Environmental Consultants
and Contractors

2830 Dairy Drive
Madison, WI 53718-6751

608 224-2830
FAX 608 224-2839
www.scsengineers.com

SCS ENGINEERS

May 10, 2018
File No. 25211374.49

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

Subject: Phase 3 Investigation Report
Off-Site Investigation of Chlorinated Volatile Organic Compounds in Groundwater in Bedrock
Land & Gas Reclamation Landfill, Dodge County, Wisconsin

Dear Mr. Bannister:

On behalf of Advanced Disposal Services Glacier Ridge Landfill, LLC (Advanced), SCS Engineers (SCS) is submitting this update on the status of additional off-site investigation activities at Land & Gas Reclamation Landfill (LGRL) completed since the Phase 2 update was submitted in June 2016. The work completed was Phase 3 of the overall investigation plan described in the April 2012 workplan for off-site investigation of chlorinated volatile organic compounds (CVOCs) in bedrock.

This Phase 3 investigation report includes:

- Background on the investigation objectives and chronology
- Description of Phase 3 field investigation activities including:
  - Borehole drilling and logging
  - Monitoring well installation
- Results of bedrock groundwater monitoring including:
  - Water levels
  - Monitoring well sampling and analysis
  - Water supply well sampling and analysis
- Conclusions and recommendations

A recommendation for additional monitoring is included in this update.

BACKGROUND

Investigation Objectives

The Wisconsin Department of Natural Resources (WDNR) requested additional investigation of dissolved CVOCs in the bedrock aquifer downgradient from LGRL. The objectives of the investigation are to evaluate the vertical and horizontal extent of CVOCs in the bedrock aquifer

and to characterize the flow directions and pathways in the bedrock. The WDNR agreed that a phased approach to the investigation was reasonable and might avoid unnecessary costs and investigation activities. The goal of Phase 1 of the bedrock investigation was to investigate the vertical distribution of contamination. The goal of Phase 2 was to evaluate the horizontal extent (width) of the plume perpendicular to the apparent direction of plume migration. The goal of Phase 3 was to further define the downgradient extent of the CVOC plume.

Investigation Chronology

Implementation of the investigation approach outlined in the 2012 workplan has been documented in the following reports and correspondence:

Document	By	Date
Workplan for Offsite Investigation of Chlorinated VOC Plume in Bedrock	SCS	4/11/2012
Workplan approval email	WDNR	5/7/2012
Status of Off-site Investigation (Phase 1 Complete)	SCS	8/13/2013
Phase 2 Investigation Update and Phase 3 Investigation Recommendations (Phase 2 Complete)	SCS	6/17/2016
Response to Phase 2 Update and Concurrence with Phase 3 Recommendations	WDNR	7/19/2016
Phase 3 Investigation Update Memo (Phase 3 in progress, modified approach proposed)	SCS	6/22/2017
Response to Phase 2 Update and Concurrence with Modified Approach	WDNR	7/12/2017

The following discussion provides a brief summary of the Phase 1 and 2 results as background for the discussion of Phases 3. For more detailed information on Phase 1 and 2 activities, refer to the documents listed above

Phase 1 Summary

As stated above, the purpose of Phase 1 of the investigation was to determine the depth of CVOC impacts within the bedrock aquifer. The upper bedrock units in the site vicinity, from the top down, include the Maquoketa shale, the Galena-Platteville dolomite, and the St. Peter sandstone. On-site investigation had determined that CVOCs in the bedrock groundwater near LGRL were moving in a zone near the top of the dolomite aquifer, below the less permeable shale.

During Phase 1, two bedrock monitoring wells, P424D and P424SS, were installed approximately 80 feet northwest of the water supply well (PW-27) on the All-Line property. The locations of the monitoring wells are shown on **Figure 1**. P424D is constructed in the upper dolomite bedrock with a screen open across a "high flow" zone from 183 to 203 feet below ground surface (bgs). P424SS is screened in the upper sandstone at a depth of 389 to 409 bgs. Boring and well depths are shown with the site geology on cross sections A-A' and B-B' (**Figures 2** through **3B**).

Phase 1 water level monitoring indicated relatively little head difference between the dolomite and upper sandstone aquifers on the All-Line property. The head in the dolomite was slightly higher than the sandstone during all three Phase 1 measurement events.

In two sample rounds, water supply well PW-27 (now abandoned) and monitoring well P424D contained very similar concentrations of CVOCs including chloroethane, cis-1,2-dichloroethene (DCE), trans-1,2-DCE, trichloroethene (TCE), and vinyl chloride. No CVOCs were detected in either sample from monitoring well P424SS.

Based on the lack of CVOC detections in the sandstone (P424SS) and the minimal flow in the lower portion of the dolomite, the Phase 1 objective of defining the vertical extent of the CVOC plume on the All-Line property was met. At this location, the CVOC plume appears to be limited to the upper dolomite, in the interval sampled by P424D.

Phase 2 Summary

As stated above, the purpose of Phase 2 of the investigation was to determine the lateral limits of the CVOC plume in the bedrock aquifer north and south of the Phase 1 monitoring wells. Two wells were proposed to be installed in the upper dolomite at locations north and south of the P424 well nest, pending borehole testing to ensure that each well was intersecting a flow zone and would provide enough water for sampling.

The Phase 2 drilling locations included P425D, P426D, and P427D, shown on **Figure 1**. Activities completed at one or more of the three locations included drilling, logging, and packer testing. Boring and well depths are shown with the site geology on cross sections A-A' and B-B' (**Figures 2** through **3B**).

Of the two boreholes initially installed in Phase 2 (P425D and P426D), only P426D encountered sufficient water for sampling in the dolomite bedrock. The monitoring well in the P426D borehole was constructed with an open interval set in the productive portion of the upper dolomite from about 199 to 219 feet bgs.

The geophysical and flow logging at P425D provided indications of some groundwater flow in the shale; however, there was not any evidence of flow in the dolomite at this location. An additional boring was added (P427D) between P424D and P425D, but also showed minimal flow in the dolomite. Based on the absence of appreciable flow in the dolomite at P425D and P427D, both boreholes were abandoned.

PHASE 3 INVESTIGATION FIELD ACTIVITIES

The Phase 3 objective was to install a monitoring well to better define the downgradient extent of the plume and to serve as a sentinel well for downgradient water supply wells. The recommendations in the June 2016 Phase 2 update report called for the installation of the well in the upper dolomite (proposed well P429D). The well construction approach was subsequently

modified due to a lack of transmissive zones within the dolomite, and the well was installed in the deeper sandstone unit (well P429SS). Drilling was completed in two mobilizations, and SCS corresponded with the WDNR project manager between mobilizations to gain concurrence regarding the change in approach. The following discussion describes the initial drilling and logging of borehole P429D in the dolomite, and then the subsequent drilling into the sandstone and installation of monitoring well P429SS.

Drilling Mobilization 1 – Dolomite Boring P429D

The following discussion provides a brief summary of the initial drilling mobilization and geophysical logging of the P429D borehole. For more detailed information on these activities, refer to the investigation status report submitted to the WDNR on June 22, 2017.

Drilling

Drilling of bedrock borehole P429D, at the Andrew Oechsner property, commenced on January 9, 2017. Badger Well Drilling performed the drilling and SCS provided oversight. Shale bedrock was encountered at 57 feet, and a 6-inch temporary casing was installed to a depth of 78 feet bgs in an 8.5-inch borehole. The hole was then drilled to 160 feet. The initial planned borehole depth was 260 feet, to potentially intercept the fracture zone identified in the upper dolomite at monitoring wells P402E, P424D, and P423D. At the P429D location, little or no apparent water was encountered in the upper portion of the dolomite, so the borehole was extended to a depth of 380 feet. The measured depth to water at the completion of drilling was 375 feet. The geologic units encountered include glacial till, shale, and dolomite. The boring log information from borehole P429D is shown on the log for P429SS (deepened borehole) in **Attachment A**.

Geophysical Logging

The geophysical logging provided indications of very little groundwater flow in the dolomite at P429D. The dolomite appears massive and relatively unfractured in the caliper log, with a possible fracture at about 235 feet bgs. The fluid temperature log shows no sharp changes in the dolomite, with an inflection at a depth of about 185 feet in the shale. The fluid conductivity was also very uniform in the dolomite, with spikes at about 138 and 160 feet bgs in the shale. The heat pulse flow meter did not detect any flow (upward or downward) in the borehole. The borehole logging information is included in **Attachment B**.

Findings and Recommendations

The observed low hydraulic conductivity of the dolomite at this location indicates that there is low potential for contaminant transport through this unit, except where fractures are present. Although a fracture zone has been observed near the top of the dolomite at other locations, it does not appear to be present at the P429D location.

Based on the results of the geophysical logging, SCS proposed to modify the work plan to extend the P429D borehole. The proposed change included extending the P429D borehole down into the sandstone below the dolomite and installed the 2-inch monitoring well (P429SS). WDNR concurred with the recommended change.

Drilling Mobilization 2 – Sandstone Monitoring Well P429SS

Drilling

In October 2017, Badger Well Drilling extended existing borehole P429D, which was renamed P429SS. SCS provided oversight and logging. Sandstone was encountered at 440 feet bgs and the borehole was extended to a total depth of 460 feet bgs. The boring log is included in **Attachment A**.

Well Construction and Development

Badger Well Drilling constructed a 2-inch monitoring well in the borehole on October 18, 2017, under the supervision of SCS. The monitoring well was constructed with an open interval set in the productive portion of the upper sandstone from about 445 to 460 feet bgs (**Figure 2** and **Figure 3B**), with a filter pack from 436 to 460 feet bgs. Two days after it was installed, the monitoring well was developed. Approximately 510 gallons of water was removed from the well. The PVC casing riser was added after development was completed. Monitoring well construction and development forms are included in **Attachment A**.

BEDROCK GROUNDWATER MONITORING

During the Phase 3 investigation, groundwater monitoring continued at existing bedrock monitoring wells and water supply wells, and new monitoring well P429SS was added to the monitoring program after installation. Results of the water level monitoring, monitoring well sampling, and water supply well sampling are discussed below.

Laboratory reports not previously submitted to WDNR are included in **Attachment C**, including reports for the following events:

- October 2016 investigation monitoring wells
- April 2017 investigation monitoring wells
- October 2017 investigation monitoring wells
- November 2017 P-429SS initial sample
- February 2018 P-429SS second sample

Laboratory reports for water supply well sampling were previously submitted to the WDNR following each sampling event.

Water Level Monitoring

Water level monitoring was performed to evaluate the groundwater flow direction in the upper dolomite and measure the vertical gradient between the dolomite and the deeper sandstone. Water level measurements and elevations in the monitoring wells are summarized in **Table 1**. Measured water elevations have ranged over about 6 feet in the period from 2010 through 2017.

The groundwater elevations measured in the upper dolomite monitoring wells on October 3 through 6, 2017, and contours of the corresponding potentiometric surface are shown on **Figure 4**. The water levels in the upper dolomite are generally consistent with the apparent northeast to east flow direction indicated by the volatile organic compound (VOC) distribution. The apparent horizontal hydraulic gradient between LGRL (P401D) and downgradient well P424D was 0.001.

There appears to be relatively little head difference between the dolomite and upper sandstone aquifers on the All-Line property. The vertical gradient between the dolomite well P424D and the sandstone well P424SS, with a vertical separation of screen midpoints of 206 feet, ranged from 0.002 to 0.005 from late April 2016 through October 2017. The head in the dolomite was slightly higher than the sandstone during all 14 measurement events. Given the apparent low hydraulic conductivity of the lower dolomite and the small vertical gradient, there appears to be limited potential for vertical groundwater flow between the upper dolomite and sandstone in the vicinity of the P424 well nest.

Monitoring Well Sampling and Analysis

During the Phase 3 investigation, Environmental Sampling Corporation (ESC) collected groundwater samples from the existing bedrock monitoring wells semiannually from October 2016 through October 2017. New monitoring well P429SS was sampled in November 2017 and February 2018. P401D was not sampled on the routine schedule due to an obstruction in the well; however, ESC returned in December 2017 to collect a sample from P401D after the obstruction was removed.

The two primary CVOCs detected are cis-1,2-DCE and vinyl chloride. Bedrock monitoring well analytical data is summarized in **Table 2**. The concentrations of cis-1,2-DCE and vinyl chloride detected in October 2017, and the approximate extent of the CVOC contamination plume in bedrock, are shown on **Figure 5**. Concentration trends of cis-1,2-DCE and vinyl chloride in monitoring wells are shown on **Figures 6** and **7**.

The findings from the monitoring well sampling include the following:

- The two groundwater samples collected to date from new downgradient well P429SS, screened at the top of the sandstone unit, have shown no detectable CVOC concentrations.

- The highest CVOC concentrations in the bedrock aquifer have been detected in samples from monitoring well P402E, located near the northeast corner of the former LGRL site. Concentrations of cis-1,2-DCE and vinyl chloride in this well have consistently exceeded the NR 140 enforcement standard (ES), and concentrations of TCE have exceeded the ES. The CVOC concentrations detected in this well increased initially when the well was first sampled in 2010, but have followed a decreasing trend for the last 7 years. It is possible that the initial increase following well installation represents equilibration of the well with the aquifer, with the initial

sample results lower than true groundwater quality due to short-term effects of drilling with air to install the well.

- Monitoring well P401D, located on the east side of the former LGRL site and south of P402E, had no observed CVOC contamination in the December 2017 sampling round. Low concentrations of cis-1,2- and trans-1,2-DCE and TCE were detected in the October 2015 and April 2016 sampling rounds but there have been no confirmed PAL exceedances.

- Monitoring well P424D, located on the All-Line property, contains concentrations of cis-1,2-DCE and vinyl chloride greater than the corresponding ESs. The CVOC concentration trends at P424D have been generally stable over the last several years, with a slight increase in October 2017.

- Monitoring well P423D, located on the Andrew Oechsner farm property, has detectable concentrations of several CVOCs; however, only vinyl chloride exceeds the ES in samples from this well. The CVOC concentrations detected in this well show an overall stable or very slightly decreasing trend since monitoring began in 2010.

- Monitoring well P426D, installed to define the northern limit of the CVOC plume, has shown no detectable CVOCs since the well was first sampled in 2015.

- Monitoring well P424SS, open to the sandstone bedrock below the dolomite on the All-Line property, has shown no detectable CVOCs since the well was first sampled in 2012.

Water Supply Well Sampling and Analysis

Selected water supply wells have been sampled on a regular basis in accordance with the work plan. Water supply well sampling results are summarized in **Table 3**, and concentration trends for cis-1,2-DCE and vinyl chloride are shown on **Figures 8** and **9**.

The findings of the water supply well sampling include the following:

- The replacement water supply well for the Oechsner farm (PW-21RR) has been sampled monthly since October 2010. The cis-1,2-DCE concentration trends for PW-21RR have been variable (**Figure 8**). Cis-1,2-DCE concentrations in this well initially increased from October 2010 through mid-2012, dropped slightly into the end of 2012, and then followed a gradual increasing trend. Vinyl chloride concentrations in this well have shown an overall declining trend since mid-2012 (**Figure 9**), and have been generally stable in the last 2 years. This well has a groundwater treatment system, and post-treatment samples demonstrate that the system is effectively removing vinyl chloride and cis-1,2-DCE, with treated water

concentrations well below the drinking water maximum contaminant levels (MCLs) (**Table 3**).

- The cis-1,2-DCE concentrations in samples from the Wendall Muche well (PW-28) have shown a very gradually increasing trend since 2011. The detected cis-1,2-DCE concentrations are still below the NR 140 Preventative Action Limit (PAL) of 7 micrograms per liter µg/L and well below the MCL of 70 µg/L. No other CVOCs have been detected in this well. This well is open to both the dolomite and sandstone units.

- Samples from the Antonioni well (PW-19) also contain cis-1,2-DCE well below the MCL. The cis-1,2-DCE concentrations in this well appear to be relatively stable since April 2013.

- Trace concentrations of cis-1,2-DCE have also been detected in some of the samples collected from PW-32 (J. Oechsner). The detected cis-1,2-DCE concentrations are also well below the drinking water MCL, and typically below the laboratory's limit of quantitation, with the exception of the October 2015 and October 2017 sampling rounds.

- None of the other six water supply wells that were sampled routinely as part of Phase 3 contained detectable concentrations of CVOCs.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Conclusions of the investigation, including Phases 1 through 3, include the following:

- The lack of CVOCs in groundwater samples from monitoring well P429SS suggests that CVOC contamination in the sandstone aquifer does not extend to the northeast beyond the Andrew Oechsner property.

- Hydrogeologic and laboratory analytical data from the P424D/P424SS monitoring well nest on the All-Line property continue to support the theory that horizontal movement of the CVOCs away from LGRL in groundwater is primarily occurring in the upper, fractured zone of the dolomite.

- The absence of appreciable quantities of water in the upper dolomite bedrock at the locations of boreholes P425D, P427D, and P429SS indicate that the relatively permeable, fractured zone in the upper dolomite encountered at the P423, P424, and P426 locations does not extend throughout the investigation area.

- Given the apparently low hydraulic conductivity of the lower portion of the dolomite and the low vertical hydraulic gradient across the lower dolomite observed at the

P424 well nest, there appears to be little potential for significant vertical flow within the dolomite under ambient conditions.

- The appearance of CVOCs in the sandstone aquifer east of Highway 67 may be related to migration of contaminants through multi-aquifer water supply wells rather than horizontal movement of the plume from the source area in the sandstone bedrock.

- CVOC concentrations in the monitoring wells along the center of the plume, including P402E, P424D, and P423D, appear to be mostly stable or decreasing.

- The slight increasing trend of cis-1,2-DCE concentrations in PW-28, and the consistent presence of low concentrations of cis-1,2-DCE in PW-19, suggest that the leading edge of the dissolved CVOC plume may be continuing to migrate; however, vinyl chloride has not been detected in these wells, and the cis-1,2-DCE concentrations remain well below the NR 140 PAL.

Phase 3 Recommendations

We recommend continued groundwater monitoring to evaluate the groundwater conditions at the site, with new monitoring well P429SS added to the monitoring program. We recommend continuing the routine bedrock monitoring program during 2018 as has been implemented during the investigation, including the following wells:

- Monthly water supply well: PW-21RR
- Semiannual water supply wells: PW-19, PW-20, PW-23, PW-28, PW-32, PW-38
- Annual water supply wells: PW-42, PW-43, PW-44
- Semiannual monitoring wells: P401D, P402E, P423D, P424D, P424SS, P426D, P429SS

An update report covering the 2018 monitoring will be submitted by March 31, 2019. Private well monitoring results will continue to be provided to the WDNR within 10 days of receipt of the results.

Please do not hesitate to contact us at (608) 224-2830 if you have any questions or would like to discuss the investigation findings and recommendations.

Sincerely,

Sherren Clark, PE, PG
Project Director
SCS ENGINEERS

Eric Oelkers, PG
Senior Project Manager/Hydrogeologist
SCS ENGINEERS

NDK/EO/AJR/SC

cc: Jake Margelofsky, Advanced Disposal Services (2 copies)
Adam Hogan, WDNR

cc via e-mail: Tim Curry, Advanced Disposal Services
Mark Torresani, Cornerstone Environmental Group
Joe Madonia, Barnes & Thornburg, LLP (for Wells Manufacturing)
Mike Bemis, Metalcraft of Mayville (e-copy)
Melanie Gotto, Deere & Company World Headquarters
Jennifer Nijman, Nijman & Franzetti, LLP (for Deere & Company)
Tom McElligott, Quarles & Brady, LLP (for Mercury Marine)
Dawn Peterson, Brenner Tank LLC
Lew Schildkraut, E.R. Wagner Manufacturing
Linda Benfeld, ESG Holdings, LLC c/o Foley & Lardner LLP (for Maysteel Corp.)
Drew Zeratsky, National Rivet & Manufacturing Co.
Nathan Kempke, City of Mayville
Paul Rosenfeldt, Edgarton, St. Peter, Petak & Rosenfeldt (for Mayville Engineering Corp.)

Enclosures: Table 1 – Water Level Summary-Bedrock Wells
Table 2 – LGRL VOC Investigation Bedrock Well Sample Results
Table 3 – LGRL VOC Investigation Water Supply Well Sample Results
Figure 1 – Bedrock Monitoring Well Locations
Figure 2 – Cross Section Location Map
Figure 3A – Cross Section A-A'
Figure 3B – Cross Section B-B'
Figure 4 – Dolomite Bedrock Groundwater Elevation and Potentiometric Surface Contours
Figure 5 – VOCs in Bedrock Groundwater – October 2017
Figure 6 – cis-1,2-DCE Concentration Trend in Bedrock Monitoring Wells
Figure 7 – Vinyl Chloride Concentration Trend in Bedrock Monitoring Wells
Figure 8 – cis-1,2-DCE Trend in Water Supply Wells Downgradient from LGRL
Figure 9 – Vinyl Chloride Trend in PW-21RR Samples (Before Treatment)
Attachment A – Boring Logs and Monitoring Well Construction and Development Forms
Attachment B – P429D Borehole Logging Results
Attachment C – Laboratory Reports (October 2016 through February 2018)

TABLES

Table 1. Water Level Summary - Bedrock Wells
Land and Gas Reclamation Landfill / File No. 25211374.49

	Depth to Water in feet below top of well casing									
Raw Data	**P401D**	**P402E**	**P423D**	**Office Well**	**PW18**	**PW27**	**P424D**	**P424SS**	**P426D**	**P429SS**
Measurement Date										
March 12, 2010	76.87	73.58		53.82	108.25	91.44				
April 8, 2011	76.96	73.67	95.30							
October 6-7, 2011	81.26	78.00	100.50							
April 13, 2012	77.60	74.40	96.00							
October 3-5, 2012	81.70	78.43	99.72							
December 17, 2012	82.16	78.95	100.50			96.90	93.40	92.90		
February 20, 2013	82.11	78.88	99.55			96.20	92.75	92.10		
April 1, 2013	81.20	77.70	98.60				91.75	91.20		
September 30, 2013	83.33	80.09	101.30				94.80	94.22		
April 7, 2014	80.00	76.80	97.87				91.04	90.65		
October 6, 2014	80.35	77.15	98.75				91.91	91.55		
April 17, 2015	78.75	75.45	96.88				90.10	89.72		
May 20, 2015	78.93	75.72	97.27				90.42	90.06	104.15	
June 3, 2015	78.85	75.65	97.00				90.14	89.80	103.65	
October 9, 2015	83.10	79.90	100.80				93.80	93.50	107.50	
April 4, 2016	77.92	74.76	95.65				88.90	89.40	102.34	
October 7, 2016	80.35	77.5	98.60				91.6	91.3	105.3	
April 7, 2017	75.80	72.52	94.30				87.33	87.10	101.00	
October 6, 2017	79.56	76.35	98.12				91.10	90.85	103.82	
November 30, 2017										156.90
December 28, 2017	77.65									
February 1, 2018										155.80

	Ground Water Elevation in feet above mean sea level (amsl)									
Well Number	**P401D**	**P402E**	**P423D**	**Office Well**	**PW18**	**PW27**	**P424D**	**P424SS**	**P426D**	**P429SS**
Top of Casing Elevation (feet amsl)	932.30	929.08	948.99	958.14	947.56	946.15	942.60	941.88	955.64	999.24
Screen/Open Hole Length (ft)	15.00	20.00	18.00	46.00	60.00	43.00	20.00	20.00	20.00	15.00
Total Depth (ft from top of casing)	147.40	177.98	225.01	202.00	247.00	205.00	206.10	411.45	221.80	460.00
Top of Screen / Open Hole Elevation (ft)	799.90	771.10	205.01	802.14	760.56	784.15	756.50	550.43	753.84	554.24
Measurement Date										
March 12, 2010	855.43	855.50		904.32	839.31	854.71				
April 8, 2011	855.34	855.41	853.69							
October 6-7, 2011	851.04	851.08	848.49							
April 13, 2012	854.70	854.68	852.99							
October 3-5, 2012	850.60	850.65	849.27							
December 17, 2012	850.14	850.13	848.49			849.25	849.20	848.98		
February 20, 2013	850.19	850.20	849.44			849.95	849.85	849.78		
April 1, 2013	851.10	851.38	850.39				850.85	850.68		
September 30, 2013	848.97	848.99	847.69				847.80	847.66		
April 7, 2014	852.30	852.28	851.12				851.56	851.23		
October 6, 2014	851.95	851.93	850.24				850.69	850.33		
April 17, 2015	853.55	853.63	852.11				852.50	852.16		
May 20, 2015	853.37	853.36	851.72				852.18	851.82	851.49	
June 3, 2015	853.45	853.43	851.99				852.46	852.08	851.99	
October 9, 2015	849.20	849.18	848.19				848.80	848.38	848.14	
April 4, 2016	854.38	854.32	853.34				853.70	852.48	853.30	
October 7, 2016	851.95	851.58	850.39				851.00	850.58	850.34	
April 7, 2017	856.50	856.56	854.69				855.27	854.78	854.64	
October 6, 2017	852.74	852.73	850.87				851.50	851.03	851.82	
November 30, 2017										842.34
December 28, 2017	854.65									
February 1, 2018										843.44
Bottom of Well Elevation (ft)	784.90	751.10	723.98	756.14	700.56	741.15	736.50	530.43	733.84	539.24

Created by: EO Date: 3/16/2010
Last revision by: JSN Date: 3/9/2018
Checked by: NDK Date: 3/15/2018

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Table 2. LGRL VOC Investigation Bedrock Well Sample Results - Through October 2017

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
P-401D	10/7/2009	Siemens	**6.37**	**452**	**194**	<0.70	<0.40	<0.40	<0.40	<0.4	<0.50	<0.30	<0.4	<0.2	ND
	4/6/2010	Siemens	**12.3**	**400**	**278**	<0.70	<0.40	<0.40	<0.40	<0.4	<0.50	<0.10	<0.4	<0.2	o-Xylene **0.22** J
	10/27/2010	Siemens	**10.4**	**345**	**277**	<0.70	<0.40	<0.40	<0.40	<0.4	<0.50	<0.30	<0.4	<0.2	ND
	11/29/2010	Siemens	**11.6**	**340**	--	<0.70	<0.40	<0.30	<0.40	<0.4	<0.50	<0.30	<0.4	<0.2	ND
	4/8/2011	Siemens	**9.4**	**356**	**281**	<0.70	<0.40	<0.40	<0.40	<0.4	<0.50	<0.30	<0.4	<0.2	cis-1,3-Dichloropropylene **0.25** J
	10/6/2011	Siemens	**9.36**	**332**	**273**	<0.70	<0.40	<0.40	<0.40	<0.4	<0.50	<0.30	<0.4	<0.2	Carbon Disulfide **28.8**
	4/13/2012	Siemens	**9.44**	**365**	**226**	<0.70	<0.40	<0.40	<0.40	<0.4	<0.50	<0.30	<0.4	<0.2	ND
	10/4/2012	Pace	**9.4**	**359**	**219**	<0.97	<0.24	<0.75	<0.57	<0.83	<0.89	<0.45	<0.48	<0.18	ND
	10/4/2013	Pace	**12.6**	**360**	**251**	<0.44	<0.39	<0.28	<0.43	<0.42	<0.37	<0.47	<0.36	<0.18	ND
	4/7/2014	Pace	**10.9**	**362**	**255**	<0.37	<0.50	<0.16	<0.41	<0.26	<0.24	<0.50	<0.33	<0.18	ND
	10/17/2014	Pace	**12.4**	**340**	**280**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	4/17/2015	Pace	**12.0**	**348**	**251**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	10/9/2015	Pace	**12.6**	**350**	**289**	<0.37	<0.50	<0.24	<0.41	**11.0**	**0.43** J	<0.50	**0.41** J	<0.18	Acetone **21.2**
	4/7/2016	Pace	**12.5**	**344**	**273**	<0.37	<0.50	<0.24	<0.41	**1.7**	<0.26	<0.50	<0.33	<0.18	Acetone **3.0** J
	12/28/2017	Pace	**16.4**	**340**	**323**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
P-402D (Abandoned)	10/7/2009	Siemens	**60.9**	**381**	**1,050**	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	Toluene **0.43** J
P-402E	1/22/2010	Siemens	**47.3**	**439**	**516**	**2.6** CSH	**0.53** J	**2.9**	**0.5** J	**120**	**4.18**	<0.30	**2.71**	**23.6**	
	2/24/2010	Siemens	**72.4**	484	--	<3.50	<2.00	<2.00	<2.00	**176**	**7.38**	<1.50	**2.66**	**26.6**	ND
	2/24/2010	TA	--	--	--	**3.9**	<0.30	**1.9**	**0.61**	**200**	**8**	<0.50	**1.9**	**35**	
	4/7/2010	Siemens	**68.5**	**414**	**486**	**7.25** J	<4.0	<4.0	<4.0	**395**	**12.4** J	<3.0	**4.84** J	**48.8**	ND
	10/27/2010	Siemens	**78.4**	**403**	**505**	<7.0	<4.0	<4.0	<4.0	**459**	**14.8** J	<3.0	**11.1** J	**39.4**	Methylene Chloride **8.47** J
	11/29/2010	Siemens	**83.6**	**410**	--	<7.0	<4.0	<4.0	<4.0	**346**	**10.9** J	<3.0	**9.16** J	**40.6**	ND
	4/8/2011	Siemens	**87.7**	**404**	**483**	**7.64**	<0.40	**1.41**	**1.65**	**499**	**18.8**	<0.30	**15.7**	**53.5**	Tetrahydrofuran **4.95** J
	10/7/2011	Siemens	**73**	**392**	**502**	**5.87**	<0.40	**1.47**	**1.23** J	**344**	**11.8**	<0.30	**13.6**	**41.9**	Carbon Disulfide **3.30** J Tetrahydrofuran **2.77** J
	4/13/2012	Siemens	**75.9**	**412**	**496**	<7	<4	<4	<4	**412**	**11.6** J	<3	**11.5 J**	**41.4**	ND

Table 2. LGRL VOC Investigation Bedrock Well Sample Results - Through October 2017

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
P-402E (cont.)	10/4/2012	Pace	**68.8**	**344**	**466**	**5.0**	<0.24	**1.3**	**1.2**	**360**	**13.0**	<0.45	**12.5**	**39.3**	Tetrahydrofuran **2.7** J
	4/5/2013	Pace	**60.2**	**397**	**566**	**5.8**	<0.96	<3.0	<2.3	**330**	**11.2**	<1.8	**10.2**	**35.5**	ND
	10/4/2013	Pace	**61.6**	**397**	**456**	**4.5**	<0.78	**1.3** J	<0.85	**301**	**20.5**	<0.94	**8.3**	**25.3**	ND
	4/7/2014	Pace	**61.5**	**399**	**470**	**8.0**	<2.0	**1.2** J	<1.6	**326**	**12.0**	<2.0	**8.3**	**42.6**	ND
	10/15/2014	Pace	**61.7**	**373**	**453**	**5.0**	<2.5	<1.2	<2.1	**283**	**17.9**	<2.5	**6.5**	**28.3**	ND
	4/17/2015	Pace	**62.8**	**383**	**450**	**4.8**	<1.2	**0.82** J	<1.0	**298**	**8.5**	<5.1	**5.5**	**27.6**	ND
	10/9/2015	Pace	**64.5**	**389**	**465**	**5.2**	<1.2	<0.60	<1.0	**287**	**8.4**	<1.2	**4.8**	**25.2**	Acetone **19.6** J
	4/7/2016	Pace	**63.5**	**364**	**450**	**7.9**	<1.2	**1.1** J	<1.0	**315**	**20.3**	<1.2	**4.4**	**28.8**	ND
	10/7/2016	Pace	**56.8**	**376**	**475**	**7.4**	<2.0	<0.97	<1.6	**309**	**9.4**	<2.0	**3.8** J	**26.9**	ND
	4/7/2017	Pace	**65.3**	**392**	**442**	**7.1**	<1.2	**1.1** J	<1.0	**324**	**14.3**	<1.2	**3.3**	**29.7**	ND
	10/6/2017	Pace	**58.4**	**379**	**452**	**5.2**	<1.2	0.78 J	1.5 J	**290**	**11.5**	<1.2	**3.5**	**27.2**	ND
P-422B	10/6/2017	Pace	**10**	**212**	**166**	<0.37	<0.50	<0.24	<0.41	**0.85 J**	<0.26	<0.50	<0.33	<0.18	ND
P-423D	12/16/2010	Siemens	**34.6**	**394**	--	**2.13** J	<0.40	**0.60** J	<0.40	**62.1**	**2.6**	<0.30	**0.9** J	**2.53**	ND
	4/8/2011	Siemens	**29.7**	**360**	**427**	**1.38** J	<0.40	**0.59** J	<0.40	**52**	**2.04**	<0.30	**0.73** J	**1.2**	
	10/7/2011	Siemens	**32.1**	**373**	**441**	**1.57** J	<0.40	**0.44** J	<0.40	**44.9**	**1.64** J	<0.30	**0.74** J	**2.19**	Carbon Disulfide **1.99** J
	4/13/2012	Siemens	**28.2**	**348**	**432**	**1.36** J	<0.40	**0.59** J	<0.40	**61.9**	**2.75**	<0.30	**0.92** J	**0.91** J	ND
	10/5/2012	Pace	**8.8**	**364**	**227**	**1.1**	<0.24	<0.75	<0.57	**51.8**	**2.5**	<0.45	**0.68** J	**1.5**	ND
	4/5/2013	Pace	**25.6**	**364**	**487**	**1.5**	<0.24	<0.75	<0.57	**59.4**	**2.6**	<0.45	**0.72** J	**2.1**	ND
	10/3/2013	Pace	**30.6**	**356**	**413**	**1.1**	<0.39	<0.28	<0.43	**59.3**	**2.4**	<0.47	**0.74** J	**1.1**	ND
	4/7/2014	Pace	**29.9**	**366**	**420**	**1.5**	<0.50	**0.41** J	<0.41	**53.6**	**2.6**	<0.50	**0.75** J	**1.0** J	ND
	10/16/2014	Pace	**32.4**	**347**	**410**	**0.95** J	<0.50	**0.37** J	<0.41	**51.2**	**2.5**	<0.50	**0.66** J	**0.91** J	ND
	4/17/2015	Pace	**33.8**	**357**	**408**	**0.97** J	<0.50	**0.35** J	<0.41	**47.7**	**2.2**	<0.50	**0.66** J	**1.1**	ND
	10/9/2015	Pace	**40.3**	**370**	**430**	**1.3**	<0.50	**0.32** J	<0.41	**45.5**	**2.0**	<0.50	**0.60** J	**1.1**	ND
	4/8/2016	Pace	**37.5**	**355**	**432**	**0.62** J	<0.50	<0.24	<0.41	**29.7**	**1.2**	<0.50	**0.47** J	<0.18	ND
	10/7/2016	Pace	**43.4**	**372**	**447**	**1.9**	<0.50	**0.38** J	<0.41	**43.9**	**2.0**	<0.50	**0.57** J	**1.1**	ND
	4/7/2017	Pace	**43.0**	**364**	**430**	**1.7**	<0.50	**0.44** J	<0.41	**47.9**	**2.6**	<0.50	**0.73** J	**1.1**	ND
	10/6/2017	Pace	**34.8**	**354**	**432**	**2.1**	<0.50	0.38 J	<0.41	**58.6**	**3.1**	<0.50	**0.59 J**	**2.5**	ND

