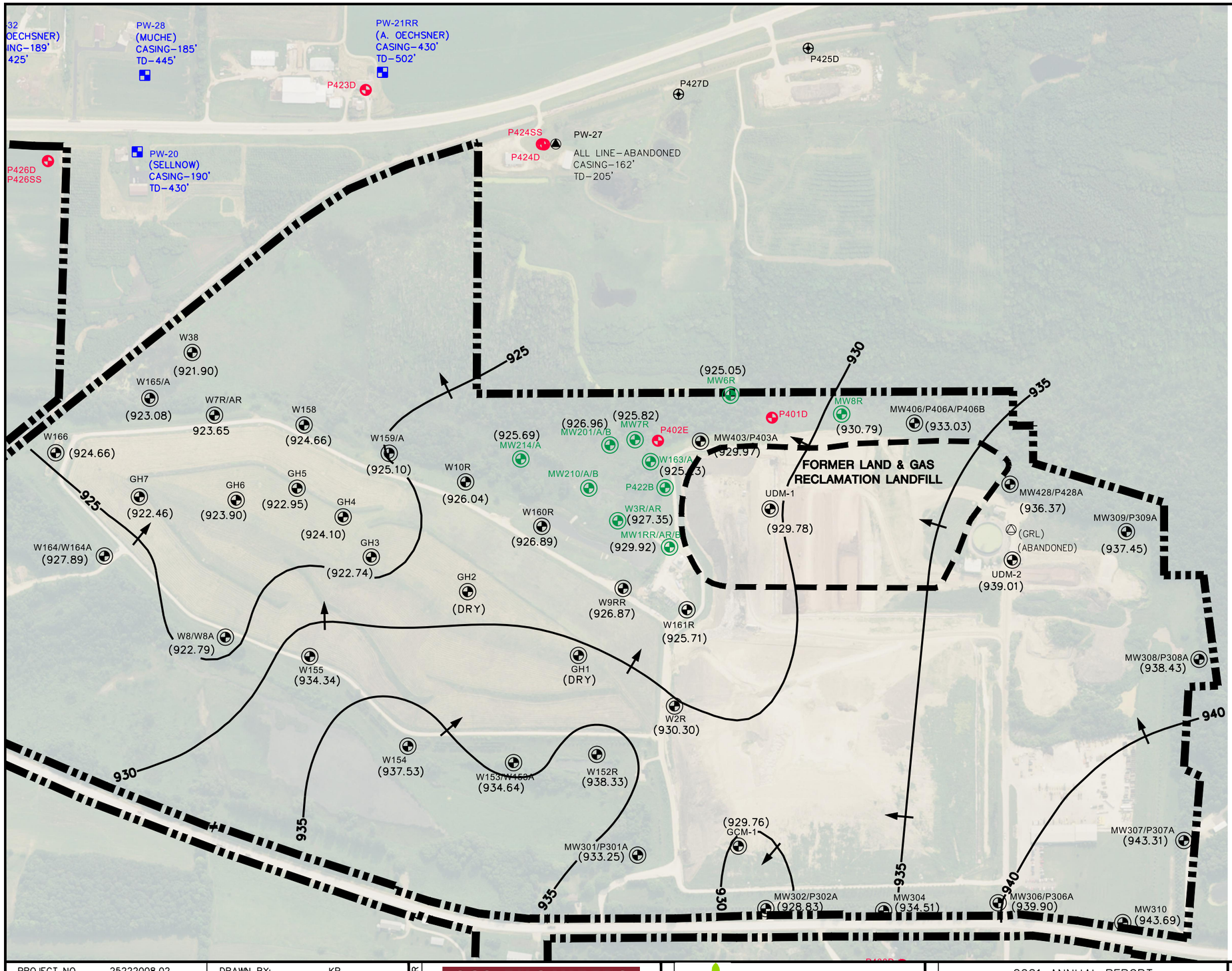
Note: Non-detect results plotted as 0 µg/L.

4/8/2022

APPENDIX A

Figure

Figure 1: Groundwater Table Map: October 2021



N

500 0 500

SCALE: 1" = 500'

LEGEND

- GLACIER RIDGE LANDFILL (GRL) PROPERTY LINE
- FORMER LGRL LIMITS OF WASTE
- APPROXIMATE PRIVATE WELL LOCATION, IN CURRENT MONITORING PROGRAM
- APPROXIMATE PRIVATE WELL LOCATION, HAS BEEN SAMPLED PREVIOUSLY
- APPROXIMATE PRIVATE WELL LOCATION, NOT SAMPLED
- PW-30 — WELL NAME ASSIGNED FOR SAMPLING PROGRAM
- (PERSHA) — WELL OWNER
- BEDROCK MONITORING WELL (LGRL INVESTIGATION)
- SHALLOW AQUIFER MONITORING WELL/NEST (LGRL MONITORING/INVESTIGATION)
- SHALLOW AQUIFER MONITORING WELL/NEST OR HORIZONTAL WELL (GRL MONITORING)
- INVESTIGATION PHASE 2 BOREHOLE (ABANDONED)
- (939.32) — WATER TABLE ELEVATION MEASURED ON OCTOBER 1–9, 2020
- WATER TABLE ELEVATION CONTOUR (5' INTERVAL)

NOTES:

1. AERIAL PHOTOGRAPH FROM THE NATIONAL AGRICULTURE IMAGERY PROGRAM AND PUBLISHED BY THE USDA FSA AERIAL PHOTOGRAPHY FIELD OFFICE. DATE OF IMAGE IS OCTOBER 30, 2015.
2. PROPERTY BOUNDARIES ARE APPROXIMATE. PROPERTY INFORMATION OBTAINED FROM DODGE COUNTY LAND INFORMATION OFFICE ON FEBRUARY 6, 2020.
3. PRIVATE WELL LOCATIONS AND DEPTHS ARE APPROXIMATE BASED ON PLAT MAPS AND WELL LOGS.

PROJECT NO.	25222008.02	DRAWN BY:	KP
DRAWN:	03/21/2022	CHECKED BY:	EO
REVISED:	04/05/2022	APPROVED BY:	EO

ENGINEER: SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

CLIENT: GFL — GLACIER RIDGE LANDFILL, LLC.

SITE: 2021 ANNUAL REPORT
LAND AND GAS RECLAMATION LANDFILL
DODGE COUNTY, WISCONSIN

SHALLOW GROUNDWATER ELEVATIONS AND WATER TABLE – OCTOBER 2021

FIGURE 6

I:\25222008.02\Drawings\Shallow Wtbl.dwg, 4/6/2022 3:52:48 PM