Table 2. LGRL VOC Investigation Bedrock Well Sample Results - Through October 2017

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
P-424D	12/17/2012	Pace	**33.8**	**357**	**409**	**2.5**	<0.48	<1.5	<1.1	**91.2**	**3.5**	<0.90	**1.7** J	**7.0**	ND
	2/20/2013	Pace	**32.6**	**382**	**432**	**2.6**	<0.24	**0.92** J	<0.57	**105**	**3.2**	<0.45	**2.5**	**5.8**	ND
	10/3/2013	Pace	**38.5**	**379**	**444**	**2.6**	<0.39	**1.1**	<0.43	**124**	**3.5**	<0.47	**3.2**	**10.1**	ND
	4/7/2014	Pace	**34.8**	**369**	**427**	**3.1**	<0.50	**0.98** J	**0.42** J	**114**	**4**	<0.50	**3**	**7.6**	Acetone **3.1** J
	10/16/2014	Pace	**40.7**	**358**	**424**	**3.3**	<1.0	**0.92** J	<0.82	**122**	**4.9**	<1.0	**2.4**	**7.7**	ND
	4/17/2015	Pace	**37.7**	**363**	**409**	**1.8**	<0.50	**0.54** J	<0.41	**79.6**	**2.5**	<0.50	**2.3**	**2.6**	ND
	10/9/2015	Pace	**48.6**	**384**	**449**	**3.5**	<0.50	**0.88** J	<0.41	**120**	**3.8**	<0.50	**2.2**	**11.4**	ND
	4/8/2016	Pace	**40.7**	**369**	**432**	**2.9**	<0.50	**0.82** J	<0.41	**111**	**3.4**	<0.50	**2.3**	**5.3**	ND
	10/7/2016	Pace	**45.1**	**370**	**485**	**4.1**	<1.2	**0.94** J	<1.0	**125**	**4.3**	<1.2	**2.3** J	**9.9**	ND
	4/7/2017	Pace	**43.2**	**374**	**422**	**3.6**	<0.50	**0.84** J	<0.41	**119**	**4.0**	<0.50	**2.1**	**7.6**	ND
	10/6/2017	Pace	**43.2**	**369**	**452**	**3.1**	<0.50	**1**	0.51 J	**151**	**4.7**	<0.50	**2**	**9.4**	ND
P-424SS	12/17/2012	Pace	<2.0	**303**	**287**	<0.97	<0.24	<0.75	<0.57	<0.83	<0.89	<0.45	<0.48	<0.18	ND
	2/20/2013	Pace	**2.1** J	**309**	**298**	<0.97	<0.24	<0.75	<0.57	<0.83	<0.89	<0.45	<0.48	<0.18	ND
	10/3/2013	Pace	**2.8** J	**320**	**298**	<0.44	<0.39	<0.28	<0.43	<0.42	<0.37	<0.47	<0.36	<0.18	ND
	4/7/2014	Pace	**2.5** J	**311**	**290**	<0.37	<0.50	<0.16	<0.41	<0.26	<0.24	<0.50	<0.33	<0.18	ND
	10/16/2014	Pace	**2.8** J	**303**	**283**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	4/17/2015	Pace	**2.8** J	**314**	**276**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	Acetone **3.7** J
	10/9/2015	Pace	**2.4** J	**323**	**295**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	4/8/2016	Pace	**2.7** J	**309**	**293**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	10/7/2016	Pace	**1.0** JB	**307**	**294**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	4/7/2017	Pace	**0.92** J	**314**	**288**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	4/7/2017 DUP	Pace	**0.91** J	**317**	**284**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	10/6/2017	Pace	**0.80** J	**310**	**306**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND

Table 2. LGRL VOC Investigation Bedrock Well Sample Results - Through October 2017

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
P-426D	6/3/2015	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	8/12/2015	Pace	**21.5**	**337**	**405**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	10/9/2015	Pace	**59.6**	**369**	**499**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	Acetone **18.6** J
	4/8/2016	Pace	**27.7**	**331**	**408**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	10/7/2016	Pace	**55**	**362**	**532**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	4/7/2017	Pace	**37.0**	**349**	**413**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	10/27/2017	Pace	**44.4**	**334**	**480**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
P-429SS	11/30/2017	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
	2/1/2018	Pace	**1.3** J	**318**	**322**	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND
Trip Blank	1/22/2010	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	2/24/2010	TA	--	--	--	<1.0	<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	ND
	2/24/2010	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	11/29/2010	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	12/16/2010	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	10/6/2011	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	10/7/2011	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	4/13/2012	Siemens	--	--	--	<0.70	<0.40	<0.40	<0.40	<0.40	<0.50	<0.30	<0.40	<0.20	ND
	10/4/2012	Pace	--	--	--	<0.97	<0.24	<0.75	<0.57	<0.83	<0.89	<0.45	<0.48	<0.18	ND
	10/5/2012	Pace	--	--	--	<0.97	<0.24	<0.75	<0.57	<0.83	<0.89	<0.45	<0.48	<0.18	Methylene Chloride 1.0 Acetone 6.8 J
	12/17/2012	Pace	--	--	--	<0.97	<0.24	<0.75	<0.57	<0.83	<0.89	<0.45	<0.48	<0.18	ND
	10/3/2013	Pace	--	--	--	<0.44	<0.39	<0.28	<0.43	<0.42	<0.37	<0.47	<0.36	<0.18	ND
	4/7/2014	Pace	--	--	--	<0.37	<0.50	<0.16	<0.41	<0.26	<0.24	<0.50	<0.33	<0.18	Methylene Chloride 0.25 J

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Well Number	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs	
Trip Blank (cont.)	10/15/2014	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND	
	4/17/2015	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	Acetone	8.5 J
	6/3/2015	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND	
	8/12/2015	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	Methylene Chloride	0.28 J
	10/9/2015	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND	
	4/7/2016	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND	
	4/8/2016	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND	
	10/5/2017	Pace	--	--	--	<0.37	<0.50	<0.24	<0.41	<0.26	<0.26	<0.50	<0.33	<0.18	ND	
NR 140 Groundwater Enforcement Standard			250	NS	NS	400	30	850	7	70	100	5	5	0.2	1,4 Dichlorobenzene	75
															Acetone	9,000
															Carbon Disulfide	1,000
															Chloroform	6
															Methylene Chloride	5
															Tetrahydrofuran	50
															Toluene	800
															Xylenes	2,000
NR 140 Preventive Action Limit			125	NS	NS	80	3	85	0.7	7	20	0.5	0.5	0.02	1,4 Dichlorobenzene	15
															Acetone	1,800
															Carbon Disulfide	200
															Chloroform	0.6
															Methylene Chloride	0.5
															Tetrahydrofuran	10
															Toluene	160
															Xylenes	400

Table 2. LGRL VOC Investigation Bedrock Well Sample Results - Through October 2017

Abbreviations:

ND = Not detected
NS = No standard established
mg/L = Milligrams per Liter
µg/L = Micrograms per Liter
Siemens = Siemens Water Technologies
TA = TestAmerica, Watertown, WI
Pace = Pace Analytical Services, Inc., Green Bay, WI
-- = Not Analyzed

Bold indicates detected compound.
Bold and underline indicates result above drinking water standard.

Lab Notes/Qualifiers:

J = Estimated value below laboratory limit of quantitation.
CSH = Check standard for this analyte exhibited a high bias. Sample results may also be biased high.

Created by:	MOB	Date:	9/5/2012
Last revision by:	JSN	Date:	3/9/2018
Checked by:	NDK	Date:	3/15/2018

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs	
Monthly Monitoring Locations																
PW-21R	A. Oechsner N7548 Hwy. 67 Mayville	1/29/2009	NLS	**12**	**310**	<0.79	<0.31	<0.21	<0.13	**11**	**0.26** J	<0.15	<0.18	**0.61**	ND	
			NLS	--	--	<0.79	<0.31	<0.21	<0.13	**10**	**0.26** J	<0.15	<0.18	**0.56**	ND	
		2/24/2009	NLS	--	--	<0.79	<0.31	<0.21	<0.13	**10**	<0.19	<0.15	<0.18	**0.35** J	ND	
			CT	--	--	<0.40	**0.56** JB	<0.21	<0.24	**8.6**	<0.27	<0.30	<0.24	**0.39**	ND	
		6/30/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	**19**	**0.52** J	<0.20	**0.26**	**0.53**	ND	
		7/14/2010	NLS	--	--	<1.0	<0.16	<0.14	<0.11	**12**	**0.23** J	<0.10	<0.12	**0.40** J	ND	
PW-21RR Untreated	A. Oechsner N7548 Hwy. 67 Mayville	10/7/2010	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**2.74**	<0.50	<0.30	<0.40	**0.58** J	ND	
			TA	--	--	<1.0	<0.30	<0.50	<0.50	**2.0**	<0.50	<0.50	<0.20	**0.37** J	ND	
		11/11/2010	TA	**13**	**320**	<1.0	**0.47** J	<0.50	<0.50	**2.6**	<0.50	<0.50	<0.20	**0.76** J	Chloroform	**0.29** J
															Toluene	**21**
		11/29/2010	Siemens	**12.4**	**347**	<0.70	<0.40	<0.40	<1.30	**3.12**	<0.50	<0.30	<0.40	**0.61** J	Toluene	**1.25**
		12/16/2010	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**3.75**	<0.50	<0.30	<0.40	**0.65** J	Toluene	**0.99** J
		1/12/2011	NLS	--	--	<1.0	<0.16	<0.14	<0.11	**4.4**	**0.13** J	<0.10	<0.12	**0.75**	ND	
		2/10/2011	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**6**	<0.50	<0.30	<0.40	**0.79**	ND	
		3/1/2011	TA	--	--	<0.070	<0.063	<0.074	<0.059	**6.1**	<0.13	<0.067	<0.060	**0.92**	ND	
		4/5/2011	NLS	--	--	<1.6	<0.29	<0.23	<0.13	**8.9**	**0.32** J	<0.11	<0.28	**0.94**	ND	
			TA	--	--	<0.10	<0.20	<0.050	<0.050	**7.3**	**0.27** J	<0.050	<0.050	**0.79**	ND	
		5/26/2011	TA	--	--	**0.34** J	<0.20	**0.080** J	<0.05	**12**	**0.44** J	<0.050	<0.050	**1.0**	ND	
		6/28/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	**9.8**	**0.37** J	<0.15	<0.25	**0.78**	ND	
		7/14/2011	TA	--	--	<0.50	**0.33** J	<0.25	<0.15	**10**	**0.40** J	<0.15	<0.25	**0.75**	ND	
		8/16/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	**9.7**	**0.31** J	<0.15	<0.25	**0.46** J	ND	
		9/1/2011	TA	--	--	<0.50	**0.46** J	<0.25	<0.15	**11**	**0.45** J	<0.15	<0.25	**0.67**	ND	
		10/6/2011	TA	--	--	**0.52**	<0.30	<0.25	<0.15	**10**	**0.40** J	<0.15	<0.25	**0.63**	ND	
		11/14/11 *	TA	--	--	<0.50	<0.30	<0.25	<0.15	**11**	**0.43** J	<0.15	<0.25	**0.82**	ND	
		11/14/11 **	TA	--	--	**0.64**	<0.30	<0.25	<0.15	**12**	**0.43** J	<0.15	<0.25	**0.81**	ND	
		12/12/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	**12**	**0.42** J	<0.15	<0.25	**0.83**	ND	
		12/27/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	**12**	**0.45** J	<0.15	<0.25	**0.74**	ND	
			Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**13.9**	**0.57** J	<0.30	<0.40	**0.85** J	ND	
		1/4/2012	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**15.4**	**0.62** J	<0.30	<0.40	**1.09**	ND	
		1/11/2012	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**15.5**	**0.66** J	<0.30	<0.40	**1.02**	ND	
		1/18/2012	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**15.2**	**0.66** J	<0.30	<0.40	**1.01**	ND	
		1/25/2012	Siemens	--	--	<0.70	<0.40	<0.40	<0.40	**16.6**	**0.61** J	<0.30	<0.40	**1.10**	ND	

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-21RR Untreated (cont.)	A. Oechsner N7548 Hwy. 67 Mayville	2/15/2012	TA	--	--	<0.50	<0.30	<0.25	<0.15	**13**	**0.47** J	<0.15	<0.25	**0.86**	ND
		3/1/2012	TA	--	--	<0.50	<0.30	<0.25	<0.15	**13**	**0.48** J	<0.15	<0.25	**0.96**	ND
		4/11/2012	TA	**16**	**290**	<0.50	<0.30	<0.25	<0.15	**14**	**0.69**	<0.15	<0.25	**0.89**	ND
		5/2/2012	Siemens	--	--	**0.92** J	<0.40	<0.40	<0.40	**19.8**	**0.80** J	<0.30	<0.40	**1.52**	ND
		6/20/2012	Pace	--	--	**0.25** J	**0.73** J	**0.11** J	<0.16	**15.1**	**0.51**	<0.16	<0.11	**0.62**	ND
		7/18/2012	Pace	--	--	<0.20	<0.13	<0.072	<0.16	**16**	**0.47** J	<0.16	<0.11	**0.62**	ND
		8/2/2012	Pace	--	--	**0.46** J	<0.13	**0.12** J	<0.16	**18.6**	**0.64**	<0.16	<0.11	**0.75**	ND
		9/13/2012	Pace	--	--	<0.31	<0.13	<0.072	<0.16	**16.1**	**0.49** J	<0.16	<0.11	**0.55**	Benzene **0.050** J Toluene **0.088** J
		10/5/2012	Pace	**13.6**	**316**	<0.31	<0.13	<0.072	<0.16	**14.6**	**0.51**	<0.16	<0.11	**0.63**	ND
		11/29/2012	Pace	--	--	<0.31	<0.13	<0.072	<0.16	**10.9**	**0.30** J	<0.16	<0.11	**0.44**	ND
		12/17/2012	Pace	--	--	<0.31	<0.13	<0.072	<0.16	**14.8**	**0.45** J	<0.16	<0.11	**0.62**	ND
		1/8/2013	Pace	--	--	**0.62** J	<0.13	<0.072	<0.16	**14.4**	**0.40** J	<0.16	<0.11	**0.52**	ND
		2/20/2013	Pace	--	--	<0.31	<0.13	<0.072	<0.16	**14**	**0.39** J	<0.16	<0.11	**0.52**	ND
		3/21/2013	Pace	--	--	<0.31	<0.13	<0.072	<0.16	**13.2**	**0.42** J	<0.16	<0.11	**0.48**	ND
		4/2/2013	Pace	**13.1**	**294**	<0.31	<0.13	<0.072	<0.16	**9.2**	**0.25** J	<0.16	<0.11	**0.34** J	ND
		5/7/2013	Pace	--	--	<0.31	<0.13	<0.072	<0.16	**14.4**	**0.43** J	<0.16	<0.11	**0.64**	ND
		6/27/2013	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**12.5**	**0.32** J	<0.25	<0.12	**0.5**	m&p-Xylene **0.22** JB
		7/29/2013	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**14.9**	**0.35** J	<0.25	<0.12	**0.6**	ND
		8/26/2013	Pace	--	--	<0.22	<0.40	<0.20	<0.23	**18**	<0.20	<0.19	<0.18	<0.19	ND
		9/12/2013	Pace	--	--	<0.22 L3	<0.40 L3	<0.20	<0.23	**16.1**	<0.20	<0.19	<0.18	<0.19 L3	ND
		10/1/13	Pace	**14.6**	**349**	<0.22	<0.40	<0.20	<0.23	**16.5**	**0.47** J	<0.19	<0.18	<0.19	ND
		11/7/13	Pace	--	--	<0.22	<0.40	<0.20	<0.23	**14.5**	**0.44** J	<0.19	<0.18	**0.67**	Methylene Chloride **0.48** J 1,2-Dichloroethane **0.55**
		12/9/13	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**13.3**	**0.39** J	<0.25	<0.13	**0.58**	ND
		1/9/2014	Pace	--	--	<0.50	<0.50 M1	<0.25	<0.24	**14.9**	**0.33** J	<0.25	<0.13	**0.75**	ND
		2/11/2014	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**12.2**	**0.32** J	<0.25	<0.13	**0.52**	ND
		3/11/2014	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**14.4**	**0.46** J	<0.25	<0.13	**0.50**	ND
		4/25/2014	Pace	**14.7**	**356**	<0.50	<0.50	<0.25	<0.24	**15.3**	**0.42** J	<0.25	<0.13	**0.66**	ND
		5/12/2014	Pace	--	--	<0.17	<0.34	<0.077	<0.13	**13.8**	**0.26** J	<0.099	<0.084	**0.56**	ND
		6/10/2014	Pace	--	--	**0.21** J	<0.34	<0.077	<0.13	**15.0**	**0.38** J	<0.099	<0.084	**0.78**	ND
		7/8/2014	Pace	--	--	**0.29** J	<0.34 M1	<0.077	<0.13	**16.4**	**0.38** J	<0.099	<0.084	**0.64** M1	ND
		8/1/2014	Pace	--	--	**0.25** J	<0.34	<0.077	<0.13	**14.6**	**0.43** J	<0.099	<0.084	**0.56**	ND
		9/3/2014	Pace	--	--	<0.17	<0.34	<0.077	<0.13	**13.9**	**0.27** J	<0.099	<0.084	**0.58**	ND

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-21RR Untreated (cont.)	A. Oechsner N7548 Hwy. 67 Mayville	9/3/2014 DUP	Pace	--	--	0.27 J	<0.34	<0.077	<0.13	**14.8**	0.30 J	<0.099	<0.084	**0.67**	ND
		10/6/2014	Pace	**14.7**	**338**	**0.47** J	<0.34	<0.087	<0.17	**15.9**	**0.48** J	<0.12	<0.084	**0.53**	ND
		11/20/2014	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**16.2**	**0.47** J	<0.12	<0.084	**0.57**	ND
		12/12/2014	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**19.0**	<0.15	<0.12	<0.084	**1.2**	ND
		1/21/2015	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**17.1**	<0.15	<0.12	<0.084	**0.43**	ND
		2/18/2015	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**14.2**	**0.37** J	<0.12	<0.084	**0.55**	ND
		3/5/2015	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**16.6**	<0.15	<0.12	<0.084	**0.50**	ND
		4/17/2015	Pace	**15.5** B	**328**	<0.27	<0.34	<0.087	<0.17	**18.3**	**0.48** J	<0.12	<0.084	**0.50**	ND
		5/20/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**16.7**	**0.44** J	<0.15	<0.14	**0.55**	ND
		6/3/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**18.8**	**0.52**	<0.15	<0.14	**0.56**	ND
		7/16/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**18.5**	**1.2**	<0.15	<0.14	**0.58**	ND
		8/31/2015	Pace	--	--	<0.34	<0.64 L2	<0.19	<0.17	**18.0**	**1.1**	<0.15	<0.14	**0.47**	ND
		9/21/2015	Pace	--	--	<0.34 H1	<0.64 H1,L3	**0.19** J,H1	<0.17 H1	**18.1** H1	**0.53** H1	<0.15 H1	**0.18** J,H1	**0.60** H1	ND
		10/6/2015	Pace	**16.0**	**328**	<0.88	<0.20	**0.18**	<0.17	**20**	**0.35**	<0.13	<0.19	**0.76**	ND
		11/4/2015	Pace	--	--	<0.24 N2	<0.23 N2	<0.17 N2	<0.17 N2	**17.7** N2	**0.42** J,N2	<0.32 N2	<0.21 N2	<0.23 N2	ND
		12/3/2015	Pace	--	--	<0.24	<0.23	<0.17	<0.17	**18.2**	**0.37** J	<0.32	<0.21	<0.23	ND
		1/5/2016	Pace	--	--	**0.36** J	<0.64	<0.19 M1	<0.17	**18.7**	<0.18	<0.15	<0.14	**0.55**	ND
		2/9/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**18.3**	**0.41** J	<0.15	<0.14	**0.50**	Toluene **0.27** JB
		3/10/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**17.5**	**0.52** J	<0.15	<0.14	**0.55**	ND
		4/5/2016	Pace	**16.0**	**345**	<0.34	<0.64	<0.19	<0.17	**17.5**	**0.42** J	<0.15	<0.14	**0.47**	ND
		5/19/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**19.7**	**0.24** J	<0.15	<0.14	**0.45**	ND
		6/22/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**18**	**0.46** J	<0.15	<0.14	**0.37**	ND
		7/7/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**18.8**	**0.48** J	<0.15	<0.14	**0.64**	ND
		8/11/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**17.9**	**0.35** J	<0.12	<0.044	**0.46**	ND
		9/9/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**17**	**0.47** J	<0.12	<0.044	**0.42**	ND
		10/4/2016	Pace	**17.0**	**345**	**0.28** J	<0.21	<0.088	<0.089	**20.7**	**0.53**	<0.12	<0.044	**0.57**	ND
		11/14/2016	Pace	--	--	**0.29** J	<0.21	<0.088	<0.089	**16.7**	**0.47** J	<0.12	<0.044	**0.45**	ND
		12/1/2016	Pace	--	--	**0.37** J	<0.21	<0.088	<0.089	**19.2**	**0.51**	<0.12	<0.044	**0.48**	ND
		1/27/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**21.1**	**0.42** J	<0.12	<0.044	**0.5**	ND
		2/2/2017	Pace	--	--	**0.31** J	<0.21	<0.088	<0.089	**22.1**	**0.44** J	<0.12	<0.044	**0.46**	ND
		3/9/2017	Pace	--	--	**0.53** J	<0.21	<0.088	<0.089	**25**	**0.63**	<0.12	<0.044	**0.5**	ND
		4/4/2017	Pace	**18.4**	**339**	**0.32** J	<0.21	<0.088	<0.089	**20.3**	**0.75**	<0.12	<0.044	**0.54**	ND
		5/19/2017	Pace	--	--	0.54 J	<0.21	<0.088	<0.089	**20.8**	**0.48 J**	<0.12	<0.044	**0.62**	ND
		6/22/2017	Pace	--	--	0.28 J	<0.21	<0.088	<0.089	**19.5**	**0.51**	<0.12	<0.044	**0.59**	ND
		7/17/2017	Pace	--	--	0.58 J	<0.21	<0.088	<0.089	**18.3**	0.42 J	<0.12	<0.044	**0.52**	ND
		8/2/2017	Pace	--	--	0.33 J	<0.21	0.20 J	<0.089	**24.1**	**0.68**	<0.12	<0.044	**0.71**	ND
		9/7/2017	Pace	--	--	0.32 J	<1.1	<0.14	<0.18	**20.6**	0.51 J	<0.12	<0.11	**0.51**	ND
		10/3/2017	Pace	18	335	<0.32	<1.1	<0.14	<0.18	**19.4**	0.41 J	<0.12	<0.11	**0.59**	ND
		11/1/2017	Pace	--	--	<0.32	<1.1	<0.14	<0.18	**17**	0.46 J	<0.12	<0.11	**0.49**	ND
		1/18/2018	Pace	--	--	0.33 J	<1.1	<0.14	<0.18	**20.6**	0.50 J	<0.12	<0.11	**0.63**	ND
		2/1/2018	Pace	--	--	0.35 J	<1.1	<0.14	<0.18	**19.5**	0.40 J	<0.12	<0.11	**0.49**	ND

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-21RR After Treatment System	A. Oechsner N7548 Hwy. 67 Mayville	6/27/13	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**1.5**	<0.21	<0.25	<0.12	<0.20	m&p-Xylene **0.25** JB
		7/29/13	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**1.4**	<0.21	<0.25	<0.12	<0.20	ND
		8/26/13	Pace	--	--	<0.22	<0.40	<0.20	<0.23	**2.3**	<0.20	<0.19	<0.18	<0.19	ND
		9/12/13	Pace	--	--	<0.22	<0.40	<0.20	<0.23	**2.1**	<0.20	<0.19	<0.18	<0.19	ND
		10/1/13	Pace	--	--	<0.22	<0.40	<0.20	<0.23	**2.4**	<0.20	<0.19	<0.18	<0.19	ND
		11/7/13	Pace	--	--	<0.22	<0.40	<0.20	<0.23	**1.2**	<0.20	<0.19	<0.18	<0.19	Methylene Chloride **0.46** J
		12/9/13	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**0.74**	<0.21	<0.25	<0.13	<0.20	ND
		1/9/2014	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**0.84**	<0.21	<0.25	<0.13	<0.20	ND
		2/11/2014	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**0.73**	<0.21	<0.25	<0.13	<0.20	ND
		3/11/2014	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**1.6**	<0.21	<0.25	<0.13	<0.20	ND
		4/25/2014	Pace	--	--	<0.50	<0.50	<0.25	<0.24	**1.2**	<0.21	<0.25	<0.13	<0.20	ND
		5/12/2014	Pace	--	--	<0.17	<0.34	<0.077	<0.13	**1.5**	<0.15	<0.099	<0.084	<0.20	ND
		6/10/2014	Pace	--	--	<0.17	<0.34	<0.077	<0.13	**1.4**	<0.15	<0.099	<0.084	<0.20	ND
		7/8/2014	Pace	--	--	<0.17	<0.34	<0.077	<0.13	**1.3**	<0.15	<0.099	<0.084	<0.20	ND
		8/1/2014	Pace	--	--	<0.17	<0.34	<0.077	<0.13	**1.7**	<0.15	<0.099	<0.084	<0.082	ND
		10/6/2014	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**1.5**	<0.15	<0.12	<0.084	<0.082	ND
		11/20/2014	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**0.63**	<0.15	<0.12	<0.084	<0.082	ND
		12/12/2014	Pace	--	--	<0.27 H1	<0.34 H1,L3	<0.087 H1	<0.17 H1	**9.9** H1	**0.17** J, H1	<0.12 H1	<0.084 H1	**0.35** H1	ND
		1/21/2015	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**9.9**	**0.21** J	<0.12	<0.084	**0.28**	ND
		2/18/2015	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**1.0**	<0.15	<0.12	<0.084	<0.082	ND
		3/5/2015	Pace	--	--	<0.27	<0.34	<0.087	<0.17	**1.3**	<0.15	<0.12	<0.084	<0.082	ND
		4/17/2015	Pace	**15.6** B	**333**	<0.27	<0.34	<0.087	<0.17	**1.6**	<0.15	<0.12	<0.084	<0.082	ND
		5/20/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**0.83**	<0.18	<0.15	<0.14	<0.081	ND
		6/3/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**1.3**	<0.18	<0.15	<0.14	<0.15	Isopropylbenzene (Cumene) **0.11** J
		7/16/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**2.3**	<0.18	<0.15	<0.14	<0.081	ND
		8/31/2015	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**2.1**	<0.18	<0.15	<0.14	<0.081	ND
		9/21/2015	Pace	--	--	<0.34 H1	<0.64 H1,L3	<0.19 H1	<0.17 H1	**1.9** H1	<0.18 H1	<0.15 H1	<0.14 H1	<0.081 H1	ND
		10/6/2015	Pace	--	--	<0.88	<0.20	<0.15	<0.17	**2.5**	<0.18	<0.13	<0.19	<0.10	ND
		11/4/2015	Pace	--	--	<0.24 N2	<0.23 N2	<0.17 N2	<0.17 N2	**1.6** N2	<0.19 N2	<0.32 N2	<0.21 N2	<0.23 N2	Isopropylbenzene (Cumene) **0.81** N2
		12/3/2015	Pace	--	--	<0.24	<0.23	<0.17	<0.17	**1.1**	<0.19	<0.32	<0.21	<0.23	ND
		2/9/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**2.7**	<0.18	<0.15	<0.14	<0.15	Toluene **0.26** J
		3/10/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**1.2**	<0.18	<0.15	<0.14	<0.15	ND
		4/5/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**0.98**	<0.18	<0.15	<0.14	<0.081	ND
		5/19/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**1.2**	<0.18	<0.15	<0.14	<0.081	ND
		6/22/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**1.6**	<0.18	<0.15	<0.14	<0.081	ND
		7/7/2016	Pace	--	--	<0.34	<0.64	<0.19	<0.17	**2.2**	<0.18	<0.15	<0.14	<0.081	ND
		8/11/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.9**	<0.11	<0.12	<0.044	<0.098	ND
		9/9/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.9**	<0.11	<0.12	<0.044	<0.098	ND
		10/4/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.9**	<0.11	<0.12	<0.044	<0.098	ND
		11/14/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.8**	<0.11	<0.12	<0.044	<0.098	ND
		12/1/2016	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.7**	<0.11	<0.12	<0.044	<0.098	ND

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-21RR After Treatment System (cont.)	A. Oechsner N7548 Hwy. 67 Mayville	1/27/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.1**	<0.11	<0.12	<0.044	<0.098	ND
		2/2/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.1**	<0.11	<0.12	<0.044	<0.098	ND
		3/9/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.4**	<0.11	<0.12	<0.044	<0.098	ND
		4/4/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.4**	<0.11	<0.12	<0.044	<0.098	ND
		5/19/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.5**	<0.11	<0.12	<0.044	<0.098	ND
		6/22/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.9**	<0.11	<0.12	<0.044	<0.098	ND
		7/17/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.4**	<0.11	<0.12	<0.044	<0.098	ND
		8/2/2017	Pace	--	--	<0.18	<0.21	<0.088	<0.089	**1.9**	<0.11	<0.12	<0.044	<0.098	ND
		9/7/2017	Pace	--	--	<0.32	<1.1	<0.14	<0.18	**1.5**	<0.21	<0.12	<0.11	<0.074	ND
		10/3/2017	Pace	--	--	<0.32	<1.1	<0.14	<0.18	**4.1**	<0.21	<0.12	<0.11	<0.074	ND
		11/1/2017	Pace	--	--	<0.32	<1.1	<0.14	<0.18	**1.5**	<0.21	<0.12	<0.11	<0.074	ND
		1/18/2018	Pace	--	--	<0.32	<1.1	<0.14	<0.18	**1.1**	<0.21	<0.12	<0.11	<0.074	ND
		2/1/2018	Pace	--	--	<0.32	<1.1	<0.14	<0.18	**1.3**	<0.21	<0.12	<0.11	<0.074	ND
Semi-annual Monitoring Locations															
PW-19	Antonioni W2831 Zion Church Rd. Mayville	6/28/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	**0.30** J	<0.30	<0.15	<0.25	<0.032	ND
		10/5/2012	Pace	**45.1**	**372**	<0.31	<0.13	<0.072	<0.16	<0.08	<0.14	<0.16	<0.11	<0.16	ND
		4/3/2013	Pace	**40.2**	**339**	<0.31	<0.13	<0.072	<0.16	**0.55**	<0.14	<0.16	<0.11	<0.16	ND
		10/1/2013	Pace	**38.3**	**355**	<0.22	<0.40	<0.20	<0.23	**0.82**	<0.20	<0.19	<0.18	<0.19	ND
		4/25/2014	Pace	**37.9**	**375**	<0.50	<0.50	<0.25	<0.24	**0.65**	<0.21	<0.25	<0.13	<0.20	ND
		10/6/2014	Pace	**43.1**	**341**	<0.27	<0.34	<0.087	<0.17	**0.63** J	<0.15	<0.12	<0.084	<0.082	ND
		6/3/2015	Pace	**41.1**	**352**	<0.34	<0.64	<0.19	<0.17	**0.63**	<0.18	<0.15	<0.14	<0.15	ND
		10/6/2015	Pace	**47.7**	**340**	<0.88	<0.20	<0.15	<0.17	**0.73**	<0.18	<0.13	<0.19	<0.10	ND
		4/5/2016	Pace	**42.6**	**335**	<0.34	<0.64	<0.19	<0.17	**0.59**	<0.18	<0.15	<0.14	<0.081	ND
		10/4/2016	Pace	**45.7**	**349**	<0.18	<0.21	<0.088	<0.089	**0.64**	<0.11	<0.12	<0.044	<0.098	ND
		4/4/2017	Pace	**45.7**	**353**	<0.18	<0.21	<0.088	<0.089	**0.55**	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**55.9**	**360**	<0.32	<1.1	<0.14	<0.18	**0.45**	<0.21	<0.12	<0.11	<0.074	ND
PW-20	Sellnow N7627 Hwy. 67 Mayville	3/11/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	**0.22** JB	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
		1/21/2010	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
		7/14/2010	NLS	--	--	<1.0	<0.16	<0.14	<0.11	<0.13	<0.11	<0.10	<0.12	<0.13	ND
		4/6/2011	NLS	--	--	<1.6	<0.29	<0.23	<0.13	<0.30	<0.30	<0.11	<0.28	<0.20	ND
			TA	--	--	<0.10	<0.20	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.032	ND
		10/6/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		4/13/2012	TA	**33**	**310**	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		10/5/2012	Pace	**45.6**	**323**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/2/2013	Pace	**29.3**	**340**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		10/1/2013	Pace	**22.3**	**312**	<0.22	<0.40	<0.20	<0.23	<0.12	<0.20	<0.19	<0.18	<0.19	ND
		4/25/2014	Pace	**27.7**	**385**	<0.50	<0.50	<0.25	<0.24	<0.23	<0.21	<0.25	<0.13	<0.20	ND

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Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-20 (cont.)	Sellnow N7627 Hwy. 67 Mayville	10/6/2014	Pace	**28.4**	**315**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		4/17/2015	Pace	**62.8**	**365**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**26.4**	**327**	<0.88	<0.20	<0.15	<0.17	<0.16	<0.18	<0.13	<0.19	<0.10	ND
		4/5/2016	Pace	**23.0**	**330**	<0.34	<0.64	<0.19	<0.17	<0.17	<0.18	<0.15	<0.14	<0.081	ND
		10/4/2016	Pace	**27.2**	**325**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		4/6/2017	Pace	**30.4**	**333**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		10/5/2017	Pace	**22.5**	**327**	<0.32	<1.1	<0.14	<0.18	<0.073	<0.21	<0.12	<0.11	<0.074	ND
PW-23	Weiss W2978 Zion Church Rd. Mayville	3/11/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	**0.25** JB	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
		7/14/2010	NLS	--	--	<1.0	<0.16	<0.14	<0.11	<0.13	<0.11	<0.10	<0.12	<0.13	ND
		4/6/2011	NLS	--	--	<1.6	<0.29	<0.23	<0.13	<0.30	<0.30	<0.11	<0.28	<0.20	ND
			TA	--	--	<0.10	<0.20	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.032	ND
		10/6/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		4/11/2012	TA	**160**	**320**	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		10/5/2012	Pace	**135**	**358**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/2/2013	Pace	**108**	**385**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		10/1/2013	Pace	**107**	**426**	<0.22	<0.40	<0.20	<0.23	<0.12	<0.20	<0.19	<0.18	<0.19	ND
		4/25/2014	Pace	**94.4**	**383**	<0.50	<0.50	<0.25	<0.24	<0.23	<0.21	<0.25	<0.13	<0.20	ND
		10/6/2014	Pace	**99.3**	**405**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		4/17/2015	Pace	**108**	**379**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**100**	**424**	<0.88	<0.20	<0.15	<0.17	<0.16	<0.18	<0.13	<0.19	<0.10	ND
		4/5/2016	Pace	**66.7**	**353**	<0.34	<0.64	<0.19	<0.17	<0.17	<0.18	<0.15	<0.14	<0.081	ND
		10/4/2016	Pace	**76.7**	**391**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		4/4/2017	Pace	**83.6**	**411**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**103**	**412**	<0.32	<1.1	<0.14	<0.18	<0.073	<0.21	<0.12	<0.11	<0.074	ND
PW-27 (Abandoned)	All Line Construction N7477 Hwy. 67 Mayville	2/24/2009	NLS	--	--	<0.79	<0.31	**0.91**	**0.36** J	**120**	**3.9**	<0.15	**2.9**	**12**	ND
			CT	--	--	**3.0**	**1.1** B	**1.0**	**0.47** J	**110**	**4.4**	<0.30	**2.8**	**9.4**	ND
		3/11/2009	NLS	--	--	<0.95	<0.16	**0.70** J	**0.26** J	**100**	**3.2**	<0.20	**2.4**	**8.3**	ND
			CT	--	--	**2.4**	<0.22	**0.81**	**0.41** J	**89**	**4.1**	<0.30	**2.7**	**7.1**	ND
		6/30/2009	Siemens	--	--	**2.55**	<0.40	**0.91** J	**0.45** J	**115**	**3.71**	<0.30	**2.83**	**8.26**	ND
		2/10/2011	Siemens	**32.3**	**386**	**1.98** J	<0.40	**0.74** J	<0.40	**101**	**3.45**	<0.30	**2.31**	**6.48**	ND
		5/2/2012	Siemens	**26.4**	**334**	**1.42** J	<0.40	**0.42** J	<0.40	**53.6**	**1.81**	<0.30	**1.19** J	**4.02**	ND
		12/17/2012	Pace	**39.9**	**349**	**2.3**	<0.13	**0.69**	**0.17** J	**86.2**	**2.8**	<0.16	**1.2**	**9.1**	Methyl-tert-butyl ether **0.092** J 1,2,4 Trimethylbenzene **0.052** J
		2/20/2013	Pace	**36.7**	**360**	**2.3**	<0.13	**0.77**	<0.16	**87**	**3.3**	<0.16	**1.9**	**7.1**	ND

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-28	W. Muche N7650 Hwy. 67 Mayville	3/11/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	**0.18** J	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	**0.24** J	<0.27	<0.30	<0.24	<0.11	ND
		6/30/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	**0.19** J	<0.28	<0.20	<0.25	<0.19	ND
		7/14/2010	NLS	--	--	<1.0	<0.16	<0.14	<0.11	**0.28** J	<0.11	<0.10	<0.12	<0.13	ND
		4/6/2011	NLS	--	--	<1.6	<0.29	<0.23	<0.13	**0.39** J	<0.30	<0.11	<0.28	<0.20	ND
			TA	--	--	<0.10	<0.20	<0.050	<0.050	**0.30** J	<0.050	<0.050	<0.050	<0.032	ND
		10/6/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	**0.33** J	<0.30	<0.15	<0.25	<0.032	ND
		4/11/2012	TA	**17**	**280**	<0.50	<0.30	<0.25	<0.15	**0.45** J	<0.30	<0.15	<0.25	<0.032	ND
		10/5/2012	Pace	**15.3**	**316**	<0.31	<0.13	<0.072	<0.16	**0.74**	<0.14	<0.16	<0.11	<0.16	ND
		4/3/2013	Pace	**16.1**	**339**	<0.31	<0.13	<0.072	<0.16	**1**	<0.14	<0.16	<0.11	<0.16	ND
		10/1/2013	Pace	**18.0**	**353**	<0.22	<0.40	<0.20	<0.23	**1.4**	<0.20	<0.19	<0.18	<0.19	ND
		4/25/2014	Pace	**18.3**	**374**	<0.17	<0.34	<0.077	<0.13	**1.2**	<0.15	<0.099	<0.084	<0.20	ND
		10/6/2014	Pace	**26.2**	**331**	<0.27	<0.34	<0.087	<0.17	**1.8**	<0.15	<0.12	<0.084	<0.082	ND
		4/17/2015	Pace	**21.7**	**344**	<0.27	<0.34	<0.087	<0.17	**2.0**	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**24.4**	**365**	<0.88	<0.20	<0.15	<0.17	**2.5**	<0.18	<0.13	<0.19	<0.10	ND
		4/5/2016	Pace	**24.1**	**362**	<0.34	<0.64	<0.19	<0.17	**2.2**	<0.18	<0.15	<0.14	<0.081	ND
		10/4/2016	Pace	**27.2**	**354**	<0.18	<0.21	<0.088	<0.089	**2.1**	<0.11	<0.12	<0.044	<0.098	ND
		4/4/2017	Pace	**27.4**	**354**	<0.18	<0.21	<0.088	<0.089	**2.3**	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**26.8**	**352**	<0.32	<1.1	<0.14	<0.18	**2.6**	<0.21	<0.12	<0.11	<0.074	ND
PW-32	J. Oechsner W2983 Zion Church Rd. Mayville	4/7/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	**0.12** J	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
		9/23/2009	NLS	--	--	<1.2	<0.48	<0.19	<0.22	<0.17	<0.19	<0.17	<0.23	<0.21	ND
		7/14/2010	NLS	--	--	<1.0	<0.16	<0.14	<0.11	**0.14** J	<0.11	<0.10	<0.12	<0.13	ND
		4/5/2011	NLS	--	--	<1.6	<0.29	<0.23	<0.13	<0.30	<0.30	<0.11	<0.28	<0.20	ND
			TA	--	--	<0.10	<0.20	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.032	Chlorobenzene **0.050** J
		10/6/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		4/11/2012	TA	**41**	**300**	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		10/5/2012	Pace	**40.2**	**349**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/2/2013	Pace	**39.8**	**478**	<0.31	<0.13	<0.072	<0.16	**0.27** J	<0.14	<0.16	<0.11	<0.16	ND
		10/1/2013	Pace	**40.5**	**362**	<0.22	<0.40	<0.20	<0.23	<0.12	<0.20	<0.19	<0.18	<0.19	ND
		4/25/2014	Pace	**40.7**	**374**	<0.50	<0.50	<0.25	<0.24	**0.30** J	<0.21	<0.25	<0.13	<0.20	ND
		10/6/2014	Pace	**41.2**	**355**	<0.27	<0.34	<0.087	<0.17	**0.33** J	<0.15	<0.12	<0.084	<0.082	ND
		4/24/2015	Pace	**35.4**	**334**	<0.27	<0.34	<0.087	<0.17	**0.16** J	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**37.1**	**355**	<0.88	<0.20	<0.15	<0.17	**0.53**	<0.18	<0.13	<0.19	<0.10	ND

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-32 (cont.)	J. Oechsner W2983 Zion Church Rd. Mayville	4/5/2016	Pace	**39.0**	**348**	<0.34	<0.64	<0.19	<0.17	**0.32** J	<0.18	<0.15	<0.14	<0.081	ND
		10/4/2016	Pace	**42.3**	**345**	<0.18	<0.21	<0.088	<0.089	**0.39** J	<0.11	<0.12	<0.044	<0.098	ND
		4/4/2017	Pace	**41.6**	**340**	<0.18	<0.21	<0.088	<0.089	**0.26** J	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**45.1**	**358**	<0.32	<1.1	<0.14	<0.18	**0.31**	<0.21	<0.12	<0.11	<0.074	ND
PW-38	King N7746 Hwy. 67 Mayville	5/14/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	**0.57** J	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
		7/14/2010	NLS	--	--	<1.0	<0.16	<0.14	<0.11	<0.13	<0.11	<0.10	<0.12	<0.13	ND
		4/6/2011	NLS	--	--	<1.6	<0.29	<0.23	<0.13	<0.30	<0.30	<0.11	<0.28	<0.20	ND
			TA	--	--	<0.10	<0.20	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.032	Toluene **0.22** J
		10/6/2011	TA	--	--	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	Toluene **0.35** J
		4/11/2012	TA	<3.1	**310**	<0.50	<0.30	<0.25	<0.15	<0.30	<0.30	<0.15	<0.25	<0.032	ND
		10/5/2012	Pace	<2.0	**338**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/2/2013	Pace	**2.4** J	**268**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		10/1/2013	Pace	**3.2** J	**349**	<0.22	<0.40	<0.20	<0.23	<0.12	<0.20	<0.19	<0.18	<0.19	ND
		4/25/2014	Pace	**2.9** J	**361**	<0.50	<0.50	<0.25	<0.24	<0.23	<0.21	<0.25	<0.13	<0.20	ND
		10/6/2014	Pace	**3.2** J	**335**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		4/24/2015	Pace	**2.9** JB	**338**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**2.7** J	**341**	<0.88	<0.20	<0.15	<0.17	<0.16	<0.18	<0.13	<0.19	<0.10	ND
		4/5/2016	Pace	**3.0** J	**344**	<0.34	<0.64	<0.19	<0.17	<0.17	<0.18	<0.15	<0.14	<0.081	ND
		10/4/2016	Pace	**1.6** J	**340**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		4/4/2017	Pace	**1.5** J	**339**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**2.5**	**334**	<0.32	<1.1	<0.14	<0.18	<0.073	<0.21	<0.12	<0.11	<0.074	ND
Annual Monitoring Locations															
PW-42	Steinbach W2772 Zion Church Rd. Mayville	10/5/2012	Pace	<2.0	**324**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/2/2013	Pace	**2.2** J	**320**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		10/6/2014	Pace	**3.4** J	**327**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**3.0** J	**342**	<0.88	<0.20	<0.15	<0.17	<0.16	<0.18	<0.13	<0.19	<0.10	ND
		10/4/2016	Pace	**1.6** J	**330**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**2.3**	**328**	<0.32	<1.1	<0.14	<0.018	<0.073	<0.21	<0.12	<0.11	<0.074	ND
PW-43	Hinz W2698 Zion Church Rd. Mayville	10/5/2012	Pace	**11.4**	**215**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/3/2013	Pace	**10.8**	**211**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		10/6/2014	Pace	**12.9**	**226**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**15**	**223**	<0.88	<0.20	<0.15	<0.17	<0.16	<0.18	<0.13	<0.19	<0.10	ND
		10/4/2016	Pace	**12.5**	**218**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**12.2**	**225**	<0.32	<1.1	<0.14	<0.18	<0.073	<0.21	<0.21	<0.11	<0.074	ND

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

(Results are in µg/L, except where otherwise noted)

Note: See last page for abbreviations, notes, and groundwater standards.

Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-44	Christian N7686 Ekren Rd. Mayville	10/5/2012	Pace	<2.0	**291**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		4/2/2013	Pace	**2.3** J	**316**	<0.31	<0.13	<0.072	<0.16	<0.080	<0.14	<0.16	<0.11	<0.16	ND
		10/6/2014	Pace	**2.9** J	**319**	<0.27	<0.34	<0.087	<0.17	<0.11	<0.15	<0.12	<0.084	<0.082	ND
		10/6/2015	Pace	**2.7** J	**342**	<0.88	<0.20	<0.15	<0.17	<0.16	<0.18	<0.13	<0.19	<0.10	ND
		10/4/2016	Pace	**1.2** J	**326**	<0.18	<0.21	<0.088	<0.089	<0.085	<0.11	<0.12	<0.044	<0.098	ND
		10/3/2017	Pace	**1.6** J	**332**	<0.32	<1.1	<0.14	<0.18	<0.073	<0.21	<0.12	<0.11	<0.074	ND
Non-Routine Monitoring Locations															
PW-1	Church View Farms J. Qualmann N7110 Hwy. V Horicon	4/7/2009	NLS	**34**	**240**	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
PW-3	Horicon Marsh Bowmen N7240 Hwy. V Horicon	4/30/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-4	Advanced Disposal N7271 Hwy. V Horicon	4/3/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
None	Wondra N7877 Hwy 67 Mayville	10/22/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	Chloroform **0.36**
PW-18	Advanced Disposal N7785 Hwy. 67 Mayville	4/3/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-18 Hand Pump	Advanced Disposal N7785 Hwy. 67 Mayville	4/3/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-24	St. John's Lutheran Church N7074 Hwy. V Mayville	4/30/2009	NLS	**33**	**320**	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	**0.3** J	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-26	Goodearle W3653 Decora Rd. Horicon	4/30/2009	NLS	**13**	**310**	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
PW-29	Persha N7241 Hwy. 67 Mayville	4/3/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-30	Wendorff N7306 Hwy. 67 Mayville	6/23/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-31	Wendorff N7306 Hwy. 67 Mayville	4/3/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND

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Well Number	Well Owner	Sample Date	Lab	Chloride (mg/L)	Alkalinity (mg/L)	Chloroethane	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Other VOCs
PW-33	Lagerman W3230 STH 33 Iron Ridge	4/3/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-34	R H Equipment N7123 Hwy. 67 Mayville	4/13/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-35	Lewis N7143 Hwy. 67 Mayville	4/13/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-36	Mayville Animal Clinic N7860 Hwy. 67 Mayville	4/21/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-37	Halsne N7817 Hwy. 67 Mayville	4/30/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	**0.40** J	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
PW-Office Well	Advanced Disposal N7296 Hwy. V Horicon	4/7/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	**3.5**	<0.25	<0.19	1,4 Dichlorobenzene **0.27** J
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	**3.3**	<0.24	<0.11	1,4 Dichlorobenzene **0.22** J
		4/30/2009	NLS	--	--	<0.95	<0.16	<0.25	<0.18	<0.10	<0.28	<0.20	<0.25	<0.19	ND
			CT	--	--	<0.40	<0.22	<0.21	<0.24	<0.21	<0.27	<0.30	<0.24	<0.11	ND
NR 140 Groundwater Enforcement Standard				250	NS	400	30	850	7	70	100	5	5	0.2	1,2-Dichloroethane 5 1,4 Dichlorobenzene 75 Benzene 5 Chloroform 6 Methyl-tert-butyl ether 60 Methylene Chloride 5 Toluene 800 Trimethylbenzenes 480
Drinking Water Standard (Maximum Contaminant Level)				250	NS	NS	NS	NS	7	70	100	5	5	0.2	1,2-Dichloroethane 5 1,4 Dichlorobenzene 75 Benzene 5 Chloroform (TTHM) 80 Methylene Chloride 5 Toluene 1,000

I:\3744\Reports\2018 Phase 3 Report\Tables\[Table3_Water Supply Well VOCs.xlsx]Results

Table 3. LGRL VOC Investigation Water Supply Well Sample Results - Through February 2018

Abbreviations:
NS = No standard established
TTHM = Trihalomethanes (disinfection byproducts including chloroform)
ND = Not detected
mg/L = Milligrams per Liter
µg/L = Micrograms per Liter
-- = Not Analyzed

CT = CT Laboratories, Baraboo, WI
NLS = Northern Lake Service, Inc., Crandon, WI
Siemens = Siemens Water Technologies
TA = TestAmerica, Watertown, WI
Pace = Pace Analytical Services, Inc., Green Bay, WI

Bold indicates detected compound.
Bold and underline indicates result above drinking water standard.

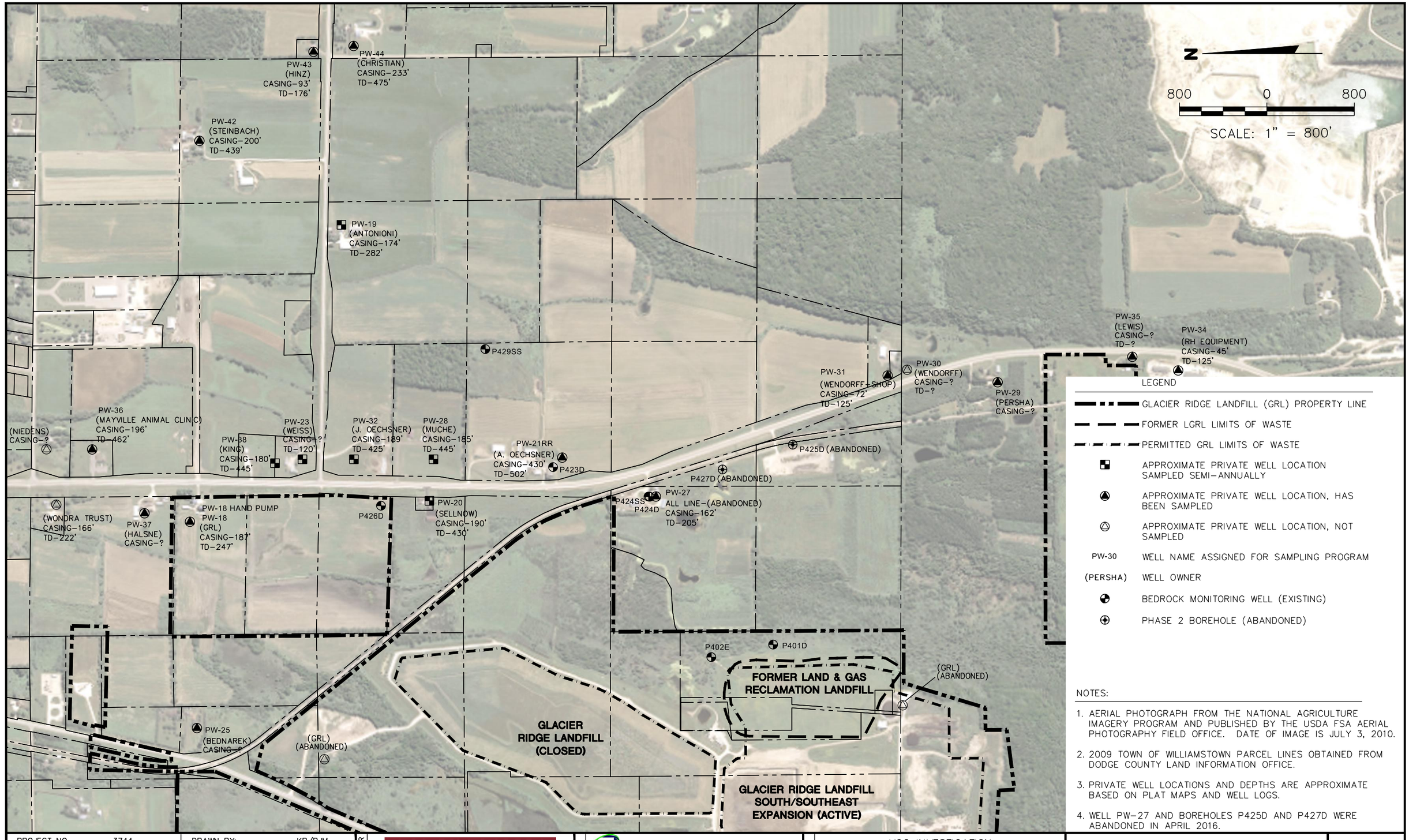
Notes:
* Sample collected at the pressure tank prior to the iron filtration system.
** Sample collected at the kitchen tap after the water passed through the iron filtration system.

Laboratory Notes/Qualifiers:
B = Compound also detected in blank sample
J = Estimated value below laboratory limit of quantitation
H1 = Analysis conducted outside the recognized method holding time. Analyzed 2 days outside of hold time.
L2 = Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
L3 = Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M1 = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2 = The lab does not hold The NELCA Institute (TNI) accreditation for this parameter.

Created by:	JSN	Date:	4/27/2009
Last revision by:	JSN	Date:	3/15/2018
Checked by:	NDK	Date:	3/15/2018

I:\3744\Reports\2018 Phase 3 Report\Tables\[Table3_Water Supply Well VOCs.xlsx]Notes

FIGURES



LEGEND

- GLACIER RIDGE LANDFILL (GRL) PROPERTY LINE
- FORMER LGRL LIMITS OF WASTE
- PERMITTED GRL LIMITS OF WASTE
- APPROXIMATE PRIVATE WELL LOCATION SAMPLED SEMI-ANNUALLY
- APPROXIMATE PRIVATE WELL LOCATION, HAS BEEN SAMPLED
- APPROXIMATE PRIVATE WELL LOCATION, NOT SAMPLED
- PW-30 WELL NAME ASSIGNED FOR SAMPLING PROGRAM
- (PERSHA) WELL OWNER
- BEDROCK MONITORING WELL (EXISTING)
- PHASE 2 BOREHOLE (ABANDONED)

NOTES:

1. AERIAL PHOTOGRAPH FROM THE NATIONAL AGRICULTURE IMAGERY PROGRAM AND PUBLISHED BY THE USDA FSA AERIAL PHOTOGRAPHY FIELD OFFICE. DATE OF IMAGE IS JULY 3, 2010.
2. 2009 TOWN OF WILLIAMSTOWN PARCEL LINES OBTAINED FROM DODGE COUNTY LAND INFORMATION OFFICE.
3. PRIVATE WELL LOCATIONS AND DEPTHS ARE APPROXIMATE BASED ON PLAT MAPS AND WELL LOGS.
4. WELL PW-27 AND BOREHOLES P425D AND P427D WERE ABANDONED IN APRIL 2016.

PROJECT NO.	3744	DRAWN BY:	KP/BJM
DRAWN:	09/13/11	CHECKED BY:	EO/SC
REVISED:	03/14/18	APPROVED BY:	

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

CLIENT: ADVANCED DISPOSAL SERVICES GLACIER RIDGE LANDFILL, LLC.

SITE: VOC INVESTIGATION LAND AND GAS RECLAMATION LANDFILL DODGE COUNTY, WISCONSIN

BEDROCK MONITORING WELL LOCATIONS

FIGURE 1

I:\3744\Drawings-General\Pr-bedrock wells 2013.dwg, 3/14/2018 9:57:54 AM

N

800 0 800

SCALE: 1" = 800'

PW-43 (HINZ) CASING–93' TD–176'

PW-44 (CHRISTIAN) CASING–233' TD–475'

B

PW-42 (STEINBACH) CASING–200' TD–439'

PW-19 (ANTONIONI) CASING–174' TD–262'

P429SS

PW-35 (LEWIS) CASING–? TD–?

PW-34 (RH EQUIPMENT) CASING–45' TD–125'

PW-31 (WENDORFF–SHOP) CASING–72' TD–125'

PW-30 (WENDORFF) CASING–? TD–?

PW-29 (PERSHA) CASING–?

A'

(NIEDENS) CASING–?

PW-36 (MAYVILLE ANIMAL CLINIC) CASING–196' TD–462'

PW-38 (KING) CASING–180' TD–445'

PW-23 (WEISS) CASING–? TD–120'

PW-32 (J. OECHSNER) CASING–189' TD–425'

PW-28 (MUCHE) CASING–185' TD–445'

PW-21RR (A. OECHSNER) CASING–430' TD–502'

P423D

P425D

P427D

A

P426D

PW-20 (SELLNOW) CASING–190' TD–430'

P424SS

P424D

PW-27 ALL LINE–ABANDONED CASING–162' TD–205'

(WONDRA TRUST) CASING–166' TD–222'

PW-37 (HALSNE) CASING–?

PW-18 HAND PUMP

PW-18 (GRL) CASING–187' TD–247'

R402E

P401D

B'

FORMER LAND & GAS RECLAMATION LANDFILL

(GRL) (ABANDONED)

PW-25 (BEDNAREK) CASING–?

(GRL) (ABANDONED)

GLACIER RIDGE LANDFILL (CLOSED)

GRL SOUTH EXPANSION

LEGEND

- GLACIER RIDGE LANDFILL (GRL) PROPERTY LINE
- FORMER LGRL LIMITS OF WASTE
- PERMITTED GRL LIMITS OF WASTE
- APPROXIMATE PRIVATE WELL LOCATION, SAMPLE COLLECTED
- APPROXIMATE PRIVATE WELL LOCATION, NOT SAMPLED
- APPROXIMATE PRIVATE WELL LOCATION, SAMPLED SEMI–ANNUALLY
- PW-30 WELL NAME ASSIGNED FOR SAMPLING PROGRAM
- (PERSHA) WELL OWNER
- BEDROCK MONITORING WELL (EXISTING)
- PHASE 2 BOREHOLE (ABANDONED)
- PHASE 3 BOREHOLE

NOTES:

1. AERIAL PHOTOGRAPH FROM THE NATIONAL AGRICULTURE IMAGERY PROGRAM AND PUBLISHED BY THE USDA FSA AERIAL PHOTOGRAPHY FIELD OFFICE. DATE OF IMAGE IS JULY 3, 2010.
2. 2009 TOWN OF WILLIAMSTOWN PARCEL LINES OBTAINED FROM DODGE COUNTY LAND INFORMATION OFFICE.
3. PRIVATE WELL LOCATIONS AND DEPTHS ARE APPROXIMATE BASED ON PLAT MAPS AND WELL LOGS.
4. WELL PW–27 AND BOREHOLES P425D AND P427D WERE ABANDONED IN APRIL 2016.

PROJECT NO.	3744	DRAWN BY:	KP
DRAWN:	04/01/16	CHECKED BY:	EO
REVISED:	03/14/18	APPROVED BY:	

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

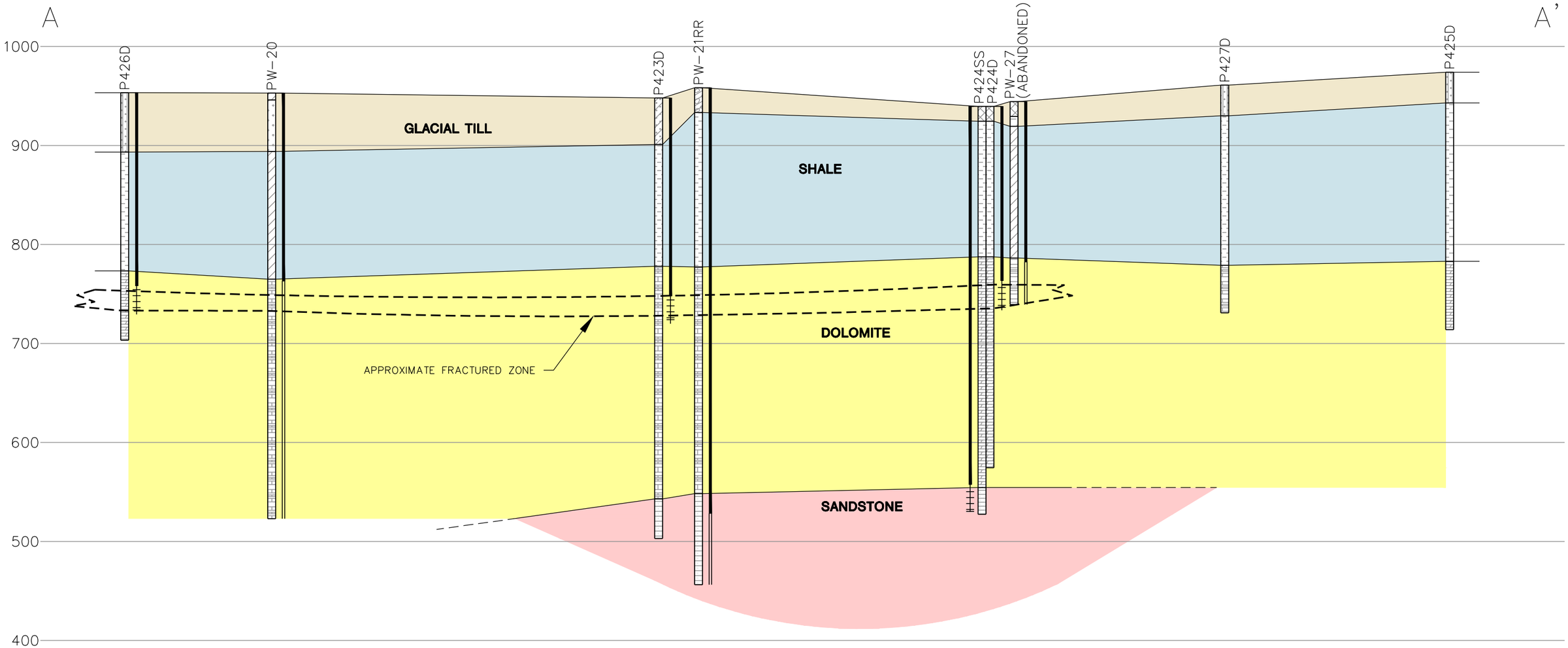
CLIENT: ADVANCED DISPOSAL SERVICES GLACIER RIDGE LANDFILL, LLC.

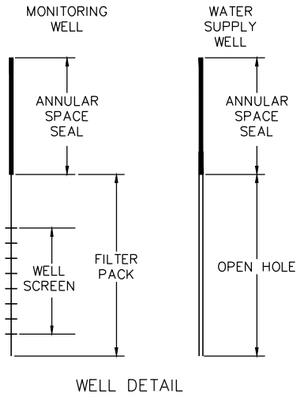
SITE: VOC INVESTIGATION LAND AND GAS RECLAMATION LANDFILL DODGE COUNTY, WISCONSIN

CROSS SECTION LOCATION MAP

FIGURE 2

I:\3744\Drawings-General\XSEC_2016.dwg, 3/14/2018 9:54:57 AM





WELL DETAIL

NOTES:

1. THE PORTION OF ANY BOREHOLE EXTENDING BELOW THE MONITORING WELL SCREEN AND FILTER PACK WAS BACKFILLED WITH BENTONITE CHIPS PRIOR TO WELL CONSTRUCTION.
2. MONITORING WELL P423D WAS INSTALLED IN FORMER WATER SUPPLY WELL PW-21R AFTER BACKFILLING THE LOWER PORTION WITH BENTONITE CHIPS.
3. APPROXIMATE FRACTURED ZONE BASED ON BOREHOLE LOGGING AND PACKER PUMPING TEST IN MONITORING WELL BOREHOLES AND PW-27. THE ZONE IS INFERRED AT PW-20 AND PW-21RR, WHICH WERE NOT TESTED.

0 300

HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'
VERTICAL EXAGGERATION = 3X

LEGEND

- SILTY SAND
- SHALE
- DOLOMITE
- LIMESTONE
- LEAN CLAY
- SAND, WELL GRADED
- SAND WITH GRAVEL
- SANDSTONE
- CLAYEY CRAVEL
- FILL

PROJECT NO.	3744	DRAWN BY:	KP
DRAWN:	04/01/16	CHECKED BY:	EO
REVISED:	04/05/18	APPROVED BY:	

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

CLIENT: Advanced Disposal
ADVANCED DISPOSAL SERVICES
GLACIER RIDGE LANDFILL, LLC.

SITE: VOC INVESTIGATION
LAND AND GAS RECLAMATION LANDFILL
DODGE COUNTY, WISCONSIN

CROSS SECTION A-A'

FIGURE 3A

I:\3744\Drawings-General\XSEC_2016.dwg, 4/5/2018 8:40:11 AM

B

B'

1000
900
800
700
600
500
400

PW-42
PW-19
P429SS
P423D
PW-21RR
P424SS
P424D
PW-27 (ABANDONED)
P402E

GLACIAL TILL
SHALE
DOLOMITE
SANDSTONE

APPROXIMATE FRACTURED ZONE

MONITORING WELL
WATER SUPPLY WELL
ANNULAR SPACE SEAL
WELL SCREEN
FILTER PACK
OPEN HOLE

WELL DETAIL

NOTES:

1. APPROXIMATE FRACTURED ZONE BASED ON BOREHOLE LOGGING AND PACKER PUMPING TEST IN MONITORING WELL BOREHOLES AND PW-27. THE ZONE IS INFERRED AT PW-21RR, WHICH WAS NOT TESTED.
2. PW-19 WELL CONSTRUCTION REPORT INDICATES THIS WELL WAS ORIGINALLY DRILLED TO A DEPTH OF 282 FEET. DAN ANTONIONI, THE PRESENT OWNER, STATED ON 02/27/2017 THAT THE WELL WAS DEEPENED TO 325 FEET IN 1962.
3. THE PORTION OF P423D EXTENDING BELOW THE MONITORING WELL SCREEN AND FILTER PACK WAS BACKFILLED WITH BENTONITE CHIPS PRIOR TO WELL CONSTRUCTION.

0 500

HORIZONTAL SCALE: 1" = 500'
VERTICAL SCALE: 1" = 100'
VERTICAL EXAGGERATION = 5X

LEGEND

- SILTY SAND
- SHALE
- DOLOMITE
- LIMESTONE
- LEAN CLAY
- SAND, WELL GRADED
- SAND WITH GRAVEL
- SANDSTONE
- CLAYEY GRAVEL
- FILL
- SILT
- GRAVEL
- SAND, POORLY GRADED
- PEAT

PROJECT NO.	3744	DRAWN BY:	BJM
DRAWN:	03/10/17	CHECKED BY:	NK
REVISED:	04/05/18	APPROVED BY:	

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

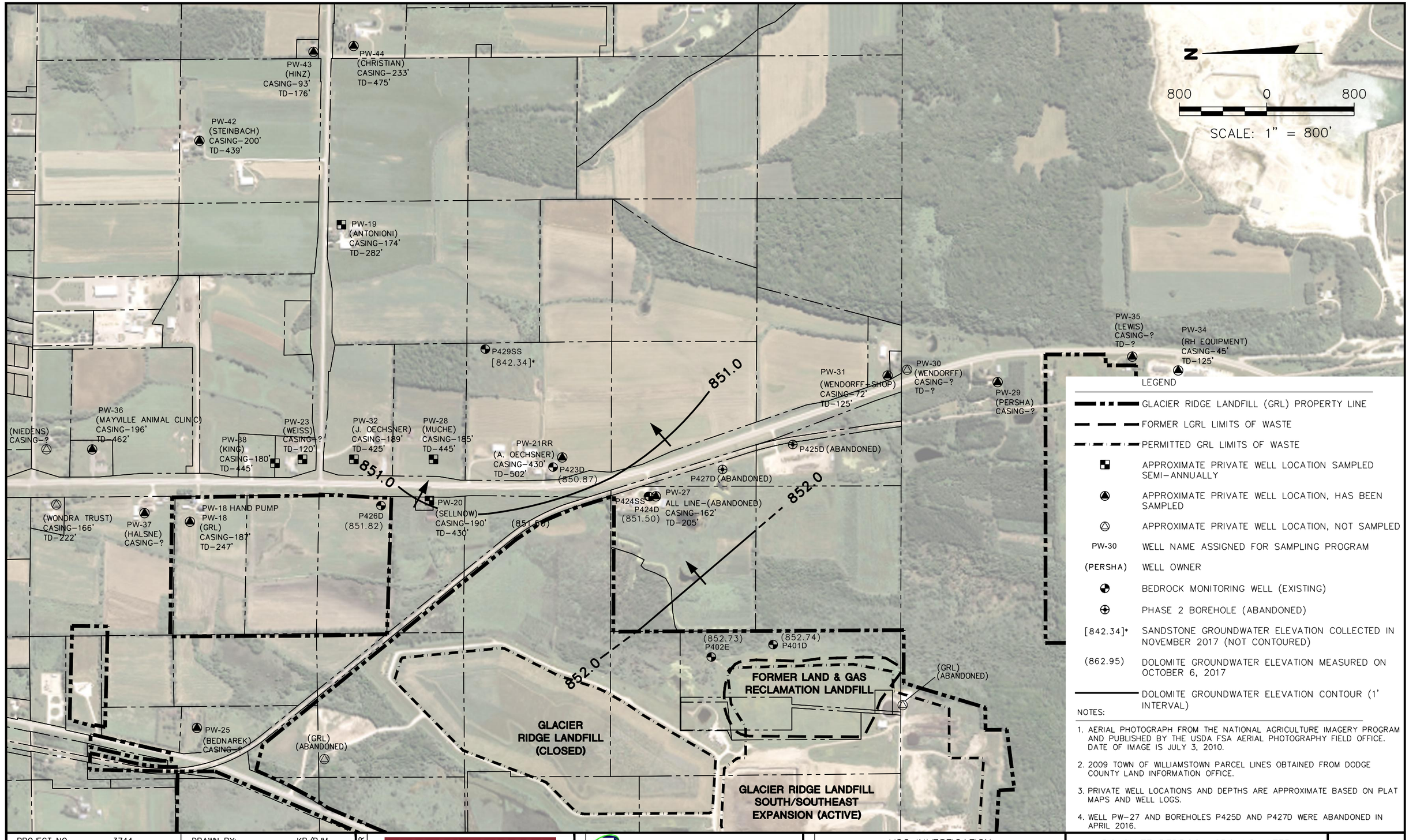
CLIENT: Advanced Disposal
ADVANCED DISPOSAL SERVICES
GLACIER RIDGE LANDFILL, LLC.

SITE: VOC INVESTIGATION
LAND AND GAS RECLAMATION LANDFILL
DODGE COUNTY, WISCONSIN

CROSS SECTION B-B'

FIGURE 3B

I:\3744\Drawings-General\XSEC_2016.dwg, 4/5/2018 8:40:59 AM



LEGEND

- GLACIER RIDGE LANDFILL (GRL) PROPERTY LINE
- FORMER LGRL LIMITS OF WASTE
- PERMITTED GRL LIMITS OF WASTE
- APPROXIMATE PRIVATE WELL LOCATION SAMPLED SEMI-ANNUALLY
- APPROXIMATE PRIVATE WELL LOCATION, HAS BEEN SAMPLED
- APPROXIMATE PRIVATE WELL LOCATION, NOT SAMPLED
- PW-30 — WELL NAME ASSIGNED FOR SAMPLING PROGRAM
- (PERSHA) — WELL OWNER
- BEDROCK MONITORING WELL (EXISTING)
- PHASE 2 BOREHOLE (ABANDONED)
- [842.34]* — SANDSTONE GROUNDWATER ELEVATION COLLECTED IN NOVEMBER 2017 (NOT CONTOURED)
- (862.95) — DOLOMITE GROUNDWATER ELEVATION MEASURED ON OCTOBER 6, 2017
- DOLOMITE GROUNDWATER ELEVATION CONTOUR (1' 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 JULY 3, 2010.
2. 2009 TOWN OF WILLIAMSTOWN PARCEL LINES OBTAINED FROM DODGE COUNTY LAND INFORMATION OFFICE.
3. PRIVATE WELL LOCATIONS AND DEPTHS ARE APPROXIMATE BASED ON PLAT MAPS AND WELL LOGS.
4. WELL PW-27 AND BOREHOLES P425D AND P427D WERE ABANDONED IN APRIL 2016.

PROJECT NO.	3744	DRAWN BY:	KP/BJM
DRAWN:	09/13/11	CHECKED BY:	NK
REVISED:	04/05/18	APPROVED BY:	

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

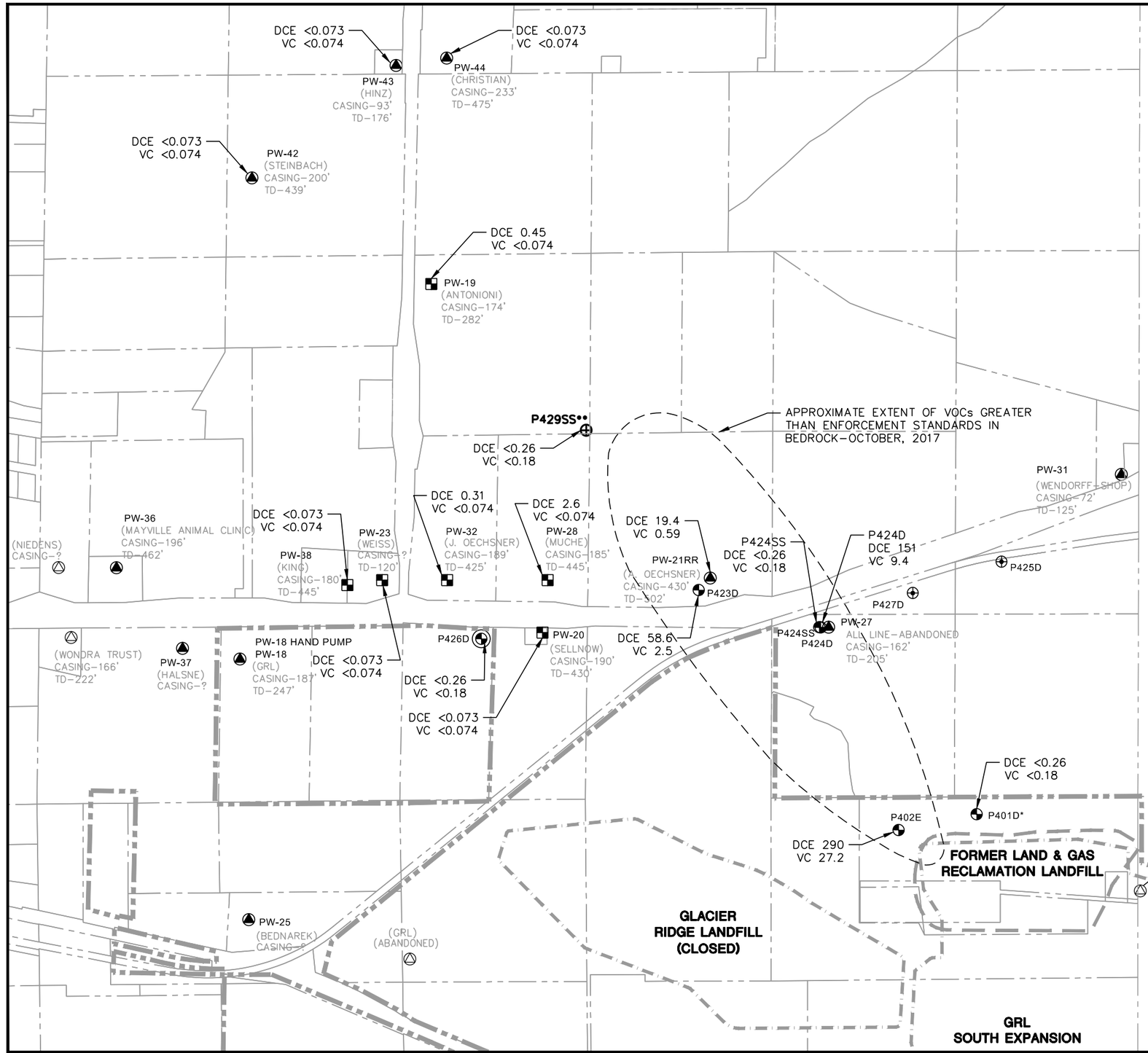
CLIENT: ADVANCED DISPOSAL SERVICES GLACIER RIDGE LANDFILL, LLC.

SITE: VOC INVESTIGATION LAND AND GAS RECLAMATION LANDFILL DODGE COUNTY, WISCONSIN

DOLOMITE BEDROCK GROUNDWATER ELEVATIONS AND POTENTIOMETRIC SURFACE CONTOURS

FIGURE 4

I:\3744\Drawings-General\Pr-bedrock wells 2013.dwg, 4/5/2018 8:49:29 AM



N

800 0 800

SCALE: 1" = 800'

LEGEND

- GLACIER RIDGE LANDFILL (VGRL) PROPERTY LINE
- EXISTING/APROVED LIMITS OF WASTE
- PERMITTED LIMITS OF WASTE
- APPROXIMATE PRIVATE WELL LOCATION, SAMPLE COLLECTED
- APPROXIMATE PRIVATE WELL LOCATION, NOT SAMPLED
- APPROXIMATE PRIVATE WELL LOCATION, SAMPLED SEMI–ANNUALLY
- PW-30 — WELL NAME ASSIGNED FOR SAMPLING PROGRAM
- (PERSHA) — WELL OWNER
- BEDROCK MONITORING WELL (EXISTING)
- PHASE 2 BOREHOLE (ABANDONED)
- PHASE 2 BOREHOLE AND BEDROCK MONITORING WELL
- PROPOSED MONITORING WELL
- DCE — CIS–1,2–DICHLOROETHYLENE (µg/L) (PAL=7; ES=70)
- VC — VINYL CHLORIDE (µg/L) (PAL=0.02; ES=0.2)
- ** — MEASURED IN NOVEMBER 2017
- * — MEASURED IN DECEMBER 2017

RE NOTES:

1. AERIAL PHOTOGRAPH FROM THE NATIONAL AGRICULTURE IMAGERY PROGRAM AND PUBLISHED BY THE USDA FSA AERIAL PHOTOGRAPHY FIELD OFFICE. DATE OF IMAGE IS JULY 3, 2010.
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3. PRIVATE WELL LOCATIONS AND DEPTHS ARE APPROXIMATE BASED ON PLAT MAPS AND WELL LOGS.
4. WELL PW–27 AND BOREHOLES P425D AND P427D WERE ABANDONED IN APRIL 2016.

PROJECT NO.	3744	DRAWN BY:	KP/BJM
DRAWN:	04/01/16	CHECKED BY:	NK
REVISED:	03/20/18	APPROVED BY:	

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

CLIENT: Advanced Disposal
ADVANCED DISPOSAL SERVICES
GLACIER RIDGE LANDFILL, LLC.

SITE: VOC INVESTIGATION
LAND AND GAS RECLAMATION LANDFILL
DODGE COUNTY, WISCONSIN

VOCs IN BEDROCK GROUNDWATER
OCTOBER 2017

FIGURE
5

I:\3744\Drawings-General\RSLTS-VOC.dwg, 3/20/2018 2:49:43 PM

Figure 6. Cis-1,2-DCE Concentration Trends in Bedrock Monitoring Wells

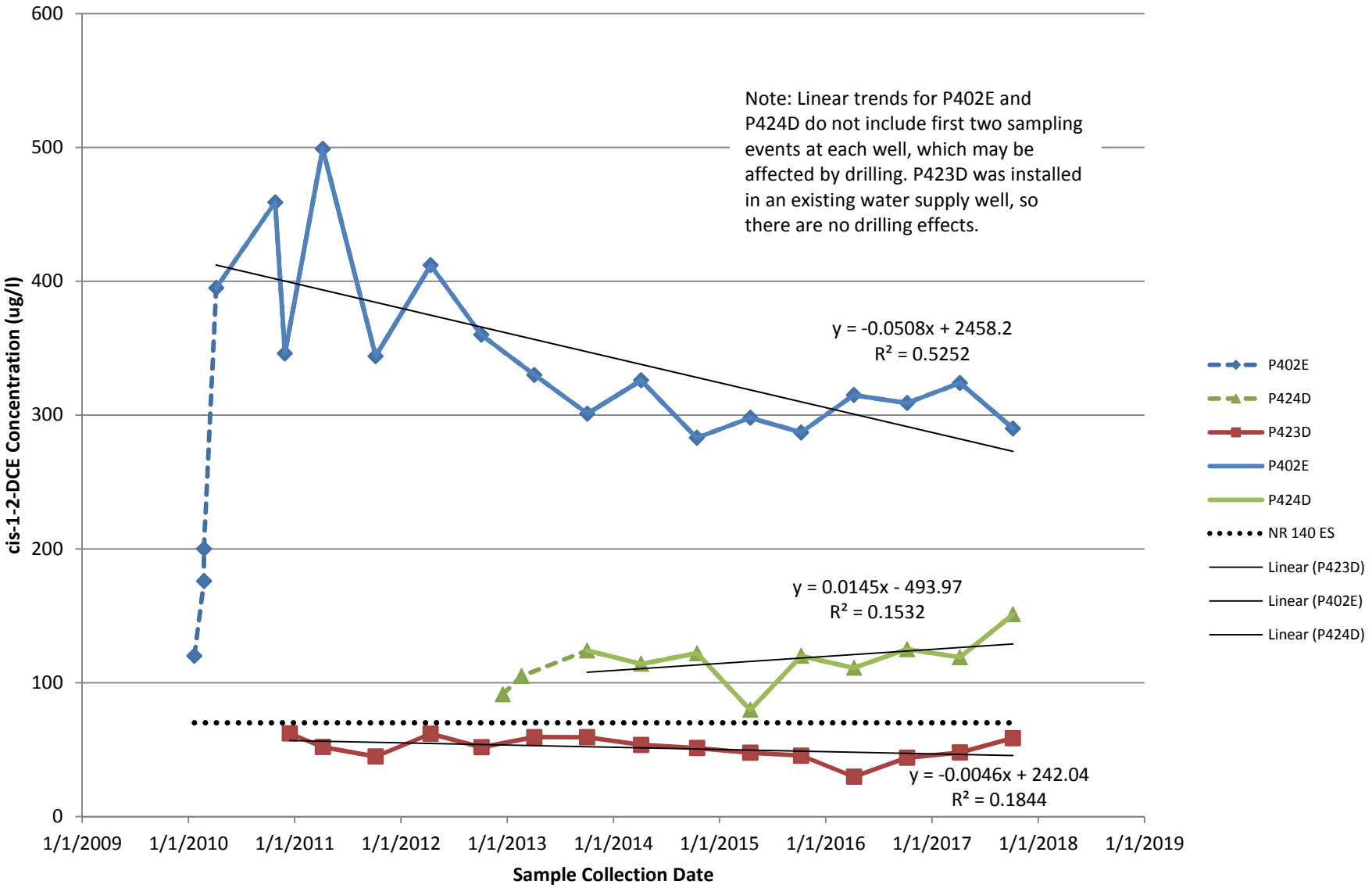


Figure 7. Vinyl Chloride Concentration Trends in Bedrock Monitoring Wells

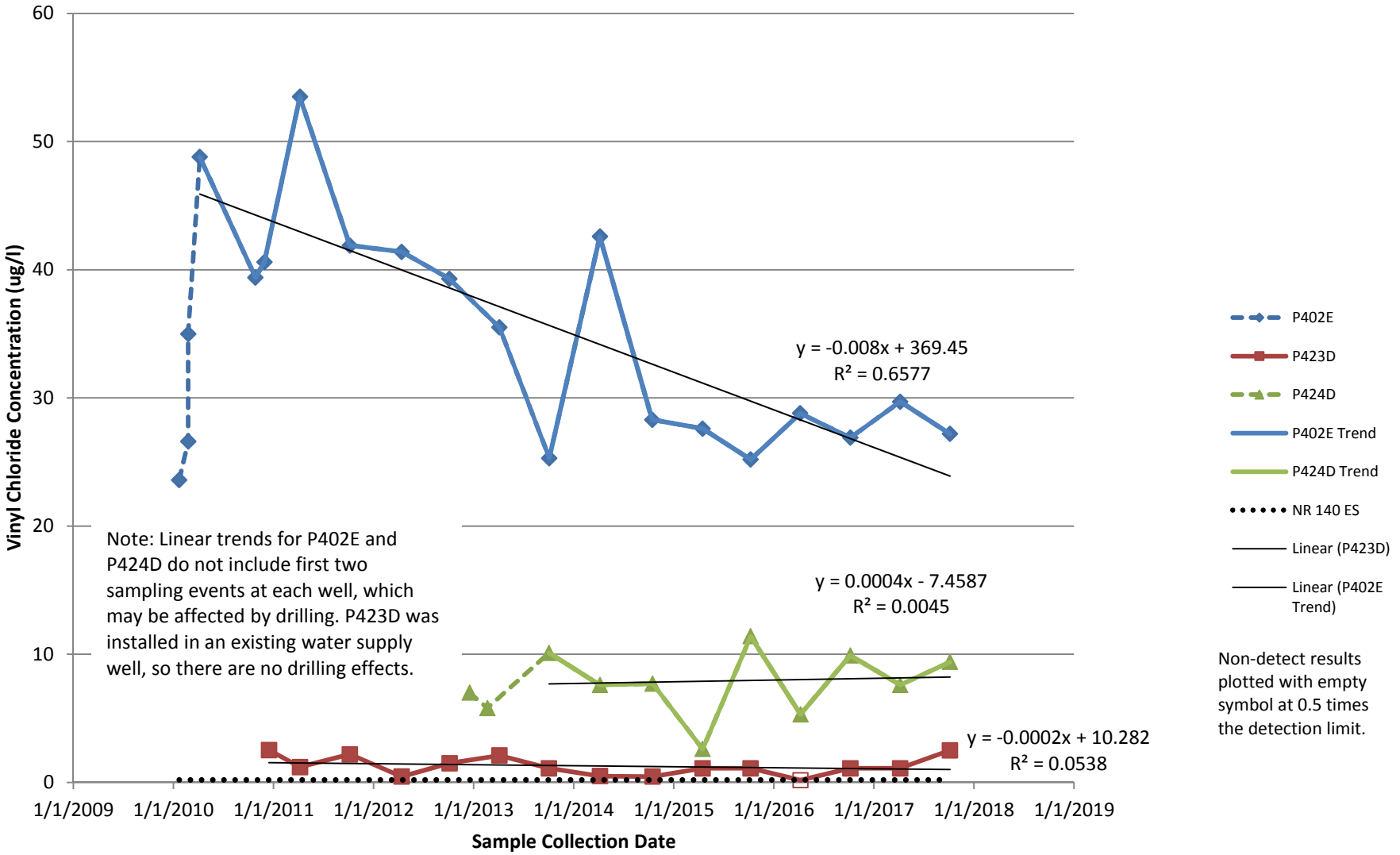


Figure 8. Cis-1,2-Dichloroethylene Trends in Water Supply Wells Downgradient from LGRL

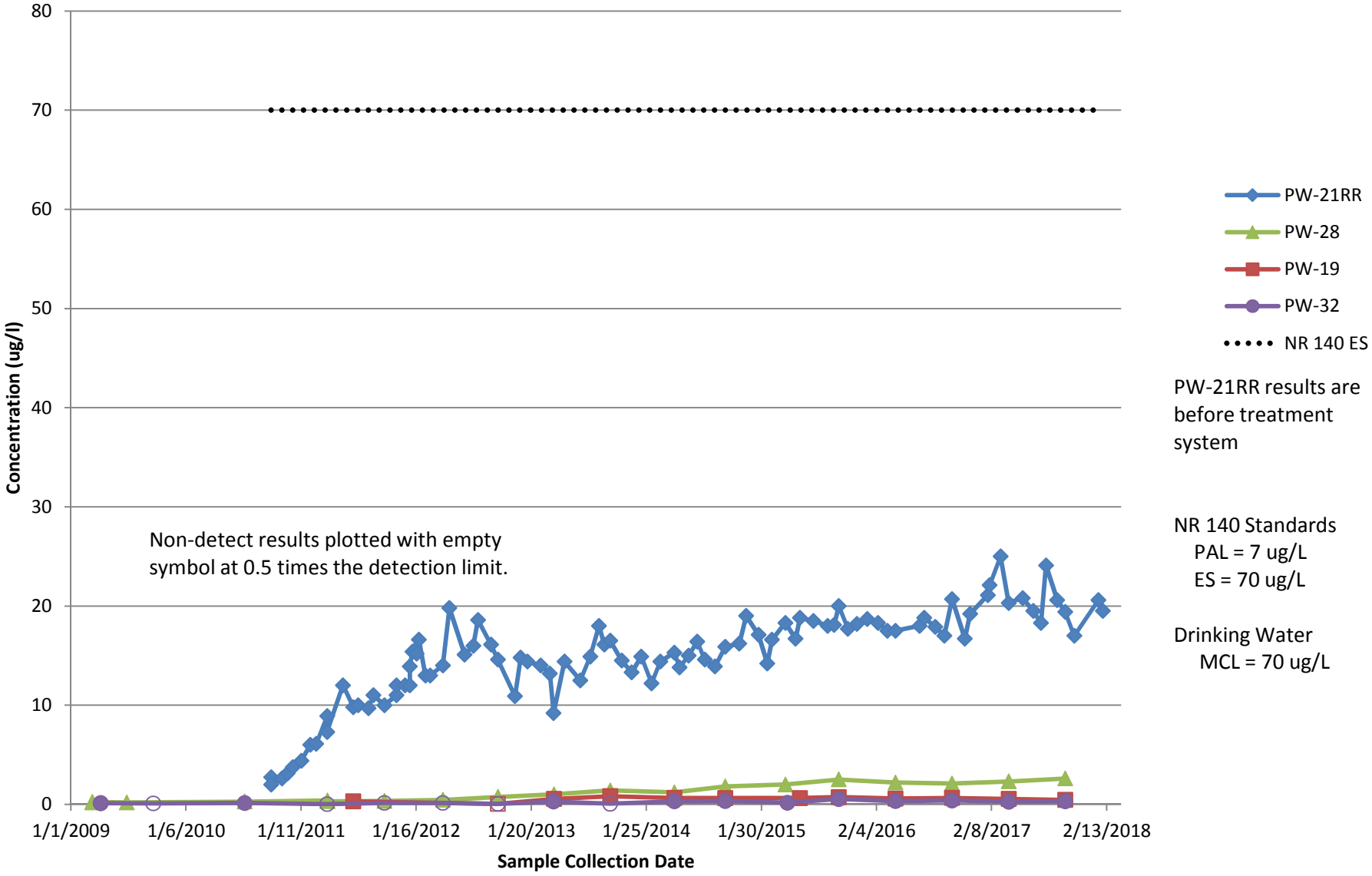
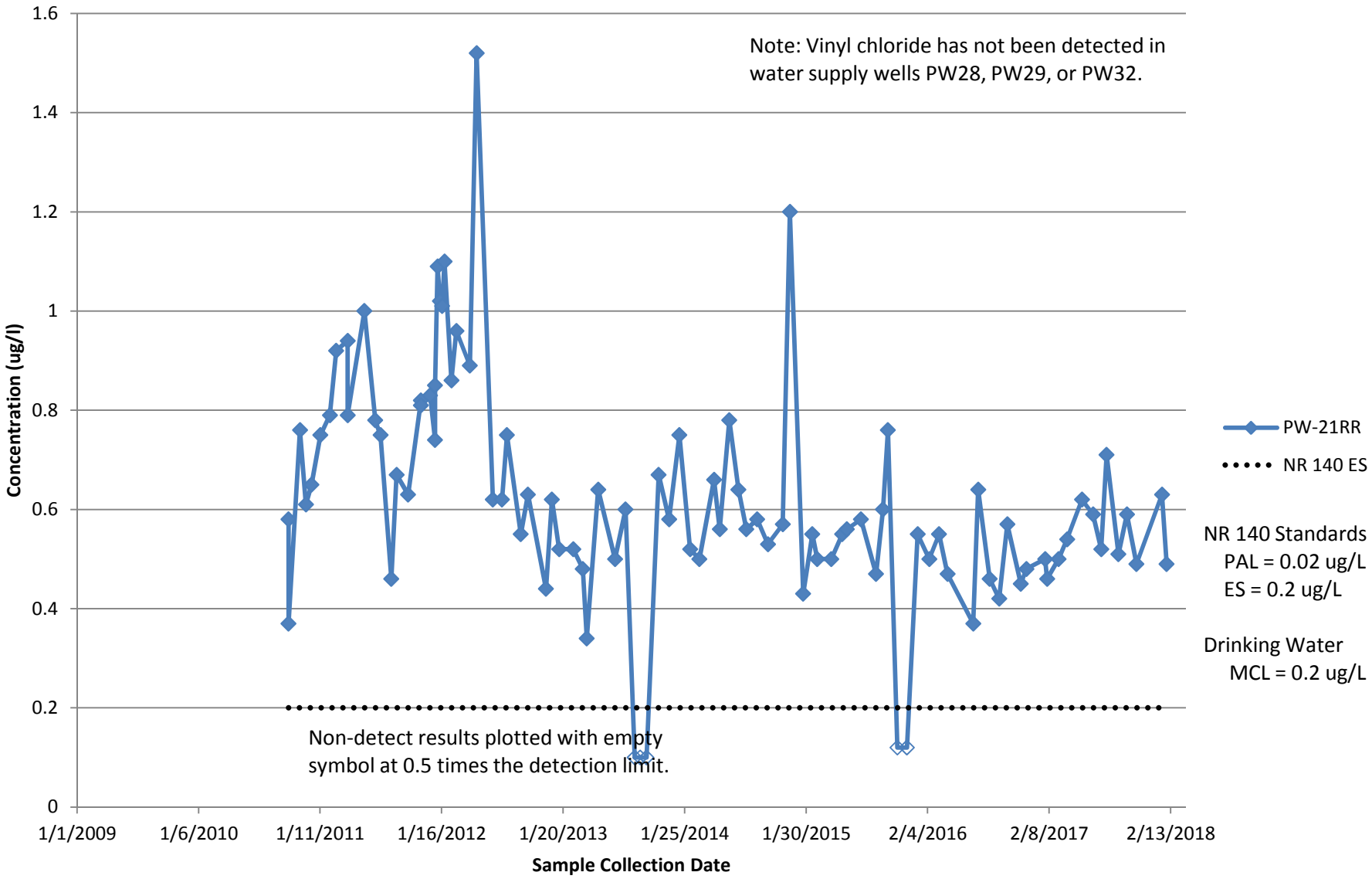


Figure 9. Vinyl Chloride Trend in PW-21RR Samples (Before Treatment System)



ATTACHMENT A

Boring Logs and Monitoring Well Construction and Development Forms

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Land and Gas Reclamation Landfill SCS#: 25211374.49	01118	P429SS

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Steffes Badger Well Drilling	1/9/2017	10/18/2017	rotary (air)

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VY486		P429SS	158.0 Feet MSL	997.22 Feet MSL	6.0 in.

Local Grid Origin ☒ (estimated: ☐) or Boring Location ☐
State Plane 537,268 N, 2,381,938 E S/C/N
SE 1/4 of NE 1/4 of Section 35, T 12 N, R 16 E
Lat 43° 28' 5.5"
Long 88° 32' 29.60"
Local Grid Location 4205.9 Feet ☒ N ☐ S 8245.46 Feet ☒ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
114052290	Dodge	14	Town of Williamstown

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1			1–15	SANDY SILT, fine to coarse, brown sand (glacial till).	ML			0.2		M				
			10–15	SILT, tan.	ML									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm SCS Engineers
2830 Dairy Drive Madison, WI 53718
Tel: 608-224-2830
Fax:

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
2			16					0.1		W				
			17											
			18											
			19											
			20											
			21											
			22											
			23		ML									
			24											
3			25					0.2		W				
			26											
			27											
			28											
			29											
			30	SILT with gravel chips, gray.										
			31											
			32											
			33											
			34											
4			35		ML			0.1		W				
			36											
			37											
			38											
			39											
			40											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 3 of 19

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
5			41											
			42											
			43											
			44											
			45					0.3		W				
			46											
			47											
			48											
			49		ML									
			50											
			51											
			52											
			53											
			54											
6			55					0.1		W				
			56											
			57	Gravel chips, gray (Maquoketa Shale bedrock).										
			58											
			59											
			60											
			61		Rock									
			62											
			63											
			64											
			65											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
7			65					0.3		W				
			66											
			67		Rock									
			68											
			69											
			70	Gravel chips with silt, gray, (Maquoketa Shale bedrock).										
			71											
			72											
			73											
			74											
8			75		Rock			0.2		W				
			76											
			77											
			78											
			79											
			80	Silt with trace gravel, gray, (Maquoketa Shale bedrock).										
			81											
			82											
			83											
			84											
9			85		Rock			0.4		W				
			86											
			87											
			88											
			89											
			90											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 5 of 19

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
10			91		Rock			0.2		W				
			92											
			93											
			94											
			95											
			96											
			97											
			98											
			99											
			100	Poorly graded sand with silt and gravel, gray, (Maquoketa Shale bedrock).										
			101											
			102											
			103											
			104											
11			105					0.1		W				
			106											
			107		Rock									
			108											
			109											
			110											
			111											
			112											
			113											
			114											
			115											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 6 of 19

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
12			116					0.1		W				
			117											
			118											
			119											
			120											
			121											
			122											
			123											
			124											
13			125					0.7		W				
			126											
			127											
			128	Rock										
			129											
			130											
			131											
			132											
			133											
			134											
14			135					0.2		W				
			136											
			137											
			138											
			139											
			140											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 7 of 19

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			141	Poorly graded sand with gravel, brown, (Maquoketa Shale bedrock).										
			142											
			143											
			144											
15			145		Rock			2.0		W				
			146											
			147											
			148											
			149											
			150	Silt with poorly graded sand (f-c), gray, (Maquoketa Shale bedrock).										
			151											
			152											
			153											
			154											
16			155		Rock			0.3		W				
			156											
			157											
			158											
			159											
			160	Silt with gravel and sand, gray, (Maquoketa Shale bedrock).										
			161											
			162											
			163		Rock									
			164											
			165											

State of Wisconsin
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SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
17			166					1.1		W				
			167											
			168											
			169											
			170											
			171											
			172											
			173											
			174											
18			175					1.7		W				
			176											
			177											
			178	Rock										
			179											
			180											
			181											
			182											
			183											
			184											
19			185					4.3		W				
			186											
			187											
			188											
			189											
			190											

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SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 9 of 19

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
20			191 192 193 194 195 196 197 198 199 200		Rock			4.2		W				
			200	Shale chips, (Maquoketa Shale bedrock).										
21			201 202 203 204 205 206 207 208 209 210		Rock			3.4		W				
			210	Dolomite chips, (dolomite bedrock (Sinnipee Group)).										
			211 212 213 214 215		Rock									

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID		Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
22			215					7.7			W				
			216												
			217												
			218												
			219												
			220												
			221												
			222												
			223												
			224												
23			225					5.2			W				
			226												
			227												
			228	Rock											
			229												
			230												
			231												
			232												
			233												
			234												
24			235					1.7			W				
			236												
			237												
			238												
			239												
			240												

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			241											
			242											
			243											
			244											
25			245					1.4		W				
			246											
			247											
			248											
			249											
			250											
			251											
			252											
			253		Rock									
			254											
26			255					1.3		W				
			256											
			257											
			258											
			259											
			260											
			261											
			262											
			263											
			264											
			265											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 12 of 19

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
27			266					1.3		W				
			267											
			268											
			269											
			270											
			271											
			272											
			273											
			274											
28			275					1.6		W				
			276											
			277											
			278	Rock										
			279											
			280											
			281											
			282											
			283											
			284											
29			285					2.5		W				
			286											
			287											
			288											
			289											
			290											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			291											
			292											
			293											
			294											
30			295					0.2		W				
			296											
			297											
			298											
			299											
			300											
			301											
			302											
			303		Rock									
			304											
31			305					1.0		W				
			306											
			307											
			308											
			309											
			310											
			311											
			312											
			313											
			314											
			315											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 14 of 19

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
32			316					1.1		W				
			317											
			318											
			319											
			320											
			321											
			322											
			323											
			324											
33			325					1.2		W				
			326											
			327											
			328	Rock										
			329											
			330											
			331											
			332											
			333											
			334											
34			335					1.4		W				
			336											
			337											
			338											
			339											
			340											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			341											
			342											
			343											
			344											
35			345					0.8		W				
			346											
			347											
			348											
			349											
			350											
			351											
			352											
			353	Rock										
			354											
36			355					0.8		W				
			356											
			357											
			358											
			359											
			360											
			361											
			362											
			363											
			364											
			365											

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SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 16 of 19

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
37			366											
			367											
			368											
			369											
			370											
			371											
			372											
			373											
			374											
38			375											
			376											
			377											
			378	Rock										
			379											
			380											
			381											
			382											
			383											
			384											
39			385											
			386											
			387											
			388											
			389											
			390											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

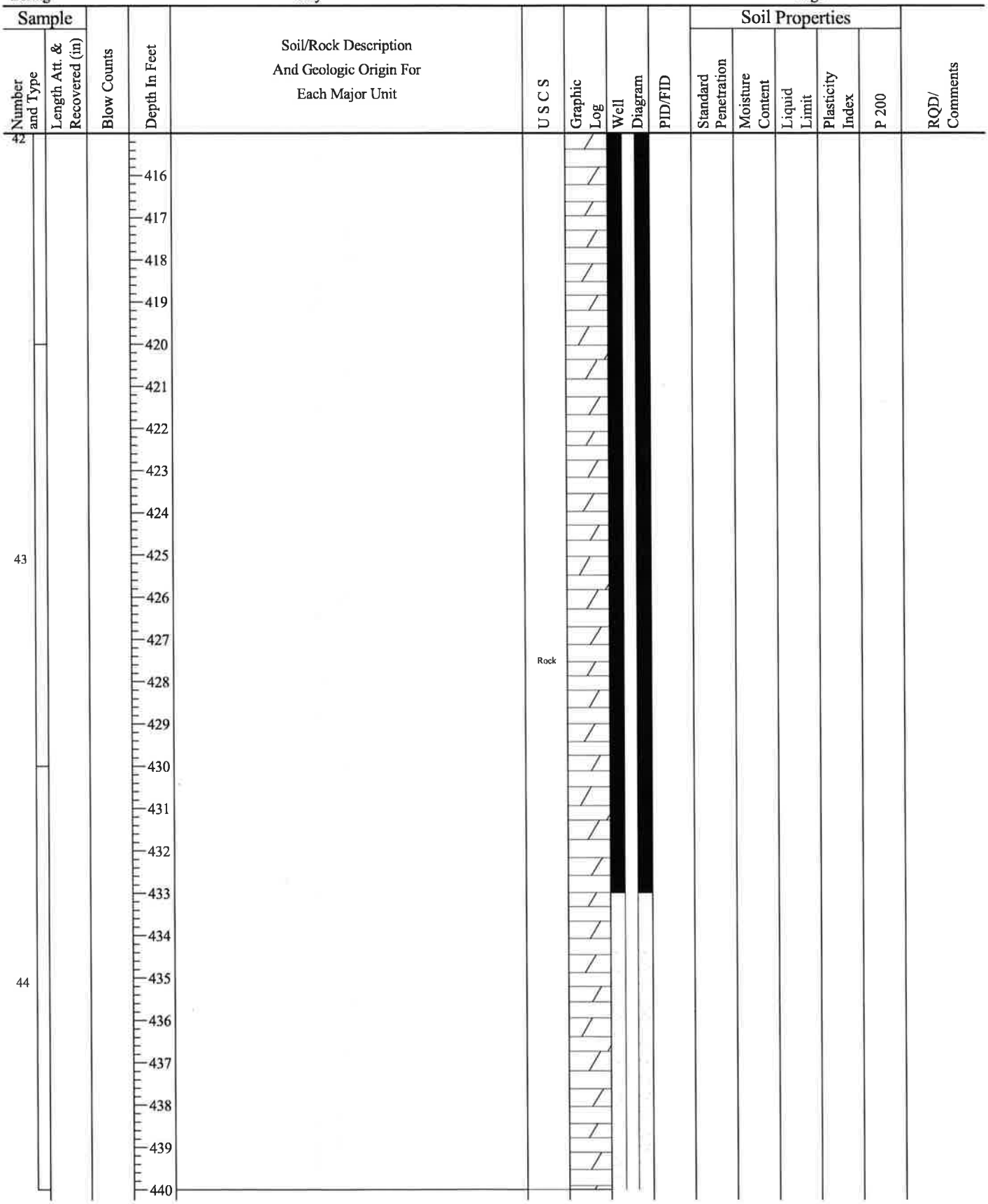
Boring Number P429SS Use only as an attachment to Form 4400-122. Page 17 of 19

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			391											
			392											
			393											
			394											
40			395											
			396											
			397											
			398											
			399											
			400											
			401											
			402											
			403	Rock										
			404											
			405											
41			406											
			407											
			408											
			409											
			410											
			411											
			412											
			413											
			414											
			415											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122.



State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number P429SS Use only as an attachment to Form 4400-122. Page 19 of 19

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			441	Sand, fine, light brown, (St. Peter Sandstone).										
			442											
			443											
			444											
45			445											
			446											
			447											
			448											
			449											
			450		Rock									
			451											
			452											
			453											
			454											
46			455											
			456											
			457											
			458											
			459											
			460	End of Boring at 460'.										

SCS # 25211374.49

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name Land and Gas Reclamation Landfill	**Local Grid Location of Well** ☒ N. ☐ S. 4205.74 ft. ☒ E. ☐ W. 8245.46 ft.	**Well Name** P429SS
Facility License, Permit or Monitoring No. 01118	**Local Grid Origin** ☒ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** VY486
Facility ID 114052290	**St. Plane** 537268.4 ft. N, 2381938.0 ft. E. S/C/N	**DNR Well ID No.**
Type of Well Well Code 12 / PZ	**Section Location of Waste/Source** NE 1/4 of SW 1/4 of Sec. 35, T. 12 N, R. 16 ☒ E ☐ W	**Date Well Installed** 10 / 18 / 2017 (m m d d y y y y)
Distance from Waste/ Source 3,500 ft.	**Enf. Stds. Apply** ☒ **Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Dan Steffes Badger Well Drilling

A. Protective pipe, top elevation 999.02 ft. MSL
B. Well casing, top elevation 999.24 ft. MSL
C. Land surface elevation 997.22 ft. MSL
D. Surface seal, bottom 917 ft. MSL or 80 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☐ Yes ☒ No

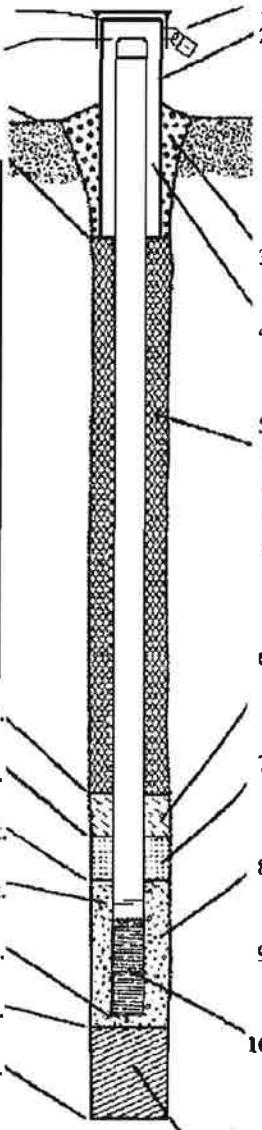
14. Drilling method used: Rotary ☒ 50
Hollow Stem Auger ☐ 41
Other ☐

15. Drilling fluid used: Water ☒ 02 Air ☒ 01
Drilling Mud ☐ 03 None ☐ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe

17. Source of water (attach analysis, if required):
Badger Drilling shop well

E. Bentonite seal, top 568 ft. MSL or 429 ft.
F. Fine sand, top 564 ft. MSL or 433 ft.
G. Filter pack, top 561 ft. MSL or 436 ft.
H. Screen joint, top 552 ft. MSL or 445 ft.
I. Well bottom 537 ft. MSL or 460 ft.
J. Filter pack, bottom 537 ft. MSL or 460 ft.
K. Borehole, bottom 537 ft. MSL or 460 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 1.94 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 6.0 in.
b. Length: 80 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☐ No
If yes, describe:
3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐
4. Material between well casing and protective pipe: Bentonite ☒ 30 Other ☐
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. 10 Lbs/gal mud weight . . . . . Bentonite slurry ☒ 31
d. % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 79.2 Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☒ 02 Gravity ☐ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☑ 32
c. Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint # 15
b. Volume added 0.5 ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint # 40
b. Volume added 3.75 ft³
9. Well casing: Flush threaded PVC schedule 40 ☐ 23
Flush threaded PVC schedule 80 ☒ 24
Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
b. Manufacturer Environmental Manufacuring Inc.
c. Slot size: 0.020 in.
d. Slotted length: 14.5 ft.
11. Backfill material (below filter pack): None ☒ 14 Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Eric Oelkers	SCS ENGINEERS - Eric Oelkers

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

SCS # 25211374.49

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Land and Gas Reclamation Landfill	Dodge	P429SS

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
01118	14	VY486	

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☒	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☒	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well 300 min.

4. Depth of well (from top of well casisng) 158.4 ft.

5. Inside diameter of well 1.94 in.

6. Volume of water in filter pack and well casing 51.0 gal.

7. Volume of water removed from well 510.0 gal.

8. Volume of water added (if any) ---.- gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 158.12 ft.	158.88 ft.
Date	b. 10/20/2017 (m m d d y y y y)	10/26/2017 (m m d d y y y y)
Time	c. 14:30 ☐ a.m. ☒ p.m.	17:02 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	---.- inches	12.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe) Clear	Clear ☒ 20 Turbid ☐ 25 (Describe) Clear
14. Total suspended solids	----.- mg/l	----.- mg/l
15. COD	----.- mg/l	----.- mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Eric Last Name: Oelkers
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:
Depths are measured from the 6" steel casing.
PVC casing riser was added after development.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Jacob Last Name: Margelofsky
Facility/Firm: Advanced Disposal Services
Street: N7296 Highway V
City/State/Zip: Horicon, WI 53032

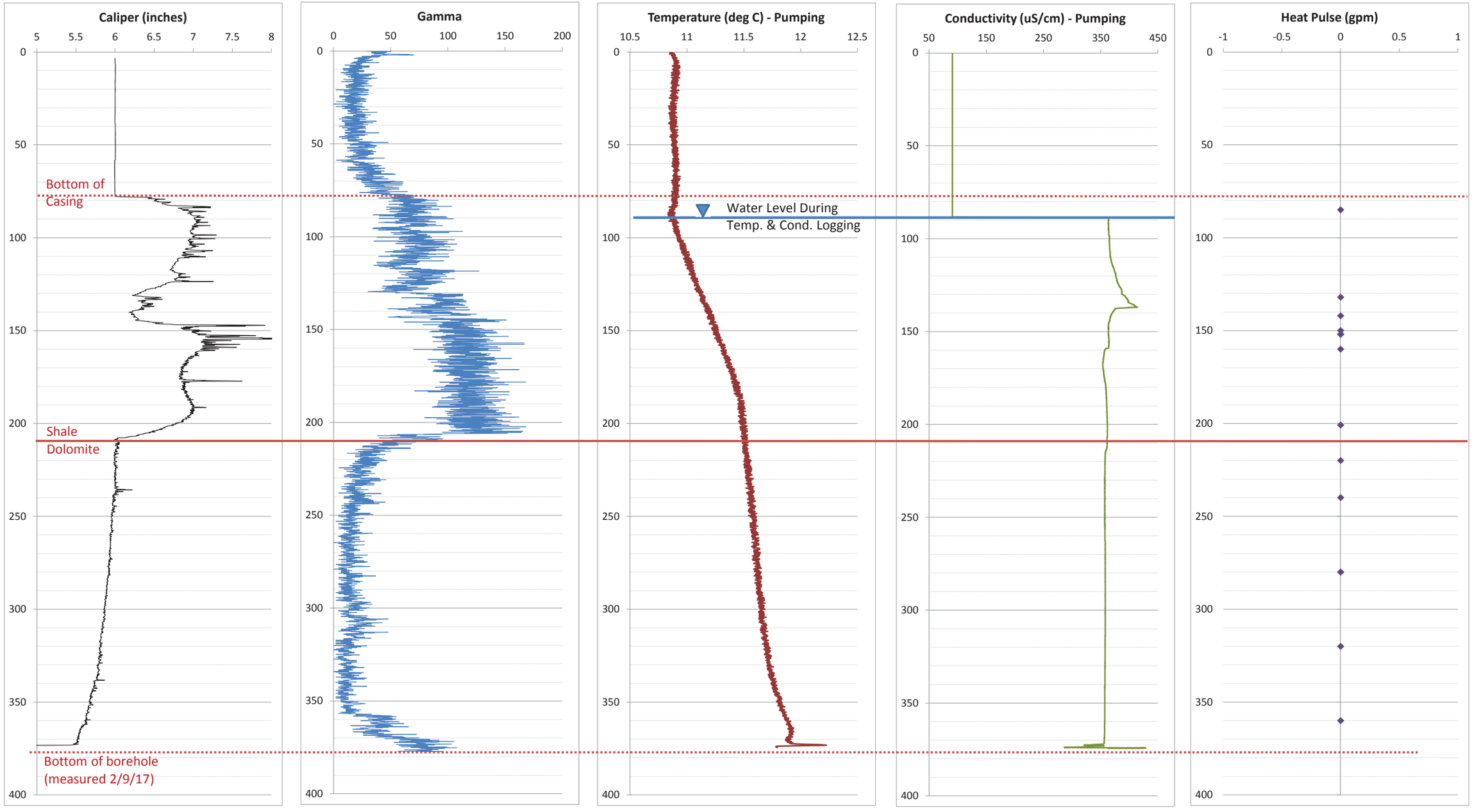
I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Eric Oelkers
Print Name: Eric Oelkers
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

NOTE: See instructions for more information including a list of county codes and well type codes.

ATTACHMENT B

P429D Borehole Logging Results

P429D Borehole Logging



SCS ENGINEERS

Attachment B
P429D Borehole Logging Results
Land & Gas Reclamation Landfill

ATTACHMENT C

Laboratory Data Reports
(October 2016 through February 2018)

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

November 04, 2016

General Manager
Advanced Disposal Glacier Ridge Landfill LLC
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Dear General Manager:
Enclosed are the analytical results for sample(s) received by the laboratory between October 06, 2016 and November 03, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Cindy K Varga

Cindy Varga
cindy.varga@pacelabs.com
Project Manager

Enclosures

cc: Mari Bull, SCS ENGINEERS
Sherren Clark, SCS Engineers
Tim Curry, Advanced Disposal Services
Frank Perugini, ESC (Environmental Sampling Corp)
ESC Staff, ESC

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

CERTIFICATIONS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Green Bay Certification IDs

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

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

SAMPLE SUMMARY

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40139613001	**MW-1B**	Water	10/05/16 15:30	10/06/16 07:30
40139786001	**P-424D**	Water	10/07/16 10:15	10/08/16 09:30
40139786002	**P-424SS**	Water	10/07/16 11:30	10/08/16 09:30
40139786003	**P-423D**	Water	10/07/16 12:00	10/08/16 09:30
40139786004	**P-426D**	Water	10/07/16 12:40	10/08/16 09:30
40139786005	**P-402E**	Water	10/07/16 13:30	10/08/16 09:30
40139786006	**P-422B**	Water	10/07/16 14:10	10/08/16 09:30
40139786007	**P-401D**	Water	10/03/16 00:00	10/08/16 09:30
40139613009	**P-402E**	Water	10/03/16 00:00	11/03/16 09:16
40139613010	**P-422B**	Water	10/03/16 00:00	11/03/16 09:16
40139613011	**P-423B**	Water	10/03/16 00:00	11/03/16 09:16
40139613012	**P-424D**	Water	10/03/16 00:00	11/03/16 09:16
40139613013	**P-424SS**	Water	10/03/16 00:00	11/03/16 09:16
40139613014	**P-426D**	Water	10/03/16 00:00	11/03/16 09:16
40139613015	**MW-1B**	Water	10/03/16 00:00	11/03/16 09:16

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SAMPLE ANALYTE COUNT

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40139613001	**MW-1B**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786001	**P-424D**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786002	**P-424SS**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786003	**P-423D**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786004	**P-426D**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786005	**P-402E**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786006	**P-422B**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	46	PASI-G
			JLJ	6	PASI-G
		EPA 300.0	JMN	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40139786007	**P-401D**		JLJ	1	PASI-G
40139613009	**P-402E**		JLJ	1	PASI-G

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40139613010	**P-422B**		JLJ	1	PASI-G
40139613011	**P-423B**		JLJ	1	PASI-G
40139613012	**P-424D**		JLJ	1	PASI-G
40139613013	**P-424SS**		JLJ	1	PASI-G
40139613014	**P-426D**		JLJ	1	PASI-G
40139613015	**MW-1B**		JLJ	1	PASI-G

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: MW-1B **Lab ID: 40139613001** Collected: 10/05/16 15:30 Received: 10/06/16 07:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**373**	mg/L	2.0	0.15	1		10/11/16 21:53		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/11/16 17:57	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/11/16 17:57	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/11/16 17:57	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/11/16 17:57	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/11/16 17:57	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/11/16 17:57	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/11/16 17:57	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/11/16 17:57	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/11/16 17:57	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/11/16 17:57	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/11/16 17:57	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/11/16 17:57	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/11/16 17:57	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/11/16 17:57	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/11/16 17:57	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/11/16 17:57	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/11/16 17:57	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/11/16 17:57	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/11/16 17:57	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/11/16 17:57	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/11/16 17:57	75-69-4	
Vinyl chloride	**2.4**	ug/L	1.0	0.18	1		10/11/16 17:57	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/11/16 17:57	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/11/16 17:57	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/11/16 17:57	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/11/16 17:57	156-60-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: MW-1B **Lab ID: 40139613001** Collected: 10/05/16 15:30 Received: 10/06/16 07:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/11/16 17:57	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		10/11/16 17:57	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		10/11/16 17:57	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/11/16 17:57	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.57**	Std. Units			1		10/05/16 15:30		
Field Specific Conductance	**852**	umhos/cm			1		10/05/16 15:30		
Turbidity	**N**	NTU			1		10/05/16 15:30		
Apparent Color	**N**	no units			1		10/05/16 15:30		
Odor	**N**	no units			1		10/05/16 15:30		
Temperature, Water (C)	**12.6**	deg C			1		10/05/16 15:30		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**109**	mg/L	10.0	2.5	5		10/14/16 19:08	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**200**	mg/L	20.0	8.6	1		10/13/16 11:23		

Sample: P-424D **Lab ID: 40139786001** Collected: 10/07/16 10:15 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**485**	mg/L	2.0	0.15	1		10/12/16 02:15		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	71-55-6	
1,1,2-Trichloroethane	**<0.49**	ug/L	2.5	0.49	2.5		10/12/16 21:42	79-00-5	
1,1-Dichloroethane	**0.94J**	ug/L	2.5	0.60	2.5		10/12/16 21:42	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	2.5	1.0	2.5		10/12/16 21:42	75-35-4	
1,2-Dibromo-3-chloropropane	**<5.4**	ug/L	12.5	5.4	2.5		10/12/16 21:42	96-12-8	
1,2-Dibromoethane (EDB)	**<0.44**	ug/L	2.5	0.44	2.5		10/12/16 21:42	106-93-4	
1,2-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	95-50-1	
1,2-Dichloroethane	**<0.42**	ug/L	2.5	0.42	2.5		10/12/16 21:42	107-06-2	
1,2-Dichloropropane	**<0.58**	ug/L	2.5	0.58	2.5		10/12/16 21:42	78-87-5	
1,3-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	541-73-1	
1,4-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	106-46-7	
2-Butanone (MEK)	**<7.4**	ug/L	50.0	7.4	2.5		10/12/16 21:42	78-93-3	
Acetone	**<7.4**	ug/L	50.0	7.4	2.5		10/12/16 21:42	67-64-1	
Benzene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	71-43-2	L3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-424D **Lab ID: 40139786001** Collected: 10/07/16 10:15 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Bromodichloromethane	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	75-27-4	
Bromoform	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	75-25-2	
Bromomethane	**<6.1**	ug/L	12.5	6.1	2.5		10/12/16 21:42	74-83-9	
Carbon disulfide	**<1.5**	ug/L	12.5	1.5	2.5		10/12/16 21:42	75-15-0	
Carbon tetrachloride	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	56-23-5	
Chlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	108-90-7	
Chloroethane	**4.1**	ug/L	2.5	0.94	2.5		10/12/16 21:42	75-00-3	
Chloroform	**<6.2**	ug/L	12.5	6.2	2.5		10/12/16 21:42	67-66-3	
Chloromethane	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	74-87-3	
Dibromochloromethane	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	124-48-1	
Dibromomethane	**<1.1**	ug/L	2.5	1.1	2.5		10/12/16 21:42	74-95-3	
Dichlorodifluoromethane	**<0.56**	ug/L	2.5	0.56	2.5		10/12/16 21:42	75-71-8	
Ethylbenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	100-41-4	
Methyl-tert-butyl ether	**<0.44**	ug/L	2.5	0.44	2.5		10/12/16 21:42	1634-04-4	
Methylene Chloride	**<0.58**	ug/L	2.5	0.58	2.5		10/12/16 21:42	75-09-2	
Naphthalene	**<6.2**	ug/L	12.5	6.2	2.5		10/12/16 21:42	91-20-3	
Styrene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	100-42-5	
Tetrachloroethene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	127-18-4	
Tetrahydrofuran	**<5.1**	ug/L	12.5	5.1	2.5		10/12/16 21:42	109-99-9	
Toluene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	108-88-3	
Trichloroethene	**2.3J**	ug/L	2.5	0.83	2.5		10/12/16 21:42	79-01-6	
Trichlorofluoromethane	**<0.46**	ug/L	2.5	0.46	2.5		10/12/16 21:42	75-69-4	
Vinyl chloride	**9.9**	ug/L	2.5	0.44	2.5		10/12/16 21:42	75-01-4	
cis-1,2-Dichloroethene	**125**	ug/L	2.5	0.64	2.5		10/12/16 21:42	156-59-2	
cis-1,3-Dichloropropene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	10061-01-5	
m&p-Xylene	**<2.5**	ug/L	5.0	2.5	2.5		10/12/16 21:42	179601-23-1	
o-Xylene	**<1.2**	ug/L	2.5	1.2	2.5		10/12/16 21:42	95-47-6	
trans-1,2-Dichloroethene	**4.3**	ug/L	2.5	0.64	2.5		10/12/16 21:42	156-60-5	
trans-1,3-Dichloropropene	**<0.57**	ug/L	2.5	0.57	2.5		10/12/16 21:42	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		2.5		10/12/16 21:42	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		2.5		10/12/16 21:42	1868-53-7	
Toluene-d8 (S)	101	%	70-130		2.5		10/12/16 21:42	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.31**	Std. Units			1		10/07/16 10:15		
Field Specific Conductance	**799**	umhos/cm			1		10/07/16 10:15		
Turbidity	**N**	NTU			1		10/07/16 10:15		
Apparent Color	**N**	no units			1		10/07/16 10:15		
Odor	**N**	no units			1		10/07/16 10:15		
Temperature, Water (C)	**15.4**	deg C			1		10/07/16 10:15		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**45.1**	mg/L	2.0	0.50	1		10/18/16 19:21	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-424D **Lab ID: 40139786001** Collected: 10/07/16 10:15 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**370**	mg/L	20.0	8.6	1		10/18/16 12:29		

Sample: P-424SS **Lab ID: 40139786002** Collected: 10/07/16 11:30 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**294**	mg/L	2.0	0.15	1		10/12/16 12:25		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/12/16 18:54	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/12/16 18:54	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/12/16 18:54	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/12/16 18:54	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/12/16 18:54	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/12/16 18:54	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/12/16 18:54	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/12/16 18:54	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/12/16 18:54	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	71-43-2	L3
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/12/16 18:54	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/12/16 18:54	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/12/16 18:54	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/12/16 18:54	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/12/16 18:54	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/12/16 18:54	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/12/16 18:54	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/12/16 18:54	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/12/16 18:54	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/12/16 18:54	109-99-9	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-424SS **Lab ID: 40139786002** Collected: 10/07/16 11:30 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/12/16 18:54	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/12/16 18:54	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/12/16 18:54	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/12/16 18:54	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/12/16 18:54	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 18:54	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/12/16 18:54	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/12/16 18:54	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		10/12/16 18:54	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/12/16 18:54	1868-53-7	
Toluene-d8 (S)	107	%	70-130		1		10/12/16 18:54	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.62**	Std. Units			1		10/07/16 11:30		
Field Specific Conductance	**468**	umhos/cm			1		10/07/16 11:30		
Turbidity	**N**	NTU			1		10/07/16 11:30		
Apparent Color	**N**	no units			1		10/07/16 11:30		
Odor	**N**	no units			1		10/07/16 11:30		
Temperature, Water (C)	**14.6**	deg C			1		10/07/16 11:30		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**1.0J**	mg/L	2.0	0.50	1		10/18/16 19:32	16887-00-6	B
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**307**	mg/L	20.0	8.6	1		10/18/16 12:30		

Sample: P-423D **Lab ID: 40139786003** Collected: 10/07/16 12:00 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**447**	mg/L	2.0	0.15	1		10/12/16 12:28		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/12/16 21:00	79-00-5	
1,1-Dichloroethane	**0.38J**	ug/L	1.0	0.24	1		10/12/16 21:00	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/12/16 21:00	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/12/16 21:00	96-12-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-423D **Lab ID: 40139786003** Collected: 10/07/16 12:00 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/12/16 21:00	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/12/16 21:00	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/12/16 21:00	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/12/16 21:00	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/12/16 21:00	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	71-43-2	L3
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/12/16 21:00	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/12/16 21:00	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	108-90-7	
Chloroethane	**1.9**	ug/L	1.0	0.37	1		10/12/16 21:00	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/12/16 21:00	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/12/16 21:00	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/12/16 21:00	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/12/16 21:00	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/12/16 21:00	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/12/16 21:00	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/12/16 21:00	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	108-88-3	
Trichloroethene	**0.57J**	ug/L	1.0	0.33	1		10/12/16 21:00	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/12/16 21:00	75-69-4	
Vinyl chloride	**1.1**	ug/L	1.0	0.18	1		10/12/16 21:00	75-01-4	
cis-1,2-Dichloroethene	**43.9**	ug/L	1.0	0.26	1		10/12/16 21:00	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/12/16 21:00	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 21:00	95-47-6	
trans-1,2-Dichloroethene	**2.0**	ug/L	1.0	0.26	1		10/12/16 21:00	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/12/16 21:00	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		10/12/16 21:00	460-00-4	
Dibromofluoromethane (S)	107	%	70-130		1		10/12/16 21:00	1868-53-7	
Toluene-d8 (S)	106	%	70-130		1		10/12/16 21:00	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.35**	Std. Units			1		10/07/16 12:00		
Field Specific Conductance	**720**	umhos/cm			1		10/07/16 12:00		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-423D **Lab ID: 40139786003** Collected: 10/07/16 12:00 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Turbidity	**N**	NTU			1		10/07/16 12:00		
Apparent Color	**N**	no units			1		10/07/16 12:00		
Odor	**N**	no units			1		10/07/16 12:00		
Temperature, Water (C)	**15.9**	deg C			1		10/07/16 12:00		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**43.4**	mg/L	2.0	0.50	1		10/18/16 19:43	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**372**	mg/L	20.0	8.6	1		10/18/16 12:30		

Sample: P-426D **Lab ID: 40139786004** Collected: 10/07/16 12:40 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**532**	mg/L	2.0	0.15	1		10/14/16 17:05		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/12/16 19:14	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/12/16 19:14	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/12/16 19:14	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/12/16 19:14	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/12/16 19:14	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/12/16 19:14	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/12/16 19:14	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/12/16 19:14	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/12/16 19:14	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	71-43-2	L3
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/12/16 19:14	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/12/16 19:14	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/12/16 19:14	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/12/16 19:14	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	74-87-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-426D **Lab ID: 40139786004** Collected: 10/07/16 12:40 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/12/16 19:14	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/12/16 19:14	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/12/16 19:14	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/12/16 19:14	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/12/16 19:14	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/12/16 19:14	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/12/16 19:14	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/12/16 19:14	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/12/16 19:14	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/12/16 19:14	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/12/16 19:14	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:14	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/12/16 19:14	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/12/16 19:14	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		10/12/16 19:14	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/12/16 19:14	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		10/12/16 19:14	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.39**	Std. Units			1		10/07/16 12:40		
Field Specific Conductance	**797**	umhos/cm			1		10/07/16 12:40		
Turbidity	**N**	NTU			1		10/07/16 12:40		
Apparent Color	**N**	no units			1		10/07/16 12:40		
Odor	**N**	no units			1		10/07/16 12:40		
Temperature, Water (C)	**15.0**	deg C			1		10/07/16 12:40		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**55.0**	mg/L	10.0	2.5	5		10/19/16 12:50	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**362**	mg/L	20.0	8.6	1		10/18/16 12:33		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-402E **Lab ID: 40139786005** Collected: 10/07/16 13:30 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**475**	mg/L	2.0	0.15	1		10/14/16 17:07		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	71-55-6	
1,1,2-Trichloroethane	**<0.79**	ug/L	4.0	0.79	4		10/12/16 22:03	79-00-5	
1,1-Dichloroethane	**<0.97**	ug/L	4.0	0.97	4		10/12/16 22:03	75-34-3	
1,1-Dichloroethene	**<1.6**	ug/L	4.0	1.6	4		10/12/16 22:03	75-35-4	
1,2-Dibromo-3-chloropropane	**<8.7**	ug/L	20.0	8.7	4		10/12/16 22:03	96-12-8	
1,2-Dibromoethane (EDB)	**<0.71**	ug/L	4.0	0.71	4		10/12/16 22:03	106-93-4	
1,2-Dichlorobenzene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	95-50-1	
1,2-Dichloroethane	**<0.67**	ug/L	4.0	0.67	4		10/12/16 22:03	107-06-2	
1,2-Dichloropropane	**<0.93**	ug/L	4.0	0.93	4		10/12/16 22:03	78-87-5	
1,3-Dichlorobenzene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	541-73-1	
1,4-Dichlorobenzene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	106-46-7	
2-Butanone (MEK)	**<11.9**	ug/L	80.0	11.9	4		10/12/16 22:03	78-93-3	
Acetone	**<11.8**	ug/L	80.0	11.8	4		10/12/16 22:03	67-64-1	
Benzene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	71-43-2	L3
Bromodichloromethane	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	75-27-4	
Bromoform	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	75-25-2	
Bromomethane	**<9.7**	ug/L	20.0	9.7	4		10/12/16 22:03	74-83-9	
Carbon disulfide	**<2.5**	ug/L	20.0	2.5	4		10/12/16 22:03	75-15-0	
Carbon tetrachloride	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	56-23-5	
Chlorobenzene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	108-90-7	
Chloroethane	**7.4**	ug/L	4.0	1.5	4		10/12/16 22:03	75-00-3	
Chloroform	**<10.0**	ug/L	20.0	10.0	4		10/12/16 22:03	67-66-3	
Chloromethane	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	74-87-3	
Dibromochloromethane	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	124-48-1	
Dibromomethane	**<1.7**	ug/L	4.0	1.7	4		10/12/16 22:03	74-95-3	
Dichlorodifluoromethane	**<0.90**	ug/L	4.0	0.90	4		10/12/16 22:03	75-71-8	
Ethylbenzene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	100-41-4	
Methyl-tert-butyl ether	**<0.70**	ug/L	4.0	0.70	4		10/12/16 22:03	1634-04-4	
Methylene Chloride	**<0.93**	ug/L	4.0	0.93	4		10/12/16 22:03	75-09-2	
Naphthalene	**<10.0**	ug/L	20.0	10.0	4		10/12/16 22:03	91-20-3	
Styrene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	100-42-5	
Tetrachloroethene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	127-18-4	
Tetrahydrofuran	**<8.1**	ug/L	20.0	8.1	4		10/12/16 22:03	109-99-9	
Toluene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	108-88-3	
Trichloroethene	**3.8J**	ug/L	4.0	1.3	4		10/12/16 22:03	79-01-6	
Trichlorofluoromethane	**<0.74**	ug/L	4.0	0.74	4		10/12/16 22:03	75-69-4	
Vinyl chloride	**26.9**	ug/L	4.0	0.70	4		10/12/16 22:03	75-01-4	
cis-1,2-Dichloroethene	**309**	ug/L	4.0	1.0	4		10/12/16 22:03	156-59-2	
cis-1,3-Dichloropropene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	10061-01-5	
m&p-Xylene	**<4.0**	ug/L	8.0	4.0	4		10/12/16 22:03	179601-23-1	
o-Xylene	**<2.0**	ug/L	4.0	2.0	4		10/12/16 22:03	95-47-6	
trans-1,2-Dichloroethene	**9.4**	ug/L	4.0	1.0	4		10/12/16 22:03	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-402E **Lab ID: 40139786005** Collected: 10/07/16 13:30 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.92**	ug/L	4.0	0.92	4		10/12/16 22:03	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	93	%	70-130		4		10/12/16 22:03	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		4		10/12/16 22:03	1868-53-7	
Toluene-d8 (S)	103	%	70-130		4		10/12/16 22:03	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.32**	Std. Units			1		10/07/16 13:30		
Field Specific Conductance	**721**	umhos/cm			1		10/07/16 13:30		
Turbidity	**N**	NTU			1		10/07/16 13:30		
Apparent Color	**N**	no units			1		10/07/16 13:30		
Odor	**N**	no units			1		10/07/16 13:30		
Temperature, Water (C)	**14.3**	deg C			1		10/07/16 13:30		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**56.8**	mg/L	10.0	2.5	5		10/19/16 13:01	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**376**	mg/L	100	43.2	5		10/18/16 12:34		

Sample: P-422B **Lab ID: 40139786006** Collected: 10/07/16 14:10 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**165**	mg/L	2.0	0.15	1		10/14/16 17:09		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/12/16 19:35	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/12/16 19:35	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/12/16 19:35	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/12/16 19:35	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/12/16 19:35	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/12/16 19:35	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/12/16 19:35	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/12/16 19:35	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/12/16 19:35	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	71-43-2	L3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-422B **Lab ID: 40139786006** Collected: 10/07/16 14:10 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/12/16 19:35	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/12/16 19:35	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/12/16 19:35	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/12/16 19:35	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/12/16 19:35	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/12/16 19:35	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/12/16 19:35	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/12/16 19:35	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/12/16 19:35	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/12/16 19:35	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/12/16 19:35	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/12/16 19:35	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/12/16 19:35	75-01-4	
cis-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.26	1		10/12/16 19:35	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/12/16 19:35	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/12/16 19:35	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/12/16 19:35	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/12/16 19:35	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		10/12/16 19:35	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/12/16 19:35	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		10/12/16 19:35	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.85**	Std. Units			1		10/07/16 14:10		
Field Specific Conductance	**387**	umhos/cm			1		10/07/16 14:10		
Turbidity	**N**	NTU			1		10/07/16 14:10		
Apparent Color	**N**	no units			1		10/07/16 14:10		
Odor	**N**	no units			1		10/07/16 14:10		
Temperature, Water (C)	**14.0**	deg C			1		10/07/16 14:10		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**18.9**	mg/L	2.0	0.50	1		10/18/16 20:14	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-422B **Lab ID: 40139786006** Collected: 10/07/16 14:10 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**199**	mg/L	20.0	8.6	1		10/18/16 12:35		

Sample: P-401D **Lab ID: 40139786007** Collected: 10/03/16 00:00 Received: 10/08/16 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**851.95**	feet			1		10/03/16 00:00		

Sample: P-402E **Lab ID: 40139613009** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**851.58**	feet			1		10/03/16 00:00		

Sample: P-422B **Lab ID: 40139613010** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**927.99**	feet			1		10/03/16 00:00		

Sample: P-423B **Lab ID: 40139613011** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**850.39**	feet			1		10/03/16 00:00		

Sample: P-424D **Lab ID: 40139613012** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**851.00**	feet			1		10/03/16 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Sample: P-424SS **Lab ID: 40139613013** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**850.58**	feet			1		10/03/16 00:00		

Sample: P-426D **Lab ID: 40139613014** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**850.40**	feet			1		10/03/16 00:00		

Sample: MW-1B **Lab ID: 40139613015** Collected: 10/03/16 00:00 Received: 11/03/16 09:16 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**926.18**	feet			1		10/03/16 00:00		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 237782 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40139613001

METHOD BLANK: 1408910 Matrix: Water
Associated Lab Samples: 40139613001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	mg/L	0.15J	2.0	10/11/16 21:48	

LABORATORY CONTROL SAMPLE: 1408911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	mg/L		34.1			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1408912 1408913

Parameter	Units	40139613001 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, Dissolved	mg/L	373			397	397				0	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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 237793 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40139786001, 40139786002, 40139786003

METHOD BLANK: 1408951 Matrix: Water
Associated Lab Samples: 40139786001, 40139786002, 40139786003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	mg/L	<0.15	2.0	10/12/16 12:16	

LABORATORY CONTROL SAMPLE: 1408952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	mg/L		29.9			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1408953 1408954

Parameter	Units	40139749001 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, Dissolved	mg/L	981000 ug/L			995	1010				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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 238166 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40139786004, 40139786005, 40139786006

METHOD BLANK: 1410892 Matrix: Water
Associated Lab Samples: 40139786004, 40139786005, 40139786006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	mg/L	<0.15	2.0	10/14/16 16:50	

LABORATORY CONTROL SAMPLE: 1410893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	mg/L		33.0			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1410894 1410895

Parameter	Units	40139965001 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, Dissolved	mg/L	1510000 ug/L			1630	1630				0	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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 237505 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40139613001

METHOD BLANK: 1407482 Matrix: Water
Associated Lab Samples: 40139613001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	10/11/16 09:00	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	10/11/16 09:00	
1,1-Dichloroethane	ug/L	<0.24	1.0	10/11/16 09:00	
1,1-Dichloroethene	ug/L	<0.41	1.0	10/11/16 09:00	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	10/11/16 09:00	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	10/11/16 09:00	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	10/11/16 09:00	
1,2-Dichloroethane	ug/L	<0.17	1.0	10/11/16 09:00	
1,2-Dichloropropane	ug/L	<0.23	1.0	10/11/16 09:00	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	10/11/16 09:00	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	10/11/16 09:00	
2-Butanone (MEK)	ug/L	<3.0	20.0	10/11/16 09:00	
Acetone	ug/L	<3.0	20.0	10/11/16 09:00	
Benzene	ug/L	<0.50	1.0	10/11/16 09:00	
Bromodichloromethane	ug/L	<0.50	1.0	10/11/16 09:00	
Bromoform	ug/L	<0.50	1.0	10/11/16 09:00	
Bromomethane	ug/L	<2.4	5.0	10/11/16 09:00	
Carbon disulfide	ug/L	<0.61	5.0	10/11/16 09:00	
Carbon tetrachloride	ug/L	<0.50	1.0	10/11/16 09:00	
Chlorobenzene	ug/L	<0.50	1.0	10/11/16 09:00	
Chloroethane	ug/L	<0.37	1.0	10/11/16 09:00	
Chloroform	ug/L	<2.5	5.0	10/11/16 09:00	
Chloromethane	ug/L	<0.50	1.0	10/11/16 09:00	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	10/11/16 09:00	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	10/11/16 09:00	
Dibromochloromethane	ug/L	<0.50	1.0	10/11/16 09:00	
Dibromomethane	ug/L	<0.43	1.0	10/11/16 09:00	
Dichlorodifluoromethane	ug/L	<0.22	1.0	10/11/16 09:00	
Ethylbenzene	ug/L	<0.50	1.0	10/11/16 09:00	
m&p-Xylene	ug/L	<1.0	2.0	10/11/16 09:00	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	10/11/16 09:00	
Methylene Chloride	ug/L	<0.23	1.0	10/11/16 09:00	
Naphthalene	ug/L	<2.5	5.0	10/11/16 09:00	
o-Xylene	ug/L	<0.50	1.0	10/11/16 09:00	
Styrene	ug/L	<0.50	1.0	10/11/16 09:00	
Tetrachloroethene	ug/L	<0.50	1.0	10/11/16 09:00	
Tetrahydrofuran	ug/L	<2.0	5.0	10/11/16 09:00	
Toluene	ug/L	<0.50	1.0	10/11/16 09:00	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	10/11/16 09:00	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	10/11/16 09:00	
Trichloroethene	ug/L	<0.33	1.0	10/11/16 09:00	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

METHOD BLANK: 1407482 Matrix: Water
Associated Lab Samples: 40139613001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	10/11/16 09:00	
Vinyl chloride	ug/L	<0.18	1.0	10/11/16 09:00	
4-Bromofluorobenzene (S)	%	93	70-130	10/11/16 09:00	
Dibromofluoromethane (S)	%	106	70-130	10/11/16 09:00	
Toluene-d8 (S)	%	102	70-130	10/11/16 09:00	

LABORATORY CONTROL SAMPLE: 1407483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.1	110	70-131	
1,1,2-Trichloroethane	ug/L	50	54.8	110	70-130	
1,1-Dichloroethane	ug/L	50	55.7	111	70-133	
1,1-Dichloroethene	ug/L	50	49.0	98	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	49.4	99	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	53.1	106	70-130	
1,2-Dichlorobenzene	ug/L	50	49.7	99	70-130	
1,2-Dichloroethane	ug/L	50	59.7	119	70-130	
1,2-Dichloropropane	ug/L	50	61.1	122	70-130	
1,3-Dichlorobenzene	ug/L	50	49.6	99	70-130	
1,4-Dichlorobenzene	ug/L	50	50.8	102	70-130	
Benzene	ug/L	50	65.9	132	60-135	
Bromodichloromethane	ug/L	50	54.4	109	70-130	
Bromoform	ug/L	50	43.2	86	70-130	
Bromomethane	ug/L	50	41.2	82	33-130	
Carbon disulfide	ug/L	50	59.0	118	70-139	
Carbon tetrachloride	ug/L	50	54.6	109	70-138	
Chlorobenzene	ug/L	50	52.9	106	70-130	
Chloroethane	ug/L	50	45.6	91	51-130	
Chloroform	ug/L	50	55.7	111	70-130	
Chloromethane	ug/L	50	36.9	74	25-132	
cis-1,2-Dichloroethene	ug/L	50	52.8	106	69-130	
cis-1,3-Dichloropropene	ug/L	50	53.8	108	70-130	
Dibromochloromethane	ug/L	50	54.7	109	70-130	
Dichlorodifluoromethane	ug/L	50	37.7	75	23-130	
Ethylbenzene	ug/L	50	54.8	110	70-136	
m&p-Xylene	ug/L	100	105	105	70-138	
Methyl-tert-butyl ether	ug/L	50	50.5	101	66-138	
Methylene Chloride	ug/L	50	51.7	103	70-130	
o-Xylene	ug/L	50	53.0	106	70-134	
Styrene	ug/L	50	53.2	106	70-133	
Tetrachloroethene	ug/L	50	49.6	99	70-138	
Toluene	ug/L	50	54.8	110	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.4	107	70-131	
trans-1,3-Dichloropropene	ug/L	50	47.1	94	69-130	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

LABORATORY CONTROL SAMPLE: 1407483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	54.1	108	70-130	
Trichlorofluoromethane	ug/L	50	49.1	98	50-150	
Vinyl chloride	ug/L	50	50.6	101	49-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Dibromofluoromethane (S)	%			108	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1408606 1408607

Parameter	Units	40139613001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	55.6	58.5	111	117	70-134	5	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	56.4	55.6	113	111	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	56.5	57.5	113	115	70-134	2	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	49.5	50.6	99	101	68-136	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	52.8	53.7	106	107	50-150	2	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	54.4	54.2	109	108	70-130	0	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	51.9	51.2	104	102	70-130	1	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	61.7	63.3	123	127	70-130	3	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	62.8	57.2	126	114	70-130	9	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	50.6	50.2	101	100	70-131	1	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	52.9	52.3	106	105	70-130	1	20	
Benzene	ug/L	<0.50	50	50	66.9	68.0	134	136	57-138	2	20	
Bromodichloromethane	ug/L	<0.50	50	50	56.1	52.6	112	105	70-130	7	20	
Bromoform	ug/L	<0.50	50	50	44.9	45.3	90	91	70-130	1	20	
Bromomethane	ug/L	<2.4	50	50	47.4	50.0	95	100	33-130	5	27	
Carbon disulfide	ug/L	<0.61	50	50	59.8	61.9	120	124	70-153	4	20	
Carbon tetrachloride	ug/L	<0.50	50	50	55.5	57.5	111	115	70-138	4	20	
Chlorobenzene	ug/L	<0.50	50	50	53.7	52.7	107	105	70-130	2	20	
Chloroethane	ug/L	<0.37	50	50	45.3	46.3	91	93	51-130	2	20	
Chloroform	ug/L	<2.5	50	50	56.9	57.9	114	116	70-130	2	20	
Chloromethane	ug/L	<0.50	50	50	37.8	38.1	76	76	25-132	1	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	54.2	53.5	108	107	61-140	1	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	57.3	52.3	115	105	70-130	9	20	
Dibromochloromethane	ug/L	<0.50	50	50	56.5	55.6	113	111	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	37.7	39.0	75	78	23-130	3	20	
Ethylbenzene	ug/L	<0.50	50	50	55.0	55.1	110	110	70-138	0	20	
m&p-Xylene	ug/L	<1.0	100	100	107	107	107	107	70-140	0	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	53.1	53.9	106	108	66-139	1	20	
Methylene Chloride	ug/L	<0.23	50	50	53.2	54.3	106	109	70-130	2	20	
o-Xylene	ug/L	<0.50	50	50	54.4	53.3	109	107	70-134	2	20	
Styrene	ug/L	<0.50	50	50	54.8	53.3	110	107	70-138	3	20	
Tetrachloroethene	ug/L	<0.50	50	50	49.0	49.9	98	100	70-148	2	20	
Toluene	ug/L	<0.50	50	50	54.7	54.6	109	109	70-130	0	20	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1408606 1408607

Parameter	Units	40139613001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	52.8	54.9	106	110	70-133	4	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	48.9	48.3	98	97	69-130	1	20	
Trichloroethene	ug/L	<0.33	50	50	53.9	52.8	108	106	70-131	2	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	49.2	51.1	98	102	50-150	4	20	
Vinyl chloride	ug/L	2.4	50	50	53.5	55.4	102	106	49-133	3	20	
4-Bromofluorobenzene (S)	%						98	98	70-130			
Dibromofluoromethane (S)	%						108	110	70-130			
Toluene-d8 (S)	%						101	101	70-130			

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 237611 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

METHOD BLANK: 1408309 Matrix: Water
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	10/12/16 11:46	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	10/12/16 11:46	
1,1-Dichloroethane	ug/L	<0.24	1.0	10/12/16 11:46	
1,1-Dichloroethene	ug/L	<0.41	1.0	10/12/16 11:46	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	10/12/16 11:46	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	10/12/16 11:46	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	10/12/16 11:46	
1,2-Dichloroethane	ug/L	<0.17	1.0	10/12/16 11:46	
1,2-Dichloropropane	ug/L	<0.23	1.0	10/12/16 11:46	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	10/12/16 11:46	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	10/12/16 11:46	
2-Butanone (MEK)	ug/L	<3.0	20.0	10/12/16 11:46	
Acetone	ug/L	<3.0	20.0	10/12/16 11:46	
Benzene	ug/L	<0.50	1.0	10/12/16 11:46	
Bromodichloromethane	ug/L	<0.50	1.0	10/12/16 11:46	
Bromoform	ug/L	<0.50	1.0	10/12/16 11:46	
Bromomethane	ug/L	<2.4	5.0	10/12/16 11:46	
Carbon disulfide	ug/L	<0.61	5.0	10/12/16 11:46	
Carbon tetrachloride	ug/L	<0.50	1.0	10/12/16 11:46	
Chlorobenzene	ug/L	<0.50	1.0	10/12/16 11:46	
Chloroethane	ug/L	<0.37	1.0	10/12/16 11:46	
Chloroform	ug/L	<2.5	5.0	10/12/16 11:46	
Chloromethane	ug/L	<0.50	1.0	10/12/16 11:46	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	10/12/16 11:46	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	10/12/16 11:46	
Dibromochloromethane	ug/L	<0.50	1.0	10/12/16 11:46	
Dibromomethane	ug/L	<0.43	1.0	10/12/16 11:46	
Dichlorodifluoromethane	ug/L	<0.22	1.0	10/12/16 11:46	
Ethylbenzene	ug/L	<0.50	1.0	10/12/16 11:46	
m&p-Xylene	ug/L	<1.0	2.0	10/12/16 11:46	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	10/12/16 11:46	
Methylene Chloride	ug/L	<0.23	1.0	10/12/16 11:46	
Naphthalene	ug/L	<2.5	5.0	10/12/16 11:46	
o-Xylene	ug/L	<0.50	1.0	10/12/16 11:46	
Styrene	ug/L	<0.50	1.0	10/12/16 11:46	
Tetrachloroethene	ug/L	<0.50	1.0	10/12/16 11:46	
Tetrahydrofuran	ug/L	<2.0	5.0	10/12/16 11:46	
Toluene	ug/L	<0.50	1.0	10/12/16 11:46	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	10/12/16 11:46	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	10/12/16 11:46	
Trichloroethene	ug/L	<0.33	1.0	10/12/16 11:46	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

METHOD BLANK: 1408309 Matrix: Water
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	10/12/16 11:46	
Vinyl chloride	ug/L	<0.18	1.0	10/12/16 11:46	
4-Bromofluorobenzene (S)	%	93	70-130	10/12/16 11:46	
Dibromofluoromethane (S)	%	104	70-130	10/12/16 11:46	
Toluene-d8 (S)	%	106	70-130	10/12/16 11:46	

LABORATORY CONTROL SAMPLE: 1408310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.8	116	70-131	
1,1,2-Trichloroethane	ug/L	50	62.1	124	70-130	
1,1-Dichloroethane	ug/L	50	59.3	119	70-133	
1,1-Dichloroethene	ug/L	50	51.0	102	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	55.8	112	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	59.4	119	70-130	
1,2-Dichlorobenzene	ug/L	50	55.1	110	70-130	
1,2-Dichloroethane	ug/L	50	64.8	130	70-130	
1,2-Dichloropropane	ug/L	50	65.0	130	70-130	
1,3-Dichlorobenzene	ug/L	50	54.4	109	70-130	
1,4-Dichlorobenzene	ug/L	50	55.7	111	70-130	
Benzene	ug/L	50	70.6	141	60-135	L0
Bromodichloromethane	ug/L	50	58.0	116	70-130	
Bromoform	ug/L	50	46.5	93	70-130	
Bromomethane	ug/L	50	44.2	88	33-130	
Carbon disulfide	ug/L	50	60.6	121	70-139	
Carbon tetrachloride	ug/L	50	56.4	113	70-138	
Chlorobenzene	ug/L	50	56.2	112	70-130	
Chloroethane	ug/L	50	47.2	94	51-130	
Chloroform	ug/L	50	58.9	118	70-130	
Chloromethane	ug/L	50	39.4	79	25-132	
cis-1,2-Dichloroethene	ug/L	50	53.3	107	69-130	
cis-1,3-Dichloropropene	ug/L	50	58.7	117	70-130	
Dibromochloromethane	ug/L	50	59.2	118	70-130	
Dichlorodifluoromethane	ug/L	50	37.1	74	23-130	
Ethylbenzene	ug/L	50	59.3	119	70-136	
m&p-Xylene	ug/L	100	113	113	70-138	
Methyl-tert-butyl ether	ug/L	50	55.2	110	66-138	
Methylene Chloride	ug/L	50	55.0	110	70-130	
o-Xylene	ug/L	50	56.8	114	70-134	
Styrene	ug/L	50	58.0	116	70-133	
Tetrachloroethene	ug/L	50	51.9	104	70-138	
Toluene	ug/L	50	59.5	119	70-130	
trans-1,2-Dichloroethene	ug/L	50	55.7	111	70-131	
trans-1,3-Dichloropropene	ug/L	50	52.3	105	69-130	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

LABORATORY CONTROL SAMPLE: 1408310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	57.0	114	70-130	
Trichlorofluoromethane	ug/L	50	51.1	102	50-150	
Vinyl chloride	ug/L	50	52.3	105	49-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Dibromofluoromethane (S)	%			106	70-130	
Toluene-d8 (S)	%			104	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409493 1409494

Parameter	Units	40139787002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	50.9	54.6	102	109	70-134	7	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	53.4	59.4	107	119	70-130	11	20	
1,1-Dichloroethane	ug/L	1.2	50	50	52.6	57.2	103	112	70-134	8	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	44.4	47.8	89	96	68-136	8	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	49.9	54.5	100	109	50-150	9	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	50.6	56.8	101	114	70-130	12	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	49.4	54.4	99	109	70-130	10	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	55.6	62.2	111	124	70-130	11	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	58.2	61.8	116	124	70-130	6	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	48.4	52.7	97	105	70-131	9	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	49.2	55.1	98	110	70-130	11	20	
Benzene	ug/L	1.3	50	50	63.0	68.8	123	135	57-138	9	20	
Bromodichloromethane	ug/L	<0.50	50	50	49.5	55.2	99	110	70-130	11	20	
Bromoform	ug/L	<0.50	50	50	40.8	44.3	82	89	70-130	8	20	
Bromomethane	ug/L	<2.4	50	50	39.2	38.0	78	76	33-130	3	27	
Carbon disulfide	ug/L	<0.61	50	50	55.7	59.6	111	119	70-153	7	20	
Carbon tetrachloride	ug/L	<0.50	50	50	51.0	54.3	102	109	70-138	6	20	
Chlorobenzene	ug/L	<0.50	50	50	50.5	54.6	101	109	70-130	8	20	
Chloroethane	ug/L	<0.37	50	50	41.6	44.9	83	90	51-130	8	20	
Chloroform	ug/L	<2.5	50	50	51.2	56.4	102	113	70-130	10	20	
Chloromethane	ug/L	<0.50	50	50	33.8	36.1	68	72	25-132	7	20	
cis-1,2-Dichloroethene	ug/L	1.8	50	50	49.1	53.2	94	103	61-140	8	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	48.3	55.4	97	111	70-130	14	20	
Dibromochloromethane	ug/L	<0.50	50	50	52.0	58.0	104	116	70-130	11	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	33.2	35.3	66	71	23-130	6	20	
Ethylbenzene	ug/L	<0.50	50	50	52.5	56.7	105	113	70-138	8	20	
m&p-Xylene	ug/L	<1.0	100	100	102	110	102	110	70-140	7	20	
Methyl-tert-butyl ether	ug/L	0.29J	50	50	47.5	52.9	94	105	66-139	11	20	
Methylene Chloride	ug/L	0.31J	50	50	47.9	52.9	95	105	70-130	10	20	
o-Xylene	ug/L	<0.50	50	50	51.3	55.1	103	110	70-134	7	20	
Styrene	ug/L	<0.50	50	50	51.4	56.9	103	114	70-138	10	20	
Tetrachloroethene	ug/L	<0.50	50	50	47.0	49.9	94	100	70-148	6	20	
Toluene	ug/L	<0.50	50	50	52.9	56.9	106	114	70-130	7	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 INVESTIGATION WELLS
Pace Project No.: 40139613

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409493 1409494

Parameter	Units	40139787002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	48.6	53.3	97	107	70-133	9	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	45.1	51.4	90	103	69-130	13	20	
Trichloroethene	ug/L	<0.33	50	50	50.8	53.8	102	108	70-131	6	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	44.9	48.6	90	97	50-150	8	20	
Vinyl chloride	ug/L	<0.18	50	50	47.6	51.3	95	103	49-133	7	20	
4-Bromofluorobenzene (S)	%						97	97	70-130			
Dibromofluoromethane (S)	%						105	106	70-130			
Toluene-d8 (S)	%						103	104	70-130			

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 237670
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40139613001

METHOD BLANK: 1408491 Matrix: Water
Associated Lab Samples: 40139613001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	10/14/16 13:25	

LABORATORY CONTROL SAMPLE: 1408492

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	22.1	110	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1408493 1408494

Parameter	Units	40139611001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	37.8	20	20	58.2	57.9	102	101	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1408495 1408496

Parameter	Units	40139614002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	559	400	400	927	911	92	88	90-110	2	15	M0

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 238126 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

METHOD BLANK: 1410630 Matrix: Water
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	0.50J	2.0	10/18/16 12:08	

LABORATORY CONTROL SAMPLE: 1410631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1410632 1410633

Parameter	Units	40139754012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6	20	20	23.1	23.3	102	104	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1410634 1410635

Parameter	Units	40139786006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	18.9	20	20	39.7	39.9	104	105	90-110	0	15	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 237905 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40139613001

METHOD BLANK: 1409543 Matrix: Water
Associated Lab Samples: 40139613001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<8.6	20.0	10/13/16 11:11	

LABORATORY CONTROL SAMPLE: 1409544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	100	102	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409545 1409546

Parameter	Units	40139612007 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, Dissolved	mg/L	1010	1000	1000	1960	1910	95	90	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409547 1409548

Parameter	Units	40139683005 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, Dissolved	mg/L	23.1	100	100	120	118	97	95	90-110	2	20	

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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 INVESTIGATION WELLS
Pace Project No.: 40139613

QC Batch: 238341 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

METHOD BLANK: 1412182 Matrix: Water
Associated Lab Samples: 40139786001, 40139786002, 40139786003, 40139786004, 40139786005, 40139786006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<8.6	20.0	10/18/16 12:25	

LABORATORY CONTROL SAMPLE: 1412183

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1412184 1412185

Parameter	Units	40139786005 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, Dissolved	mg/L	376	500	500	884	891	102	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1412186 1412187

Parameter	Units	40139870003 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, Dissolved	mg/L	34.5	100	100	129	129	95	94	90-110	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40139613

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40139613001	**MW-1B**	EPA 6010	237782		
40139786001	**P-424D**	EPA 6010	237793		
40139786002	**P-424SS**	EPA 6010	237793		
40139786003	**P-423D**	EPA 6010	237793		
40139786004	**P-426D**	EPA 6010	238166		
40139786005	**P-402E**	EPA 6010	238166		
40139786006	**P-422B**	EPA 6010	238166		
40139613001	**MW-1B**	EPA 8260	237505		
40139786001	**P-424D**	EPA 8260	237611		
40139786002	**P-424SS**	EPA 8260	237611		
40139786003	**P-423D**	EPA 8260	237611		
40139786004	**P-426D**	EPA 8260	237611		
40139786005	**P-402E**	EPA 8260	237611		
40139786006	**P-422B**	EPA 8260	237611		
40139613001	**MW-1B**				
40139786001	**P-424D**				
40139786002	**P-424SS**				
40139786003	**P-423D**				
40139786004	**P-426D**				
40139786005	**P-402E**				
40139786006	**P-422B**				
40139786007	**P-401D**				
40139613009	**P-402E**				
40139613010	**P-422B**				
40139613011	**P-423B**				
40139613012	**P-424D**				
40139613013	**P-424SS**				
40139613014	**P-426D**				
40139613015	**MW-1B**				
40139613001	**MW-1B**	EPA 300.0	237670		
40139786001	**P-424D**	EPA 300.0	238126		
40139786002	**P-424SS**	EPA 300.0	238126		
40139786003	**P-423D**	EPA 300.0	238126		
40139786004	**P-426D**	EPA 300.0	238126		
40139786005	**P-402E**	EPA 300.0	238126		
40139786006	**P-422B**	EPA 300.0	238126		
40139613001	**MW-1B**	EPA 310.2	237905		
40139786001	**P-424D**	EPA 310.2	238341		
40139786002	**P-424SS**	EPA 310.2	238341		
40139786003	**P-423D**	EPA 310.2	238341		
40139786004	**P-426D**	EPA 310.2	238341		
40139786005	**P-402E**	EPA 310.2	238341		
40139786006	**P-422B**	EPA 310.2	238341		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

40139613

Page: 1 of 1

mm.

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: / Fax:	Project Name: LGRL Investigation Wells	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: 3707

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ DRINKING WATER

__ UST __ RCRA OTHER____

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

Section D Required Client Information

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

SAMPLE ID

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

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: Nitric	Preservatives: HCL	Preservatives: Unpreserved	Filtered (Y/N)	Requested Analysis: 8260 NR 507 VOCs	Requested Analysis: diss chloride, alkalinity	Requested Analysis: diss 6020 - hard, ss	Requested Analysis: Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
													N	Y	Y			
1	MW-1B 001	GW	G			10/5	1530	12.6	5	1	3	1		X	X	X		3-40ml 2-250ml
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] Fritsch/ESC	10/5	1700			
Dunham	10/6/16	0730	[signature] Pace	10/6/16	0730

SAMPLE CONDITIONS

	Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
	R01	Y/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: Brenda Fritsch

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 10/05/16

Sample Condition Upon Receipt

Pace Analytical

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

Client Name: ADS

Project #: **WO# : 40139613**

40139613

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: Dunham

Tracking #: 1220541

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 NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: /Corr: R01 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 10-6-16
Initials: MV

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 <2; NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDRO, Phenolics, OTHER:	☑Yes ☐No	Initial when completed MV / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14.
Trip Blank Present:	☐Yes ☑No ☐N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Person Contacted: Date/Time:

If checked, see attached form for additional comments ☐

Comments/ Resolution:

Project Manager Review: **Date:** 10/6/16

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CHAIN-OF-CUSTODY / Analytical Request Document

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

40139786

BH

Page: 1 of 1

Section A **Required** Client Information:	Section B **Required** Project Information:	Section C Invoice Information:
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: LGRL Investigation Wells	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: 3707

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ 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: Nitric	Preservatives: HCL	Preservatives: Unpreserved	Filtered (Y/N)	Requested Analysis: 8260 NR 507 VOCs	Requested Analysis: diss chloride, alkalinity	Requested Analysis: diss 6020 - hard, as	Requested Analysis: Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
													N	Y	Y			
1	P-424D 001	GW	G	—	—	10/7/16	1015	15.4	5	1	3	1		X	X	X	3-40mlVB	2-250mlpDA
2	P-424SS 002			—	—		1130	14.6	5	1	3	1		X	X	X		
3	P-423D 003			—	—		1200	15.9	5	1	3	1		X	X	X		
4	P-426D 004			—	—		1240	15.0	5	1	3	1		X	X	X		
5	P-401D ~~005~~			—	—				5	1	3	1		X	X	X		
6	P-402E ~~005~~ ~~006~~			—	—		1330	14.3	5	1	3	1		X	X	X		
7	P-422B ~~006~~ ~~007~~	GW	G	—	—	10/7/16	1410		5	1	3	1		X	X	X		
8	Trip Blank	—	—	—	—	—	—	—	2		2			X				
9																		
10																		
11																		
12																		

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] BH	10/7/16	1700			
[signature]	10/8/16	0930	[signature] Pace	10/8/16	0930

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
FC1	Y/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 Freimark

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 10/7/16

Sample Condition Upon Receipt

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

Project #: **WO#: 40139786**

Client Name: ADS Glacier Ridge

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace ☐ Other: Durham

Tracking #: 1221537

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 NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: /Corr: ROI **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 10/8/16
Initials: KG

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☐Yes ☑No ☐N/A	8. no sample volume for P-401D or
Correct Containers Used:	☑Yes ☐No ☐N/A	9. trip blank KF 10/8/16
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WW		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No	Initial when completed KG / Lab Std #ID of Preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14.
Trip Blank Present:	☐Yes ☑No ☐N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: Date/Time:

Comments/ Resolution: P 401D not sampled per ESC. 10/10/16 CK

Project Manager Review: CKV **Date:** 10/10/16

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

May 04, 2017

General Manager
Advanced Disposal Glacier Ridge Landfill LLC
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Dear General Manager:
Enclosed are the analytical results for sample(s) received by the laboratory between April 07, 2017 and May 04, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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: Mari Bull, SCS ENGINEERS
Sherren Clark, SCS Engineers
Frank Perugini, Environmental Sampling Corporation
Kari Rabideau, Advanced Disposal Hickory Meadows Landfill, LLC
ESC Staff, ESC

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

CERTIFICATIONS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Green Bay Certification IDs

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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40147998001	**P-402E**	Water	04/07/17 13:40	04/08/17 07:40
40147998002	**P-422B**	Water	04/07/17 14:10	04/08/17 07:40
40147998003	**P-423D**	Water	04/07/17 11:50	04/08/17 07:40
40147998004	**P-424D**	Water	04/07/17 11:15	04/08/17 07:40
40147998005	**P-424SS**	Water	04/07/17 10:45	04/08/17 07:40
40147998006	**P-426D**	Water	04/07/17 12:30	04/08/17 07:40
40147998007	**P-424SS DUP**	Water	04/07/17 10:45	04/08/17 07:40
40147998008	**TRIP BLANK**	Water	04/07/17 00:00	04/08/17 07:40
40147912005	**MW-1B**	Water	04/06/17 13:40	04/07/17 08:55
40147998010	**P-401D**	Water	04/03/17 00:00	05/04/17 14:30
40147998011	**P-402E**	Water	04/03/17 00:00	05/04/17 14:30
40147998012	**P-422B**	Water	04/03/17 00:00	05/04/17 14:30
40147998013	**P-423D**	Water	04/03/17 00:00	05/04/17 14:30
40147998014	**P-424D**	Water	04/03/17 00:00	05/04/17 14:30
40147998015	**P-424SS**	Water	04/03/17 00:00	05/04/17 14:30
40147998016	**P-426D**	Water	04/03/17 00:00	05/04/17 14:30
40147998017	**MW-1B**	Water	04/03/17 00:00	05/04/17 14:30

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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40147998001	**P-402E**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998002	**P-422B**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998003	**P-423D**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998004	**P-424D**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998005	**P-424SS**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998006	**P-426D**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998007	**P-424SS DUP**	EPA 6010	DLB	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998008	**TRIP BLANK**	EPA 8260	HNW	46	PASI-G
40147912005	**MW-1B**	EPA 6010	DLB	1	PASI-G

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260	LAP	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40147998010	**P-401D**		CKV	1	PASI-G
40147998011	**P-402E**		CKV	1	PASI-G
40147998012	**P-422B**		CKV	1	PASI-G
40147998013	**P-423D**		CKV	1	PASI-G
40147998014	**P-424D**		CKV	1	PASI-G
40147998015	**P-424SS**		CKV	1	PASI-G
40147998016	**P-426D**		CKV	1	PASI-G
40147998017	**MW-1B**		CKV	1	PASI-G

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-402E **Lab ID: 40147998001** Collected: 04/07/17 13:40 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**442000**	ug/L	2000	150	1		04/13/17 13:28		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	71-55-6	
1,1,2-Trichloroethane	**<0.49**	ug/L	2.5	0.49	2.5		04/11/17 09:46	79-00-5	
1,1-Dichloroethane	**1.1J**	ug/L	2.5	0.60	2.5		04/11/17 09:46	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	2.5	1.0	2.5		04/11/17 09:46	75-35-4	
1,2-Dibromo-3-chloropropane	**<5.4**	ug/L	12.5	5.4	2.5		04/11/17 09:46	96-12-8	
1,2-Dibromoethane (EDB)	**<0.44**	ug/L	2.5	0.44	2.5		04/11/17 09:46	106-93-4	
1,2-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	95-50-1	
1,2-Dichloroethane	**<0.42**	ug/L	2.5	0.42	2.5		04/11/17 09:46	107-06-2	
1,2-Dichloropropane	**<0.58**	ug/L	2.5	0.58	2.5		04/11/17 09:46	78-87-5	
1,3-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	541-73-1	
1,4-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	106-46-7	
2-Butanone (MEK)	**<7.4**	ug/L	50.0	7.4	2.5		04/11/17 09:46	78-93-3	
Acetone	**<7.4**	ug/L	50.0	7.4	2.5		04/11/17 09:46	67-64-1	
Benzene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	71-43-2	
Bromodichloromethane	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	75-27-4	
Bromoform	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	75-25-2	
Bromomethane	**<6.1**	ug/L	12.5	6.1	2.5		04/11/17 09:46	74-83-9	
Carbon disulfide	**<1.5**	ug/L	12.5	1.5	2.5		04/11/17 09:46	75-15-0	
Carbon tetrachloride	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	56-23-5	
Chlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	108-90-7	
Chloroethane	**7.1**	ug/L	2.5	0.94	2.5		04/11/17 09:46	75-00-3	
Chloroform	**<6.2**	ug/L	12.5	6.2	2.5		04/11/17 09:46	67-66-3	
Chloromethane	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	74-87-3	
Dibromochloromethane	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	124-48-1	
Dibromomethane	**<1.1**	ug/L	2.5	1.1	2.5		04/11/17 09:46	74-95-3	
Dichlorodifluoromethane	**<0.56**	ug/L	2.5	0.56	2.5		04/11/17 09:46	75-71-8	
Ethylbenzene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	100-41-4	
Methyl-tert-butyl ether	**<0.44**	ug/L	2.5	0.44	2.5		04/11/17 09:46	1634-04-4	
Methylene Chloride	**<0.58**	ug/L	2.5	0.58	2.5		04/11/17 09:46	75-09-2	
Naphthalene	**<6.2**	ug/L	12.5	6.2	2.5		04/11/17 09:46	91-20-3	
Styrene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	100-42-5	
Tetrachloroethene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	127-18-4	
Tetrahydrofuran	**<5.1**	ug/L	12.5	5.1	2.5		04/11/17 09:46	109-99-9	
Toluene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	108-88-3	
Trichloroethene	**3.3**	ug/L	2.5	0.83	2.5		04/11/17 09:46	79-01-6	
Trichlorofluoromethane	**<0.46**	ug/L	2.5	0.46	2.5		04/11/17 09:46	75-69-4	
Vinyl chloride	**29.7**	ug/L	2.5	0.44	2.5		04/11/17 09:46	75-01-4	
cis-1,2-Dichloroethene	**324**	ug/L	2.5	0.64	2.5		04/11/17 09:46	156-59-2	
cis-1,3-Dichloropropene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	10061-01-5	
m&p-Xylene	**<2.5**	ug/L	5.0	2.5	2.5		04/11/17 09:46	179601-23-1	
o-Xylene	**<1.2**	ug/L	2.5	1.2	2.5		04/11/17 09:46	95-47-6	
trans-1,2-Dichloroethene	**14.3**	ug/L	2.5	0.64	2.5		04/11/17 09:46	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-402E **Lab ID: 40147998001** Collected: 04/07/17 13:40 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.57**	ug/L	2.5	0.57	2.5		04/11/17 09:46	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		2.5		04/11/17 09:46	460-00-4	
Dibromofluoromethane (S)	113	%	70-130		2.5		04/11/17 09:46	1868-53-7	
Toluene-d8 (S)	88	%	70-130		2.5		04/11/17 09:46	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.02**	Std. Units			1		04/07/17 13:40		
Field Specific Conductance	**880**	umhos/cm			1		04/07/17 13:40		
Turbidity	**N**	NTU			1		04/07/17 13:40		
Static Water Level	**N**	feet			1		04/07/17 13:40		
Apparent Color	**N**	no units			1		04/07/17 13:40		
Temperature, Water (C)	**13.3**	deg C			1		04/07/17 13:40		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**65.3**	mg/L	10.0	2.5	5		04/18/17 23:41	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**392**	mg/L	23.5	7.0	1		04/13/17 12:33		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-422B **Lab ID: 40147998002** Collected: 04/07/17 14:10 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**157000**	ug/L	2000	150	1		04/13/17 13:31		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 10:09	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/11/17 10:09	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 10:09	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 10:09	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:09	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 10:09	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:09	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 10:09	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 10:09	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 10:09	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 10:09	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/11/17 10:09	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 10:09	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 10:09	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 10:09	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 10:09	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:09	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 10:09	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 10:09	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/11/17 10:09	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:09	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:09	75-01-4	
cis-1,2-Dichloroethene	**7.0**	ug/L	1.0	0.26	1		04/11/17 10:09	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 10:09	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:09	95-47-6	
trans-1,2-Dichloroethene	**0.27J**	ug/L	1.0	0.26	1		04/11/17 10:09	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-422B **Lab ID: 40147998002** Collected: 04/07/17 14:10 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:09	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		04/11/17 10:09	460-00-4	
Dibromofluoromethane (S)	112	%	70-130		1		04/11/17 10:09	1868-53-7	
Toluene-d8 (S)	87	%	70-130		1		04/11/17 10:09	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.98**	Std. Units			1		04/07/17 14:10		
Field Specific Conductance	**407**	umhos/cm			1		04/07/17 14:10		
Turbidity	**N**	NTU			1		04/07/17 14:10		
Apparent Color	**N**	no units			1		04/07/17 14:10		
Odor	**N**	no units			1		04/07/17 14:10		
Temperature, Water (C)	**12.4**	deg C			1		04/07/17 14:10		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**12.2**	mg/L	2.0	0.50	1		04/18/17 23:53	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**209**	mg/L	23.5	7.0	1		04/13/17 12:34		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-423D **Lab ID: 40147998003** Collected: 04/07/17 11:50 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**430000**	ug/L	2000	150	1		04/13/17 13:34		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 10:32	79-00-5	
1,1-Dichloroethane	**0.44J**	ug/L	1.0	0.24	1		04/11/17 10:32	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 10:32	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 10:32	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:32	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 10:32	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:32	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 10:32	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 10:32	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 10:32	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 10:32	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	108-90-7	
Chloroethane	**1.7**	ug/L	1.0	0.37	1		04/11/17 10:32	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 10:32	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 10:32	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 10:32	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 10:32	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:32	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 10:32	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 10:32	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	108-88-3	
Trichloroethene	**0.73J**	ug/L	1.0	0.33	1		04/11/17 10:32	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:32	75-69-4	
Vinyl chloride	**1.1**	ug/L	1.0	0.18	1		04/11/17 10:32	75-01-4	
cis-1,2-Dichloroethene	**47.9**	ug/L	1.0	0.26	1		04/11/17 10:32	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 10:32	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:32	95-47-6	
trans-1,2-Dichloroethene	**2.6**	ug/L	1.0	0.26	1		04/11/17 10:32	156-60-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-423D **Lab ID: 40147998003** Collected: 04/07/17 11:50 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:32	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		04/11/17 10:32	460-00-4	
Dibromofluoromethane (S)	111	%	70-130		1		04/11/17 10:32	1868-53-7	
Toluene-d8 (S)	88	%	70-130		1		04/11/17 10:32	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.57**	Std. Units			1		04/07/17 11:50		
Field Specific Conductance	**799**	umhos/cm			1		04/07/17 11:50		
Turbidity	**N**	NTU			1		04/07/17 11:50		
Apparent Color	**N**	no units			1		04/07/17 11:50		
Odor	**N**	no units			1		04/07/17 11:50		
Temperature, Water (C)	**14.3**	deg C			1		04/07/17 11:50		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**43.0**	mg/L	2.0	0.50	1		04/19/17 00:05	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**364**	mg/L	47.0	14.1	2		04/13/17 12:34		

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424D **Lab ID: 40147998004** Collected: 04/07/17 11:15 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**422000**	ug/L	2000	150	1		04/13/17 13:52		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 09:24	79-00-5	
1,1-Dichloroethane	**0.84J**	ug/L	1.0	0.24	1		04/11/17 09:24	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 09:24	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 09:24	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 09:24	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 09:24	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 09:24	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 09:24	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 09:24	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 09:24	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 09:24	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	108-90-7	
Chloroethane	**3.6**	ug/L	1.0	0.37	1		04/11/17 09:24	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 09:24	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 09:24	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 09:24	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 09:24	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 09:24	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 09:24	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 09:24	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	108-88-3	
Trichloroethene	**2.1**	ug/L	1.0	0.33	1		04/11/17 09:24	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 09:24	75-69-4	
Vinyl chloride	**7.6**	ug/L	1.0	0.18	1		04/11/17 09:24	75-01-4	
cis-1,2-Dichloroethene	**119**	ug/L	1.0	0.26	1		04/11/17 09:24	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 09:24	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 09:24	95-47-6	
trans-1,2-Dichloroethene	**4.0**	ug/L	1.0	0.26	1		04/11/17 09:24	156-60-5	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424D **Lab ID: 40147998004** Collected: 04/07/17 11:15 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 09:24	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		04/11/17 09:24	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		04/11/17 09:24	1868-53-7	
Toluene-d8 (S)	88	%	70-130		1		04/11/17 09:24	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.51**	Std. Units			1		04/07/17 11:15		
Field Specific Conductance	**821**	umhos/cm			1		04/07/17 11:15		
Turbidity	**N**	NTU			1		04/07/17 11:15		
Apparent Color	**N**	no units			1		04/07/17 11:15		
Odor	**N**	no units			1		04/07/17 11:15		
Temperature, Water (C)	**12.5**	deg C			1		04/07/17 11:15		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**43.2**	mg/L	10.0	2.5	5		04/19/17 13:08	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**374**	mg/L	47.0	14.1	2		04/13/17 12:39		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424SS **Lab ID: 40147998005** Collected: 04/07/17 10:45 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**288000**	ug/L	2000	150	1		04/13/17 14:00		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 10:55	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/11/17 10:55	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 10:55	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 10:55	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:55	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 10:55	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:55	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 10:55	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 10:55	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 10:55	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 10:55	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/11/17 10:55	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 10:55	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 10:55	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 10:55	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 10:55	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:55	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 10:55	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 10:55	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/11/17 10:55	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:55	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/11/17 10:55	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 10:55	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 10:55	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 10:55	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 10:55	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424SS **Lab ID: 40147998005** Collected: 04/07/17 10:45 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 10:55	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		04/11/17 10:55	460-00-4	
Dibromofluoromethane (S)	112	%	70-130		1		04/11/17 10:55	1868-53-7	
Toluene-d8 (S)	88	%	70-130		1		04/11/17 10:55	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.52**	Std. Units			1		04/07/17 10:45		
Field Specific Conductance	**530**	umhos/cm			1		04/07/17 10:45		
Turbidity	**N**	NTU			1		04/07/17 10:45		
Apparent Color	**N**	no units			1		04/07/17 10:45		
Odor	**N**	no units			1		04/07/17 10:45		
Temperature, Water (C)	**12.8**	deg C			1		04/07/17 10:45		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**0.92J**	mg/L	2.0	0.50	1		04/19/17 00:51	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**314**	mg/L	23.5	7.0	1		04/13/17 12:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-426D **Lab ID: 40147998006** Collected: 04/07/17 12:30 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**413000**	ug/L	2000	150	1		04/13/17 14:03		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 11:18	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/11/17 11:18	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 11:18	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 11:18	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 11:18	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 11:18	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 11:18	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 11:18	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 11:18	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 11:18	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 11:18	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/11/17 11:18	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 11:18	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 11:18	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 11:18	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 11:18	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 11:18	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 11:18	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 11:18	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/11/17 11:18	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 11:18	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/11/17 11:18	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 11:18	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 11:18	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:18	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 11:18	156-60-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-426D **Lab ID: 40147998006** Collected: 04/07/17 12:30 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 11:18	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		04/11/17 11:18	460-00-4	
Dibromofluoromethane (S)	111	%	70-130		1		04/11/17 11:18	1868-53-7	
Toluene-d8 (S)	88	%	70-130		1		04/11/17 11:18	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.67**	Std. Units			1		04/07/17 12:30		
Field Specific Conductance	**806**	umhos/cm			1		04/07/17 12:30		
Turbidity	**N**	NTU			1		04/07/17 12:30		
Apparent Color	**N**	no units			1		04/07/17 12:30		
Odor	**N**	no units			1		04/07/17 12:30		
Field Temperature, C	**14.0**	deg C			1		04/07/17 12:30		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**37.0**	mg/L	2.0	0.50	1		04/19/17 01:02	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**349**	mg/L	23.5	7.0	1		04/13/17 12:41		

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424SS DUP **Lab ID: 40147998007** Collected: 04/07/17 10:45 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**284000**	ug/L	2000	150	1		04/13/17 14:05		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 11:41	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/11/17 11:41	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 11:41	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 11:41	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 11:41	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 11:41	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 11:41	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 11:41	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 11:41	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 11:41	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 11:41	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/11/17 11:41	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 11:41	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 11:41	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 11:41	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 11:41	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 11:41	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 11:41	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 11:41	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/11/17 11:41	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 11:41	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/11/17 11:41	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 11:41	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 11:41	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 11:41	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 11:41	156-60-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424SS DUP **Lab ID: 40147998007** Collected: 04/07/17 10:45 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 11:41	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		04/11/17 11:41	460-00-4	
Dibromofluoromethane (S)	116	%	70-130		1		04/11/17 11:41	1868-53-7	
Toluene-d8 (S)	88	%	70-130		1		04/11/17 11:41	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.52**	Std. Units			1		04/07/17 10:45		
Field Specific Conductance	**530**	umhos/cm			1		04/07/17 10:45		
Turbidity	**N**	NTU			1		04/07/17 10:45		
Apparent Color	**N**	no units			1		04/07/17 10:45		
Odor	**N**	no units			1		04/07/17 10:45		
Field Temperature, C	**12.8**	deg C			1		04/07/17 10:45		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**0.91J**	mg/L	2.0	0.50	1		04/19/17 01:14	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**317**	mg/L	23.5	7.0	1		04/13/17 12:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: TRIP BLANK **Lab ID: 40147998008** Collected: 04/07/17 00:00 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/12/17 02:00	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/12/17 02:00	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/12/17 02:00	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/12/17 02:00	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/12/17 02:00	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/12/17 02:00	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/12/17 02:00	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/12/17 02:00	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/12/17 02:00	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/12/17 02:00	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/12/17 02:00	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/12/17 02:00	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/12/17 02:00	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/12/17 02:00	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/12/17 02:00	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/12/17 02:00	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/12/17 02:00	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/12/17 02:00	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/12/17 02:00	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/12/17 02:00	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/12/17 02:00	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/12/17 02:00	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/12/17 02:00	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/12/17 02:00	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/12/17 02:00	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/12/17 02:00	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/12/17 02:00	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		04/12/17 02:00	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		04/12/17 02:00	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: TRIP BLANK **Lab ID: 40147998008** Collected: 04/07/17 00:00 Received: 04/08/17 07:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	88	%	70-130		1		04/12/17 02:00	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: MW-1B **Lab ID: 40147912005** Collected: 04/06/17 13:40 Received: 04/07/17 08:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**287000**	ug/L	2000	150	1		04/13/17 12:56		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/11/17 13:35	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/11/17 13:35	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/11/17 13:35	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/11/17 13:35	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/11/17 13:35	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/11/17 13:35	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/11/17 13:35	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		04/11/17 13:35	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		04/11/17 13:35	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/11/17 13:35	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		04/11/17 13:35	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/11/17 13:35	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/11/17 13:35	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/11/17 13:35	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/11/17 13:35	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/11/17 13:35	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/11/17 13:35	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/11/17 13:35	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		04/11/17 13:35	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/11/17 13:35	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/11/17 13:35	75-69-4	
Vinyl chloride	**1.9**	ug/L	1.0	0.18	1		04/11/17 13:35	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 13:35	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/11/17 13:35	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/11/17 13:35	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/11/17 13:35	156-60-5	

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: MW-1B **Lab ID: 40147912005** Collected: 04/06/17 13:40 Received: 04/07/17 08:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/11/17 13:35	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	83	%	70-130		1		04/11/17 13:35	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1		04/11/17 13:35	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		04/11/17 13:35	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.87**	Std. Units			1		04/06/17 13:40		
Field Specific Conductance	**783**	umhos/cm			1		04/06/17 13:40		
Turbidity	**N**	NTU			1		04/06/17 13:40		
Apparent Color	**N**	no units			1		04/06/17 13:40		
Odor	**N**	no units			1		04/06/17 13:40		
Temperature, Water (C)	**10.6**	deg C			1		04/06/17 13:40		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**89.0**	mg/L	10.0	2.5	5		04/18/17 19:31	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**216**	mg/L	23.5	7.0	1		04/13/17 12:31		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-401D **Lab ID: 40147998010** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**856.50**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-402E **Lab ID: 40147998011** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**856.56**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-422B **Lab ID: 40147998012** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**928.59**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-423D **Lab ID: 40147998013** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**854.69**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424D **Lab ID: 40147998014** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**855.27**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-424SS **Lab ID: 40147998015** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**854.78**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: P-426D **Lab ID: 40147998016** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**854.70**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Sample: MW-1B **Lab ID: 40147998017** Collected: 04/03/17 00:00 Received: 05/04/17 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**928.48**	feet			1		04/03/17 00:00		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252510 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40147912005, 40147998001, 40147998002, 40147998003

METHOD BLANK: 1489777 Matrix: Water
Associated Lab Samples: 40147912005, 40147998001, 40147998002, 40147998003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L	<150	2000	04/13/17 12:22	

LABORATORY CONTROL SAMPLE: 1489778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L		30800			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1489779 1489780

Parameter	Units	40147491008 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, Dissolved	ug/L	221000			248000	253000				2	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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252512 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40147998004, 40147998005, 40147998006, 40147998007

METHOD BLANK: 1489784 Matrix: Water
Associated Lab Samples: 40147998004, 40147998005, 40147998006, 40147998007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L	<150	2000	04/13/17 13:47	

LABORATORY CONTROL SAMPLE: 1489785

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L		31700			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1489786 1489787

Parameter	Units	40147998004 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, Dissolved	ug/L	422000			441000	441000				0	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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252206
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40147912005

METHOD BLANK: 1488616
Matrix: Water
Associated Lab Samples: 40147912005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	04/11/17 07:06	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	04/11/17 07:06	
1,1-Dichloroethane	ug/L	<0.24	1.0	04/11/17 07:06	
1,1-Dichloroethene	ug/L	<0.41	1.0	04/11/17 07:06	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	04/11/17 07:06	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	04/11/17 07:06	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
1,2-Dichloroethane	ug/L	<0.17	1.0	04/11/17 07:06	
1,2-Dichloropropane	ug/L	<0.23	1.0	04/11/17 07:06	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
2-Butanone (MEK)	ug/L	<3.0	20.0	04/11/17 07:06	
Acetone	ug/L	<3.0	20.0	04/11/17 07:06	
Benzene	ug/L	<0.50	1.0	04/11/17 07:06	
Bromodichloromethane	ug/L	<0.50	1.0	04/11/17 07:06	
Bromoform	ug/L	<0.50	1.0	04/11/17 07:06	
Bromomethane	ug/L	<2.4	5.0	04/11/17 07:06	
Carbon disulfide	ug/L	<0.61	5.0	04/11/17 07:06	
Carbon tetrachloride	ug/L	<0.50	1.0	04/11/17 07:06	
Chlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
Chloroethane	ug/L	<0.37	1.0	04/11/17 07:06	
Chloroform	ug/L	<2.5	5.0	04/11/17 07:06	
Chloromethane	ug/L	<0.50	1.0	04/11/17 07:06	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	04/11/17 07:06	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	04/11/17 07:06	
Dibromochloromethane	ug/L	<0.50	1.0	04/11/17 07:06	
Dibromomethane	ug/L	<0.43	1.0	04/11/17 07:06	
Dichlorodifluoromethane	ug/L	<0.22	1.0	04/11/17 07:06	
Ethylbenzene	ug/L	<0.50	1.0	04/11/17 07:06	
m&p-Xylene	ug/L	<1.0	2.0	04/11/17 07:06	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	04/11/17 07:06	
Methylene Chloride	ug/L	<0.23	1.0	04/11/17 07:06	
Naphthalene	ug/L	<2.5	5.0	04/11/17 07:06	
o-Xylene	ug/L	<0.50	1.0	04/11/17 07:06	
Styrene	ug/L	<0.50	1.0	04/11/17 07:06	
Tetrachloroethene	ug/L	<0.50	1.0	04/11/17 07:06	
Tetrahydrofuran	ug/L	<2.0	5.0	04/11/17 07:06	
Toluene	ug/L	<0.50	1.0	04/11/17 07:06	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	04/11/17 07:06	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	04/11/17 07:06	
Trichloroethene	ug/L	<0.33	1.0	04/11/17 07:06	

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

METHOD BLANK: 1488616 Matrix: Water
Associated Lab Samples: 40147912005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	04/11/17 07:06	
Vinyl chloride	ug/L	<0.18	1.0	04/11/17 07:06	
4-Bromofluorobenzene (S)	%	83	70-130	04/11/17 07:06	
Dibromofluoromethane (S)	%	94	70-130	04/11/17 07:06	
Toluene-d8 (S)	%	97	70-130	04/11/17 07:06	

LABORATORY CONTROL SAMPLE: 1488617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.2	102	70-131	
1,1,2-Trichloroethane	ug/L	50	48.4	97	70-130	
1,1-Dichloroethane	ug/L	50	46.8	94	70-133	
1,1-Dichloroethene	ug/L	50	47.1	94	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	41.9	84	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	49.0	98	70-130	
1,2-Dichlorobenzene	ug/L	50	46.2	92	70-130	
1,2-Dichloroethane	ug/L	50	48.8	98	70-130	
1,2-Dichloropropane	ug/L	50	50.2	100	70-130	
1,3-Dichlorobenzene	ug/L	50	47.4	95	70-130	
1,4-Dichlorobenzene	ug/L	50	47.7	95	70-130	
Benzene	ug/L	50	52.1	104	60-135	
Bromodichloromethane	ug/L	50	49.8	100	70-130	
Bromoform	ug/L	50	51.1	102	70-130	
Bromomethane	ug/L	50	38.1	76	33-130	
Carbon disulfide	ug/L	50	54.6	109	70-139	
Carbon tetrachloride	ug/L	50	50.9	102	70-138	
Chlorobenzene	ug/L	50	49.4	99	70-130	
Chloroethane	ug/L	50	39.1	78	51-130	
Chloroform	ug/L	50	49.1	98	70-130	
Chloromethane	ug/L	50	35.9	72	25-132	
cis-1,2-Dichloroethene	ug/L	50	51.3	103	69-130	
cis-1,3-Dichloropropene	ug/L	50	45.8	92	70-130	
Dibromochloromethane	ug/L	50	51.1	102	70-130	
Dichlorodifluoromethane	ug/L	50	32.9	66	23-130	
Ethylbenzene	ug/L	50	52.1	104	70-136	
m&p-Xylene	ug/L	100	107	107	70-138	
Methyl-tert-butyl ether	ug/L	50	46.1	92	66-138	
Methylene Chloride	ug/L	50	44.5	89	70-130	
o-Xylene	ug/L	50	52.1	104	70-134	
Styrene	ug/L	50	52.1	104	70-133	
Tetrachloroethene	ug/L	50	51.5	103	70-138	
Toluene	ug/L	50	52.5	105	70-130	
trans-1,2-Dichloroethene	ug/L	50	47.1	94	70-131	
trans-1,3-Dichloropropene	ug/L	50	46.4	93	69-130	

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

LABORATORY CONTROL SAMPLE: 1488617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	52.7	105	70-130	
Trichlorofluoromethane	ug/L	50	48.8	98	50-150	
Vinyl chloride	ug/L	50	44.5	89	49-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Dibromofluoromethane (S)	%			95	70-130	
Toluene-d8 (S)	%			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1488618 1488619

Parameter	Units	40147831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	51.0	49.8	102	100	70-134	2	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	53.3	49.4	107	99	70-130	7	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	46.0	45.5	92	91	70-134	1	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	47.2	47.7	94	95	68-136	1	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	59.9	44.5	120	89	50-150	29	20	R1
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	55.5	50.1	111	100	70-130	10	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	52.8	49.0	106	98	70-130	7	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	49.9	48.1	100	96	70-130	4	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	46.5	48.7	93	97	70-130	4	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	48.4	48.3	97	97	70-131	0	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	50.0	48.3	100	97	70-130	4	20	
Benzene	ug/L	<0.50	50	50	52.2	51.6	104	103	57-138	1	20	
Bromodichloromethane	ug/L	<0.50	50	50	49.8	48.6	100	97	70-130	2	20	
Bromoform	ug/L	<0.50	50	50	59.0	54.1	118	108	70-130	9	20	
Bromomethane	ug/L	<2.4	50	50	35.7	44.1	71	88	33-130	21	27	
Carbon disulfide	ug/L	<0.61	50	50	56.2	54.5	112	109	70-153	3	20	
Carbon tetrachloride	ug/L	<0.50	50	50	51.2	49.7	102	99	70-138	3	20	
Chlorobenzene	ug/L	<0.50	50	50	48.7	49.7	97	99	70-130	2	20	
Chloroethane	ug/L	<0.37	50	50	41.1	41.1	82	82	51-130	0	20	
Chloroform	ug/L	<2.5	50	50	50.5	48.3	101	97	70-130	4	20	
Chloromethane	ug/L	<0.50	50	50	41.6	39.3	83	79	25-132	6	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	50.2	48.5	100	97	61-140	4	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	45.6	44.4	91	89	70-130	3	20	
Dibromochloromethane	ug/L	<0.50	50	50	52.9	50.1	106	100	70-130	6	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	34.0	33.3	68	67	23-130	2	20	
Ethylbenzene	ug/L	<0.50	50	50	53.4	53.3	107	107	70-138	0	20	
m&p-Xylene	ug/L	<1.0	100	100	108	112	108	112	70-140	3	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	52.4	46.9	105	94	66-139	11	20	
Methylene Chloride	ug/L	<0.23	50	50	46.8	45.9	94	92	70-130	2	20	
o-Xylene	ug/L	<0.50	50	50	56.2	54.4	112	109	70-134	3	20	
Styrene	ug/L	<0.50	50	50	53.5	54.4	107	109	70-138	2	20	
Tetrachloroethene	ug/L	<0.50	50	50	51.2	51.8	102	104	70-148	1	20	
Toluene	ug/L	<0.50	50	50	53.0	52.4	106	105	70-130	1	20	

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1488618 1488619

Parameter	Units	40147831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	47.9	47.8	96	96	70-133	0	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	52.5	47.2	105	94	69-130	11	20	
Trichloroethene	ug/L	<0.33	50	50	51.5	51.8	103	104	70-131	1	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	48.3	47.8	97	96	50-150	1	20	
Vinyl chloride	ug/L	<0.18	50	50	46.2	44.3	92	89	49-133	4	20	
4-Bromofluorobenzene (S)	%						102	100	70-130			
Dibromofluoromethane (S)	%						98	94	70-130			
Toluene-d8 (S)	%						96	96	70-130			

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252232 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40147998001, 40147998002, 40147998003, 40147998004, 40147998005, 40147998006, 40147998007, 40147998008

METHOD BLANK: 1488719 Matrix: Water
Associated Lab Samples: 40147998001, 40147998002, 40147998003, 40147998004, 40147998005, 40147998006, 40147998007, 40147998008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	04/11/17 07:06	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	04/11/17 07:06	
1,1-Dichloroethane	ug/L	<0.24	1.0	04/11/17 07:06	
1,1-Dichloroethene	ug/L	<0.41	1.0	04/11/17 07:06	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	04/11/17 07:06	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	04/11/17 07:06	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
1,2-Dichloroethane	ug/L	<0.17	1.0	04/11/17 07:06	
1,2-Dichloropropane	ug/L	<0.23	1.0	04/11/17 07:06	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
2-Butanone (MEK)	ug/L	<3.0	20.0	04/11/17 07:06	
Acetone	ug/L	<3.0	20.0	04/11/17 07:06	
Benzene	ug/L	<0.50	1.0	04/11/17 07:06	
Bromodichloromethane	ug/L	<0.50	1.0	04/11/17 07:06	
Bromoform	ug/L	<0.50	1.0	04/11/17 07:06	
Bromomethane	ug/L	<2.4	5.0	04/11/17 07:06	
Carbon disulfide	ug/L	<0.61	5.0	04/11/17 07:06	
Carbon tetrachloride	ug/L	<0.50	1.0	04/11/17 07:06	
Chlorobenzene	ug/L	<0.50	1.0	04/11/17 07:06	
Chloroethane	ug/L	<0.37	1.0	04/11/17 07:06	
Chloroform	ug/L	<2.5	5.0	04/11/17 07:06	
Chloromethane	ug/L	<0.50	1.0	04/11/17 07:06	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	04/11/17 07:06	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	04/11/17 07:06	
Dibromochloromethane	ug/L	<0.50	1.0	04/11/17 07:06	
Dibromomethane	ug/L	<0.43	1.0	04/11/17 07:06	
Dichlorodifluoromethane	ug/L	<0.22	1.0	04/11/17 07:06	
Ethylbenzene	ug/L	<0.50	1.0	04/11/17 07:06	
m&p-Xylene	ug/L	<1.0	2.0	04/11/17 07:06	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	04/11/17 07:06	
Methylene Chloride	ug/L	<0.23	1.0	04/11/17 07:06	
Naphthalene	ug/L	<2.5	5.0	04/11/17 07:06	
o-Xylene	ug/L	<0.50	1.0	04/11/17 07:06	
Styrene	ug/L	<0.50	1.0	04/11/17 07:06	
Tetrachloroethene	ug/L	<0.50	1.0	04/11/17 07:06	
Tetrahydrofuran	ug/L	<2.0	5.0	04/11/17 07:06	
Toluene	ug/L	<0.50	1.0	04/11/17 07:06	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	04/11/17 07:06	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	04/11/17 07:06	

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

METHOD BLANK: 1488719 Matrix: Water
Associated Lab Samples: 40147998001, 40147998002, 40147998003, 40147998004, 40147998005, 40147998006, 40147998007, 40147998008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	<0.33	1.0	04/11/17 07:06	
Trichlorofluoromethane	ug/L	<0.18	1.0	04/11/17 07:06	
Vinyl chloride	ug/L	<0.18	1.0	04/11/17 07:06	
4-Bromofluorobenzene (S)	%	91	70-130	04/11/17 07:06	
Dibromofluoromethane (S)	%	111	70-130	04/11/17 07:06	
Toluene-d8 (S)	%	87	70-130	04/11/17 07:06	

LABORATORY CONTROL SAMPLE: 1488720

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.5	111	70-131	
1,1,2-Trichloroethane	ug/L	50	45.8	92	70-130	
1,1-Dichloroethane	ug/L	50	55.5	111	70-133	
1,1-Dichloroethene	ug/L	50	57.0	114	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	36.3	73	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	46.9	94	70-130	
1,2-Dichlorobenzene	ug/L	50	46.2	92	70-130	
1,2-Dichloroethane	ug/L	50	49.8	100	70-130	
1,2-Dichloropropane	ug/L	50	47.5	95	70-130	
1,3-Dichlorobenzene	ug/L	50	46.1	92	70-130	
1,4-Dichlorobenzene	ug/L	50	47.2	94	70-130	
Benzene	ug/L	50	50.5	101	60-135	
Bromodichloromethane	ug/L	50	46.6	93	70-130	
Bromoform	ug/L	50	48.2	96	70-130	
Bromomethane	ug/L	50	42.9	86	33-130	
Carbon disulfide	ug/L	50	60.0	120	70-139	
Carbon tetrachloride	ug/L	50	54.4	109	70-138	
Chlorobenzene	ug/L	50	48.1	96	70-130	
Chloroethane	ug/L	50	49.8	100	51-130	
Chloroform	ug/L	50	51.1	102	70-130	
Chloromethane	ug/L	50	51.9	104	25-132	
cis-1,2-Dichloroethene	ug/L	50	51.3	103	69-130	
cis-1,3-Dichloropropene	ug/L	50	38.1	76	70-130	
Dibromochloromethane	ug/L	50	48.7	97	70-130	
Dichlorodifluoromethane	ug/L	50	57.2	114	23-130	
Ethylbenzene	ug/L	50	46.9	94	70-136	
m&p-Xylene	ug/L	100	99.5	99	70-138	
Methyl-tert-butyl ether	ug/L	50	48.2	96	66-138	
Methylene Chloride	ug/L	50	56.8	114	70-130	
o-Xylene	ug/L	50	47.3	95	70-134	
Styrene	ug/L	50	48.0	96	70-133	
Tetrachloroethene	ug/L	50	52.6	105	70-138	
Toluene	ug/L	50	47.5	95	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

LABORATORY CONTROL SAMPLE: 1488720

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	50	58.4	117	70-131	
trans-1,3-Dichloropropene	ug/L	50	35.3	71	69-130	
Trichloroethene	ug/L	50	50.6	101	70-130	
Trichlorofluoromethane	ug/L	50	68.5	137	50-150	
Vinyl chloride	ug/L	50	59.9	120	49-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			113	70-130	
Toluene-d8 (S)	%			89	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1488721 1488722

Parameter	Units	40147998004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	51.9	53.3	104	107	70-134	3	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	44.8	44.5	90	89	70-130	1	20	
1,1-Dichloroethane	ug/L	0.84J	50	50	52.1	55.0	103	108	70-134	5	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	53.1	52.2	105	104	68-136	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	35.8	35.4	72	71	50-150	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	46.7	46.4	93	93	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	45.5	45.6	91	91	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	42.4	41.6	85	83	70-130	2	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	46.4	49.5	93	99	70-130	6	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	45.4	45.5	91	91	70-131	0	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	46.9	47.3	94	95	70-130	1	20	
Benzene	ug/L	<0.50	50	50	40.0	39.6	80	79	57-138	1	20	
Bromodichloromethane	ug/L	<0.50	50	50	45.8	48.9	92	98	70-130	7	20	
Bromoform	ug/L	<0.50	50	50	47.7	47.5	95	95	70-130	0	20	
Bromomethane	ug/L	<2.4	50	50	42.6	44.0	85	88	33-130	3	27	
Carbon disulfide	ug/L	<0.61	50	50	55.0	54.3	110	109	70-153	1	20	
Carbon tetrachloride	ug/L	<0.50	50	50	53.7	53.5	107	107	70-138	0	20	
Chlorobenzene	ug/L	<0.50	50	50	47.7	47.4	95	95	70-130	1	20	
Chloroethane	ug/L	3.6	50	50	48.6	47.5	90	88	51-130	2	20	
Chloroform	ug/L	<2.5	50	50	48.3	49.0	97	98	70-130	1	20	
Chloromethane	ug/L	<0.50	50	50	45.8	45.4	92	91	25-132	1	20	
cis-1,2-Dichloroethene	ug/L	119	50	50	168	180	97	121	61-140	7	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	39.7	42.4	79	85	70-130	6	20	
Dibromochloromethane	ug/L	<0.50	50	50	48.4	47.4	97	95	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	47.0	46.7	94	93	23-130	0	20	
Ethylbenzene	ug/L	<0.50	50	50	46.5	46.2	93	92	70-138	1	20	
m&p-Xylene	ug/L	<1.0	100	100	99.4	98.3	99	98	70-140	1	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	44.6	42.4	89	85	66-139	5	20	
Methylene Chloride	ug/L	<0.23	50	50	48.6	47.8	97	96	70-130	2	20	
o-Xylene	ug/L	<0.50	50	50	47.2	46.9	94	94	70-134	1	20	
Styrene	ug/L	<0.50	50	50	47.8	47.5	96	95	70-138	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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1488721 1488722

Parameter	Units	40147998004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetrachloroethene	ug/L	<0.50	50	50	53.7	53.5	107	107	70-148	0	20	
Toluene	ug/L	<0.50	50	50	47.2	46.8	94	93	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	4.0	50	50	57.5	52.9	107	98	70-133	8	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	37.3	37.1	75	74	69-130	1	20	
Trichloroethene	ug/L	2.1	50	50	52.0	55.3	100	106	70-131	6	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	62.3	61.7	125	123	50-150	1	20	
Vinyl chloride	ug/L	7.6	50	50	60.8	59.9	106	104	49-133	2	20	
4-Bromofluorobenzene (S)	%						97	96	70-130			
Dibromofluoromethane (S)	%						110	113	70-130			
Toluene-d8 (S)	%						89	90	70-130			

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252695
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40147912005

METHOD BLANK: 1490839
Matrix: Water
Associated Lab Samples: 40147912005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	04/17/17 17:34	

LABORATORY CONTROL SAMPLE: 1490840

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1490841 1490842

Parameter	Units	40147857008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.5	100	100	124	124	113	112	90-110	0	15	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1490843 1490844

Parameter	Units	40147912003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	84.7	100	100	192	194	108	110	90-110	1	15	

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252777 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40147998001, 40147998002, 40147998003, 40147998004, 40147998005, 40147998006, 40147998007

METHOD BLANK: 1491354 Matrix: Water
Associated Lab Samples: 40147998001, 40147998002, 40147998003, 40147998004, 40147998005, 40147998006, 40147998007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	04/18/17 20:02	

LABORATORY CONTROL SAMPLE: 1491355

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.2	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1491356 1491357

Parameter	Units	40147971004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	55.6	100	100	163	164	107	108	90-110	0	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1491358 1491359

Parameter	Units	40147998004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	43.2	100	100	151	151	108	108	90-110	0	15	

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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 INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252606 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40147912005, 40147998001, 40147998002, 40147998003

METHOD BLANK: 1490412 Matrix: Water
Associated Lab Samples: 40147912005, 40147998001, 40147998002, 40147998003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<7.0	23.5	04/13/17 12:17	

LABORATORY CONTROL SAMPLE: 1490413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	100	108	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1490414 1490415

Parameter	Units	40147912003 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, Dissolved	mg/L	942	500	500	1520	1500	115	111	90-110	1	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1490416 1490417

Parameter	Units	40147998003 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, Dissolved	mg/L	364	200	200	560	558	98	97	90-110	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

QC Batch: 252607 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40147998004, 40147998005, 40147998006, 40147998007

METHOD BLANK: 1490418 Matrix: Water
Associated Lab Samples: 40147998004, 40147998005, 40147998006, 40147998007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<7.0	23.5	04/13/17 12:38	

LABORATORY CONTROL SAMPLE: 1490419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	100	99.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1490420 1490421

Parameter	Units	40147998004 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, Dissolved	mg/L	374	200	200	577	582	101	104	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1490422 1490423

Parameter	Units	40148133003 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, Dissolved	mg/L	15.3J	100	100	110	111	95	96	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40147912005	**MW-1B**	EPA 6010	252510		
40147998001	**P-402E**	EPA 6010	252510		
40147998002	**P-422B**	EPA 6010	252510		
40147998003	**P-423D**	EPA 6010	252510		
40147998004	**P-424D**	EPA 6010	252512		
40147998005	**P-424SS**	EPA 6010	252512		
40147998006	**P-426D**	EPA 6010	252512		
40147998007	**P-424SS DUP**	EPA 6010	252512		
40147912005	**MW-1B**	EPA 8260	252206		
40147998001	**P-402E**	EPA 8260	252232		
40147998002	**P-422B**	EPA 8260	252232		
40147998003	**P-423D**	EPA 8260	252232		
40147998004	**P-424D**	EPA 8260	252232		
40147998005	**P-424SS**	EPA 8260	252232		
40147998006	**P-426D**	EPA 8260	252232		
40147998007	**P-424SS DUP**	EPA 8260	252232		
40147998008	**TRIP BLANK**	EPA 8260	252232		
40147912005	**MW-1B**				
40147998001	**P-402E**				
40147998002	**P-422B**				
40147998003	**P-423D**				
40147998004	**P-424D**				
40147998005	**P-424SS**				
40147998006	**P-426D**				
40147998007	**P-424SS DUP**				
40147998010	**P-401D**				
40147998011	**P-402E**				
40147998012	**P-422B**				
40147998013	**P-423D**				
40147998014	**P-424D**				
40147998015	**P-424SS**				
40147998016	**P-426D**				
40147998017	**MW-1B**				
40147912005	**MW-1B**	EPA 300.0	252695		
40147998001	**P-402E**	EPA 300.0	252777		
40147998002	**P-422B**	EPA 300.0	252777		
40147998003	**P-423D**	EPA 300.0	252777		
40147998004	**P-424D**	EPA 300.0	252777		
40147998005	**P-424SS**	EPA 300.0	252777		
40147998006	**P-426D**	EPA 300.0	252777		
40147998007	**P-424SS DUP**	EPA 300.0	252777		
40147912005	**MW-1B**	EPA 310.2	252606		
40147998001	**P-402E**	EPA 310.2	252606		
40147998002	**P-422B**	EPA 310.2	252606		
40147998003	**P-423D**	EPA 310.2	252606		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL INVESTIGATION WELLS 04/17
Pace Project No.: 40147998

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40147998004	**P-424D**	EPA 310.2	252607		
40147998005	**P-424SS**	EPA 310.2	252607		
40147998006	**P-426D**	EPA 310.2	252607		
40147998007	**P-424SS DUP**	EPA 310.2	252607		

Pace Analytical™
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CHAIN-OF-CUSTODY / Analytical Request Document

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

4014799

Page: 1 of 1

Section A Required Client Information:
ADS Glacier Ridge
N7296 Hwy V
Horicon, WI 53032
Email To: Kari Rabideau - ADS
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:
Report To: Same
Copy To: Frank Perugini - ESC, Mari Bull - SCS, Sherren Clark - SCS
Purchase Order No.:
Project Name: LGRL [redacted]
Project Number:

Section C Invoice Information:
Attention: Same
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Cindy Varga
Pace Profile #: [redacted]

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

Filtered (Y/N): N N N

ITEM #	SAMPLE ID		MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	HCL	Unpreserved	HNO3	EPA VOCs	alk, cl	6010 hardness		Residual Chlorine (Y/N) / Pace Project Number Lab I.D.
1	P-401D		GW	G	—	—	4/17	—	—	obstructed - no sample collected								
2	P-402E	001			—	—		1340	13.3	5	3	1F	1F	X	X	X	3-40mlVB	2-250ml P HD
3	P-422B	002			—	—		1410	12.4	5	3	1F	1F	X	X	X		
4	P-423D	003			—	—		1150	14.3	5	3	1F	1F	X	X	X		
5	P-424D	004			—	—		1115	12.5	9	6 2F	1F		X	X	X	6-40mlVB	3-250ml P D AH
6	P-424SS	005			—	—		1045	12.8	5	3	1F	1F	X	X	X		
7	P-426D	006			—	—		1230	14.0	5	3	1F	1F	X	X	X		
8	Dup01	007	GW	G	—		4/17	1045	12.8	5	3	1F	1F	X	X	X		
9	Trip Blank	008	—		—		—		—	2	2			X			4	2-40mlVB 4817
10																		
11																		
12																		

Additional Comments:

PW-21RR After only need VOCs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
[signature]	4/17/17	1700					Y/N	Y/N	Y/N
Walt Co	4/8	0740	Matt McKay Pace	4/8	0740	ROI	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): 4/17/17

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

Sample Condition Upon Receipt

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

Project #: WO#: 40147998

Client Name: ADS

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: WalMart

Tracking #: 133057[illegible]

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 DAQ

Type of Ice: (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: R01 /Corr:

Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 4.8.17
Initials: MMA

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests 4/8/17	☑Yes ☐No ~~☐N/A~~	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No	Initial when completed MMA / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☐N/A	14.
Trip Blank Present:	☑Yes ☐No ☐N/A	15.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 375		

Client Notification/ Resolution:

If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Cal Date: 5/10/17

F-GB-C-031-Rev.03 (9April2015) SCUR Form

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CHAIN-OF-CUSTODY / Analytical Request Document

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

BA

40147912

Page: 1 of 1

Section A
Required Client Information:

ADS Glacier Ridge
N7296 Hwy V
Horicon, WI 53032
Email To: Kari Rabideau - ADS
Phone: Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Same
Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng
Purchase Order No.:
Project Name: LGRL GW APR
Project Number:

Section C
Invoice Information:

Attention: Same
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Cindy Varga
Pace Profile #: 4172 line 17

REGULATORY AGENCY

__NPDES X GROUND WATER __DRINKING WATER
__UST __RCRA OTHER_____

SITE LOCATION: __GA __IL __IN __MI __NC __OH __SC X WI OTHER___

Filtered (Y/N): N Y Y

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	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Nitric	HCL	Unpreserved	8260 NR 507 VOCs	diss chloride, alkalinity	diss 6020 - hard, as		Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	A-3A*	001	W	G	—	—	4/6	1200	10.6	2	1		1		X	X			2-250mL A-D
2	MW-204A*	002	|	|	—	—	|	1210	10.0	2	|		|		X	X			↓
3	MW-1RR*	003	|	|	—	—	|	1320	10.9	8	|	6	|	X	X	X	6-40mL B		
4	MW-1AR*	004	|	|	—	—	|	1330	11.5	5	|	3	|	X	X	X	3-40mL B		
5	MW-1B	005	|	|	—	—	|	1340	10.6	5	|	3	|	X	X	X	↓		
6	~~Dup~~ (4-6-17 BF) Trip Blank	006								2		2		X	~~X~~		2-40mL B		
7																			
8																			
9																			
10																			
11																			
12																			

Additional Comments:

VOCs - MW-1RR, MW-1AR,W-3AR,W-3AR, MW-210, MW-210A, MW-210B, DUP02, W-163, W-163A

* Shared wells

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[signature] / ESC	4/6	1730					Y/N	Y/N	Y/N
Walto	4/7/17	0855	Susan Kuhlo Pace	4/7/17	0855	ROI	Y/N (N circled)	Y/N (Y circled)	Y/N (Y circled)
							Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N
						Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brenda Fritsch

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 04/06/17

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

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

40147912

Page: 1 of 1

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

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ 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 HN03	Preservatives Unpreseved	Preservatives HCL	Requested Analysis: dissolved chloride, alk	Requested Analysis: dissolved 6020/6010	Requested Analysis: 8260 VOC NR507	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
1	A-3A ★	W	G			4/6	1200	10.6									
2	MW-204A ★						1210	10.0									
3	MW-1RR ★						1320	10.9									
4	MW-1AR ★						1330	11.5									
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Filtered (Y/N): Y Y N

Additional Comments:

6010 - hardness all except MW-1RR, MW-1AR, W-163, W-163A

6020 - hardness, As - MW-1ARR, MW-1AR, W-163, W-163A

VOCs - MW-1RR,MW-1AR,W-163,W-163A,MW-403, P-403A,

P-406A,P-406B,MW-407, DUP-03,W-158,W-160R,MW-302,MW-306

MW-307,MW-406,DUP-04

★ Shared wells Bottles listed on LGRL coc

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[illegible] /ESC	4/6	1730			
[illegible]	4/7/17	0855	[illegible] Pace	4/7/17	0855

SAMPLE CONDITIONS

	Y/N	Y/N	Y/N	
ROI	Y/N	Y/N	Y/N	
	Y/N	Y/N	Y/N	
	Y/N	Y/N	Y/N	
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brenda Fritsch

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 04/06/17

Sample Condition Upon Receipt

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

Pace Analytical™

Client Name: ADS

Project #: **WO#: 40147912**

40147912

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: Walker

Tracking #: 1330238

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 N/A **Type of Ice:** Wet Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RDI /Corr: **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 4-7-17
Initials: SW

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC: BH 4/7/17	☑Yes ☐No ☐N/A	12. 003 collect time 1420
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct BH 4/7/17
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2, NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No	Initial when completed SW / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14.
Trip Blank Present:	☑Yes ☐No ☐N/A	15.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 375	4717 SW	

Client Notification/ Resolution:
Person Contacted: _____ Date/Time: _____ If checked, see attached form for additional comments ☐
Comments/ Resolution: _____

Project Manager Review: CW **Date:** 4/7/17

F-GB-C-031-Rev.03 (9April2015) SCUR Form

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

November 14, 2017

General Manager
Advanced Disposal Glacier Ridge Landfill LLC
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Dear General Manager:
Enclosed are the analytical results for sample(s) received by the laboratory between October 06, 2017 and November 14, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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
Frank Perugini, Environmental Sampling Corporation
Kari Rabideau, Advanced Disposal Hickory Meadows Landfill, LLC
ESC Staff, ESC
Ashley Viney, SCS ENGINEERS

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

CERTIFICATIONS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Green Bay Certification IDs

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

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

SAMPLE SUMMARY

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40158121001	**MW-1B**	Water	10/05/17 13:20	10/06/17 08:45
40158121002	**TRIP BLANK**	Water	10/05/17 00:00	10/06/17 08:45
40158227001	**P-402E**	Water	10/06/17 10:30	10/07/17 08:15
40158227002	**P-422B**	Water	10/06/17 11:15	10/07/17 08:15
40158227003	**P-424SS**	Water	10/06/17 13:00	10/07/17 08:15
40158227004	**P-424D**	Water	10/06/17 13:30	10/07/17 08:15
40158227005	**P-423D**	Water	10/06/17 14:15	10/07/17 08:15
40158227006	**P-401D**	Water	10/02/17 00:00	10/07/17 08:15
40159679001	**P-426D**	Water	10/27/17 11:35	10/28/17 08:10
40159954004	**P-402E**	Water	10/02/17 00:00	11/14/17 07:44
40159954005	**P-422B**	Water	10/02/17 00:00	11/14/17 07:44
40159954006	**P-423D**	Water	10/02/17 00:00	11/14/17 07:44
40159954007	**P-424D**	Water	10/02/17 00:00	11/14/17 07:44
40159954008	**P-424SS**	Water	10/02/17 00:00	11/14/17 07:44
40159954009	**P-426D**	Water	10/02/17 00:00	11/14/17 07:44
40159954010	**MW-1B**	Water	10/02/17 00:00	11/14/17 07:44

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SAMPLE ANALYTE COUNT

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40158121001	**MW-1B**	EPA 6010	JLD	1	PASI-G
		EPA 8260	MDS	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40158121002	**TRIP BLANK**	EPA 8260	MDS	46	PASI-G
40158227001	**P-402E**	EPA 6010	JLD	1	PASI-G
		EPA 8260	LAP	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40158227002	**P-422B**	EPA 6010	JLD	1	PASI-G
		EPA 8260	LAP	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40158227003	**P-424SS**	EPA 6010	JLD	1	PASI-G
		EPA 8260	LAP	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40158227004	**P-424D**	EPA 6010	JLD	1	PASI-G
		EPA 8260	LAP	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40158227005	**P-423D**	EPA 6010	JLD	1	PASI-G
		EPA 8260	LAP	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40158227006	**P-401D**		CKV	1	PASI-G
40159679001	**P-426D**	EPA 6010	JLD	1	PASI-G
		EPA 8260	HNW	46	PASI-G
			CKV	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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SAMPLE ANALYTE COUNT

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40159954004	**P-402E**		CKV	1	PASI-G
40159954005	**P-422B**		CKV	1	PASI-G
40159954006	**P-423D**		CKV	1	PASI-G
40159954007	**P-424D**		CKV	1	PASI-G
40159954008	**P-424SS**		CKV	1	PASI-G
40159954009	**P-426D**		CKV	1	PASI-G
40159954010	**MW-1B**		CKV	1	PASI-G

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: MW-1B **Lab ID: 40158121001** Collected: 10/05/17 13:20 Received: 10/06/17 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**314000**	ug/L	2000	150	1		10/13/17 18:13		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/09/17 19:26	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/09/17 19:26	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/09/17 19:26	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/09/17 19:26	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/09/17 19:26	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/09/17 19:26	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/09/17 19:26	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/09/17 19:26	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/09/17 19:26	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/09/17 19:26	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/09/17 19:26	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/09/17 19:26	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/09/17 19:26	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/09/17 19:26	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/09/17 19:26	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/09/17 19:26	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/09/17 19:26	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/09/17 19:26	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/09/17 19:26	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/09/17 19:26	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/09/17 19:26	75-69-4	L2
Vinyl chloride	**2.0**	ug/L	1.0	0.18	1		10/09/17 19:26	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/17 19:26	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/09/17 19:26	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 19:26	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/17 19:26	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: MW-1B **Lab ID: 40158121001** Collected: 10/05/17 13:20 Received: 10/06/17 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/09/17 19:26	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	80	%	61-130		1		10/09/17 19:26	460-00-4	
Dibromofluoromethane (S)	112	%	67-130		1		10/09/17 19:26	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/09/17 19:26	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.32**	Std. Units			1		10/05/17 13:20		
Field Specific Conductance	**821**	umhos/cm			1		10/05/17 13:20		
Turbidity	**N**	NTU			1		10/05/17 13:20		
Apparent Color	**N**	no units			1		10/05/17 13:20		
Odor	**N**	no units			1		10/05/17 13:20		
Temperature, Water (C)	**13.6**	deg C			1		10/05/17 13:20		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**93.6**	mg/L	10.0	2.5	5		10/13/17 16:17	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**212**	mg/L	23.5	7.0	1		10/12/17 11:23		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: TRIP BLANK **Lab ID: 40158121002** Collected: 10/05/17 00:00 Received: 10/06/17 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/09/17 15:49	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/09/17 15:49	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/09/17 15:49	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/09/17 15:49	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/09/17 15:49	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/09/17 15:49	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/09/17 15:49	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/09/17 15:49	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/09/17 15:49	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/09/17 15:49	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/09/17 15:49	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/09/17 15:49	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/09/17 15:49	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/09/17 15:49	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/09/17 15:49	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/09/17 15:49	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/09/17 15:49	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/09/17 15:49	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/09/17 15:49	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/09/17 15:49	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/09/17 15:49	75-69-4	L2
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/09/17 15:49	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/17 15:49	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/09/17 15:49	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/09/17 15:49	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/17 15:49	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/09/17 15:49	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	80	%	61-130		1		10/09/17 15:49	460-00-4	
Dibromofluoromethane (S)	105	%	67-130		1		10/09/17 15:49	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: TRIP BLANK **Lab ID: 40158121002** Collected: 10/05/17 00:00 Received: 10/06/17 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	101	%	70-130		1		10/09/17 15:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-402E **Lab ID: 40158227001** Collected: 10/06/17 10:30 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**452000**	ug/L	2000	150	1		10/13/17 16:35		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	71-55-6	
1,1,2-Trichloroethane	**<0.49**	ug/L	2.5	0.49	2.5		10/10/17 10:23	79-00-5	
1,1-Dichloroethane	**0.78J**	ug/L	2.5	0.60	2.5		10/10/17 10:23	75-34-3	
1,1-Dichloroethene	**1.5J**	ug/L	2.5	1.0	2.5		10/10/17 10:23	75-35-4	
1,2-Dibromo-3-chloropropane	**<5.4**	ug/L	12.5	5.4	2.5		10/10/17 10:23	96-12-8	
1,2-Dibromoethane (EDB)	**<0.44**	ug/L	2.5	0.44	2.5		10/10/17 10:23	106-93-4	
1,2-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	95-50-1	
1,2-Dichloroethane	**<0.42**	ug/L	2.5	0.42	2.5		10/10/17 10:23	107-06-2	
1,2-Dichloropropane	**<0.58**	ug/L	2.5	0.58	2.5		10/10/17 10:23	78-87-5	
1,3-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	541-73-1	
1,4-Dichlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	106-46-7	
2-Butanone (MEK)	**<7.4**	ug/L	50.0	7.4	2.5		10/10/17 10:23	78-93-3	
Acetone	**<7.4**	ug/L	50.0	7.4	2.5		10/10/17 10:23	67-64-1	
Benzene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	71-43-2	
Bromodichloromethane	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	75-27-4	
Bromoform	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	75-25-2	
Bromomethane	**<6.1**	ug/L	12.5	6.1	2.5		10/10/17 10:23	74-83-9	
Carbon disulfide	**<1.5**	ug/L	12.5	1.5	2.5		10/10/17 10:23	75-15-0	
Carbon tetrachloride	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	56-23-5	L1
Chlorobenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	108-90-7	
Chloroethane	**5.2**	ug/L	2.5	0.94	2.5		10/10/17 10:23	75-00-3	
Chloroform	**<6.2**	ug/L	12.5	6.2	2.5		10/10/17 10:23	67-66-3	
Chloromethane	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	74-87-3	
Dibromochloromethane	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	124-48-1	
Dibromomethane	**<1.1**	ug/L	2.5	1.1	2.5		10/10/17 10:23	74-95-3	
Dichlorodifluoromethane	**<0.56**	ug/L	2.5	0.56	2.5		10/10/17 10:23	75-71-8	
Ethylbenzene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	100-41-4	
Methyl-tert-butyl ether	**<0.44**	ug/L	2.5	0.44	2.5		10/10/17 10:23	1634-04-4	
Methylene Chloride	**<0.58**	ug/L	2.5	0.58	2.5		10/10/17 10:23	75-09-2	
Naphthalene	**<6.2**	ug/L	12.5	6.2	2.5		10/10/17 10:23	91-20-3	
Styrene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	100-42-5	
Tetrachloroethene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	127-18-4	
Tetrahydrofuran	**<5.1**	ug/L	12.5	5.1	2.5		10/10/17 10:23	109-99-9	
Toluene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	108-88-3	
Trichloroethene	**3.5**	ug/L	2.5	0.83	2.5		10/10/17 10:23	79-01-6	
Trichlorofluoromethane	**<0.46**	ug/L	2.5	0.46	2.5		10/10/17 10:23	75-69-4	
Vinyl chloride	**27.2**	ug/L	2.5	0.44	2.5		10/10/17 10:23	75-01-4	
cis-1,2-Dichloroethene	**290**	ug/L	2.5	0.64	2.5		10/10/17 10:23	156-59-2	
cis-1,3-Dichloropropene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	10061-01-5	
m&p-Xylene	**<2.5**	ug/L	5.0	2.5	2.5		10/10/17 10:23	179601-23-1	
o-Xylene	**<1.2**	ug/L	2.5	1.2	2.5		10/10/17 10:23	95-47-6	
trans-1,2-Dichloroethene	**11.5**	ug/L	2.5	0.64	2.5		10/10/17 10:23	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-402E **Lab ID: 40158227001** Collected: 10/06/17 10:30 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.57**	ug/L	2.5	0.57	2.5		10/10/17 10:23	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	85	%	61-130		2.5		10/10/17 10:23	460-00-4	
Dibromofluoromethane (S)	104	%	67-130		2.5		10/10/17 10:23	1868-53-7	
Toluene-d8 (S)	89	%	70-130		2.5		10/10/17 10:23	2037-26-5	
Field Data	Analytical Method:								
Field pH	**6.58**	Std. Units			1		10/06/17 10:30		
Field Specific Conductance	**818**	umhos/cm			1		10/06/17 10:30		
Turbidity	**N**	NTU			1		10/06/17 10:30		
Apparent Color	**N**	no units			1		10/06/17 10:30		
Odor	**N**	no units			1		10/06/17 10:30		
Temperature, Water (C)	**14.4**	deg C			1		10/06/17 10:30		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**58.4**	mg/L	10.0	2.5	5		10/16/17 20:58	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**379**	mg/L	47.0	14.1	2		10/12/17 11:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-422B **Lab ID: 40158227002** Collected: 10/06/17 11:15 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**166000**	ug/L	2000	150	1		10/13/17 16:38		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/10/17 14:08	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/10/17 14:08	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/10/17 14:08	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/10/17 14:08	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:08	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/10/17 14:08	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:08	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/10/17 14:08	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/10/17 14:08	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/10/17 14:08	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/10/17 14:08	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	56-23-5	L1
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/10/17 14:08	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/10/17 14:08	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/10/17 14:08	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/10/17 14:08	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/10/17 14:08	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:08	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/10/17 14:08	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/10/17 14:08	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/10/17 14:08	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:08	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:08	75-01-4	
cis-1,2-Dichloroethene	**0.85J**	ug/L	1.0	0.26	1		10/10/17 14:08	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/10/17 14:08	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:08	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/10/17 14:08	156-60-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-422B **Lab ID: 40158227002** Collected: 10/06/17 11:15 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:08	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	83	%	61-130		1		10/10/17 14:08	460-00-4	
Dibromofluoromethane (S)	121	%	67-130		1		10/10/17 14:08	1868-53-7	
Toluene-d8 (S)	88	%	70-130		1		10/10/17 14:08	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.36**	Std. Units			1		10/06/17 11:15		
Field Specific Conductance	**431**	umhos/cm			1		10/06/17 11:15		
Turbidity	**N**	NTU			1		10/06/17 11:15		
Apparent Color	**N**	no units			1		10/06/17 11:15		
Odor	**N**	no units			1		10/06/17 11:15		
Temperature, Water (C)	**14.4**	deg C			1		10/06/17 11:15		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**10.0**	mg/L	2.0	0.50	1		10/16/17 21:08	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**212**	mg/L	23.5	7.0	1		10/12/17 11:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-424SS **Lab ID: 40158227003** Collected: 10/06/17 13:00 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**306000**	ug/L	2000	150	1		10/13/17 16:40		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/10/17 14:30	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/10/17 14:30	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/10/17 14:30	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/10/17 14:30	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:30	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/10/17 14:30	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:30	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/10/17 14:30	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/10/17 14:30	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/10/17 14:30	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/10/17 14:30	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	56-23-5	L1
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/10/17 14:30	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/10/17 14:30	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/10/17 14:30	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/10/17 14:30	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/10/17 14:30	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:30	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/10/17 14:30	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/10/17 14:30	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/10/17 14:30	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:30	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:30	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/10/17 14:30	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/10/17 14:30	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:30	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/10/17 14:30	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-424SS **Lab ID: 40158227003** Collected: 10/06/17 13:00 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:30	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	80	%	61-130		1		10/10/17 14:30	460-00-4	
Dibromofluoromethane (S)	118	%	67-130		1		10/10/17 14:30	1868-53-7	
Toluene-d8 (S)	90	%	70-130		1		10/10/17 14:30	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.13**	Std. Units			1		10/06/17 13:00		
Field Specific Conductance	**529**	umhos/cm			1		10/06/17 13:00		
Turbidity	**N**	NTU			1		10/06/17 13:00		
Apparent Color	**N**	no units			1		10/06/17 13:00		
Odor	**N**	no units			1		10/06/17 13:00		
Temperature, Water (C)	**13.5**	deg C			1		10/06/17 13:00		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**0.80J**	mg/L	2.0	0.50	1		10/16/17 21:19	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**310**	mg/L	47.0	14.1	2		10/12/17 11:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-424D **Lab ID: 40158227004** Collected: 10/06/17 13:30 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**452000**	ug/L	2000	150	1		10/13/17 16:42		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/10/17 14:53	79-00-5	
1,1-Dichloroethane	**1.0**	ug/L	1.0	0.24	1		10/10/17 14:53	75-34-3	
1,1-Dichloroethene	**0.51J**	ug/L	1.0	0.41	1		10/10/17 14:53	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/10/17 14:53	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:53	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/10/17 14:53	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:53	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/10/17 14:53	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/10/17 14:53	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/10/17 14:53	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/10/17 14:53	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	56-23-5	L1
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	108-90-7	
Chloroethane	**3.1**	ug/L	1.0	0.37	1		10/10/17 14:53	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/10/17 14:53	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/10/17 14:53	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/10/17 14:53	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/10/17 14:53	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:53	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/10/17 14:53	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/10/17 14:53	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	108-88-3	
Trichloroethene	**2.0**	ug/L	1.0	0.33	1		10/10/17 14:53	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/10/17 14:53	75-69-4	
Vinyl chloride	**9.4**	ug/L	1.0	0.18	1		10/10/17 14:53	75-01-4	
cis-1,2-Dichloroethene	**151**	ug/L	1.0	0.26	1		10/10/17 14:53	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/10/17 14:53	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 14:53	95-47-6	
trans-1,2-Dichloroethene	**4.7**	ug/L	1.0	0.26	1		10/10/17 14:53	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-424D **Lab ID: 40158227004** Collected: 10/06/17 13:30 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/10/17 14:53	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	85	%	61-130		1		10/10/17 14:53	460-00-4	
Dibromofluoromethane (S)	110	%	67-130		1		10/10/17 14:53	1868-53-7	
Toluene-d8 (S)	93	%	70-130		1		10/10/17 14:53	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.02**	Std. Units			1		10/06/17 13:30		
Field Specific Conductance	**766**	umhos/cm			1		10/06/17 13:30		
Turbidity	**N**	NTU			1		10/06/17 13:30		
Apparent Color	**N**	no units			1		10/06/17 13:30		
Odor	**N**	no units			1		10/06/17 13:30		
Temperature, Water (C)	**12.8**	deg C			1		10/06/17 13:30		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**43.2**	mg/L	2.0	0.50	1		10/16/17 21:29	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**369**	mg/L	23.5	7.0	1		10/13/17 10:04		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-423D **Lab ID: 40158227005** Collected: 10/06/17 14:15 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**432000**	ug/L	2000	150	1		10/13/17 16:45		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/10/17 15:15	79-00-5	
1,1-Dichloroethane	**0.38J**	ug/L	1.0	0.24	1		10/10/17 15:15	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/10/17 15:15	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/10/17 15:15	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/10/17 15:15	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/10/17 15:15	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/10/17 15:15	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/10/17 15:15	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/10/17 15:15	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/10/17 15:15	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/10/17 15:15	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	56-23-5	L1
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	108-90-7	
Chloroethane	**2.1**	ug/L	1.0	0.37	1		10/10/17 15:15	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/10/17 15:15	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/10/17 15:15	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/10/17 15:15	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/10/17 15:15	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/10/17 15:15	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/10/17 15:15	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/10/17 15:15	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	108-88-3	
Trichloroethene	**0.59J**	ug/L	1.0	0.33	1		10/10/17 15:15	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/10/17 15:15	75-69-4	
Vinyl chloride	**2.5**	ug/L	1.0	0.18	1		10/10/17 15:15	75-01-4	
cis-1,2-Dichloroethene	**58.6**	ug/L	1.0	0.26	1		10/10/17 15:15	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/10/17 15:15	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/10/17 15:15	95-47-6	
trans-1,2-Dichloroethene	**3.1**	ug/L	1.0	0.26	1		10/10/17 15:15	156-60-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-423D **Lab ID: 40158227005** Collected: 10/06/17 14:15 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/10/17 15:15	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	81	%	61-130		1		10/10/17 15:15	460-00-4	
Dibromofluoromethane (S)	119	%	67-130		1		10/10/17 15:15	1868-53-7	
Toluene-d8 (S)	89	%	70-130		1		10/10/17 15:15	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.32**	Std. Units			1		10/06/17 14:15		
Field Specific Conductance	**741**	umhos/cm			1		10/06/17 14:15		
Turbidity	**N**	NTU			1		10/06/17 14:15		
Apparent Color	**N**	no units			1		10/06/17 14:15		
Odor	**N**	no units			1		10/06/17 14:15		
Temperature, Water (C)	**13.7**	deg C			1		10/06/17 14:15		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**34.8**	mg/L	2.0	0.50	1		10/16/17 21:40	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**354**	mg/L	23.5	7.0	1		10/13/17 10:05		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-401D **Lab ID: 40158227006** Collected: 10/02/17 00:00 Received: 10/07/17 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**852.74**	feet			1		11/14/17 07:41		

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-426D **Lab ID: 40159679001** Collected: 10/27/17 11:35 Received: 10/28/17 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**480000**	ug/L	2000	150	1		11/03/17 16:09		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		10/31/17 16:03	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/31/17 16:03	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		10/31/17 16:03	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		10/31/17 16:03	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		10/31/17 16:03	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		10/31/17 16:03	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		10/31/17 16:03	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		10/31/17 16:03	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		10/31/17 16:03	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		10/31/17 16:03	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		10/31/17 16:03	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		10/31/17 16:03	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		10/31/17 16:03	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		10/31/17 16:03	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		10/31/17 16:03	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		10/31/17 16:03	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		10/31/17 16:03	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		10/31/17 16:03	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		10/31/17 16:03	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		10/31/17 16:03	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		10/31/17 16:03	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		10/31/17 16:03	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/31/17 16:03	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		10/31/17 16:03	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		10/31/17 16:03	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/31/17 16:03	156-60-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-426D **Lab ID: 40159679001** Collected: 10/27/17 11:35 Received: 10/28/17 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		10/31/17 16:03	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	85	%	61-130		1		10/31/17 16:03	460-00-4	
Dibromofluoromethane (S)	93	%	67-130		1		10/31/17 16:03	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/31/17 16:03	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.16**	Std. Units			1		10/27/17 11:35		
Field Specific Conductance	**770**	umhos/cm			1		10/27/17 11:35		
Turbidity	**N**	NTU			1		10/27/17 11:35		
Apparent Color	**N**	no units			1		10/27/17 11:35		
Odor	**N**	no units			1		10/27/17 11:35		
Temperature, Water (C)	**12.1**	deg C			1		10/27/17 11:35		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**44.4**	mg/L	2.0	0.50	1		11/07/17 14:13	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**334**	mg/L	23.5	7.0	1		11/02/17 11:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-402E **Lab ID: 40159954004** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**852.73**	feet			1		10/02/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-422B **Lab ID: 40159954005** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**927.49**	feet			1		10/02/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-423D **Lab ID: 40159954006** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**850.87**	feet			1		10/02/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-424D **Lab ID: 40159954007** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**851.50**	feet			1		10/02/17 00:00		

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-424SS **Lab ID: 40159954008** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**851.03**	feet			1		10/02/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: P-426D **Lab ID: 40159954009** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**851.88**	feet			1		10/02/17 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Sample: MW-1B **Lab ID: 40159954010** Collected: 10/02/17 00:00 Received: 11/14/17 07:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Static Water Level	**926.13**	feet			1		10/02/17 00:00		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270499
QC Batch Method: EPA 6010
Analysis Method: EPA 6010
Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40158121001

METHOD BLANK: 1589806
Matrix: Water
Associated Lab Samples: 40158121001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L	<150	2000	10/13/17 18:08	

LABORATORY CONTROL SAMPLE: 1589807

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L		32100			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1589808 1589809

Parameter	Units	40158121001 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, Dissolved	ug/L	314000			344000	344000				0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270500 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

METHOD BLANK: 1589810 Matrix: Water
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L	<150	2000	10/13/17 15:58	

LABORATORY CONTROL SAMPLE: 1589811

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L		30900			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1589812 1589813

Parameter	Units	40158163008 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, Dissolved	ug/L	276000			305000	303000				1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 272667 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40159679001

METHOD BLANK: 1603721 Matrix: Water
Associated Lab Samples: 40159679001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L	<150	2000	11/03/17 15:31	

LABORATORY CONTROL SAMPLE: 1603722

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L		33400			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1603723 1603724

Parameter	Units	40159626001 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, Dissolved	ug/L	1210000			1220000	1200000				2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 269830 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40158121001, 40158121002

METHOD BLANK: 1586191 Matrix: Water
Associated Lab Samples: 40158121001, 40158121002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	10/09/17 11:26	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	10/09/17 11:26	
1,1-Dichloroethane	ug/L	<0.24	1.0	10/09/17 11:26	
1,1-Dichloroethene	ug/L	<0.41	1.0	10/09/17 11:26	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	10/09/17 11:26	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	10/09/17 11:26	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	10/09/17 11:26	
1,2-Dichloroethane	ug/L	<0.17	1.0	10/09/17 11:26	
1,2-Dichloropropane	ug/L	<0.23	1.0	10/09/17 11:26	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	10/09/17 11:26	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	10/09/17 11:26	
2-Butanone (MEK)	ug/L	<3.0	20.0	10/09/17 11:26	
Acetone	ug/L	<3.0	20.0	10/09/17 11:26	
Benzene	ug/L	<0.50	1.0	10/09/17 11:26	
Bromodichloromethane	ug/L	<0.50	1.0	10/09/17 11:26	
Bromoform	ug/L	<0.50	1.0	10/09/17 11:26	
Bromomethane	ug/L	<2.4	5.0	10/09/17 11:26	
Carbon disulfide	ug/L	<0.61	5.0	10/09/17 11:26	
Carbon tetrachloride	ug/L	<0.50	1.0	10/09/17 11:26	
Chlorobenzene	ug/L	<0.50	1.0	10/09/17 11:26	
Chloroethane	ug/L	<0.37	1.0	10/09/17 11:26	
Chloroform	ug/L	<2.5	5.0	10/09/17 11:26	
Chloromethane	ug/L	<0.50	1.0	10/09/17 11:26	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	10/09/17 11:26	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	10/09/17 11:26	
Dibromochloromethane	ug/L	<0.50	1.0	10/09/17 11:26	
Dibromomethane	ug/L	<0.43	1.0	10/09/17 11:26	
Dichlorodifluoromethane	ug/L	<0.22	1.0	10/09/17 11:26	
Ethylbenzene	ug/L	<0.50	1.0	10/09/17 11:26	
m&p-Xylene	ug/L	<1.0	2.0	10/09/17 11:26	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	10/09/17 11:26	
Methylene Chloride	ug/L	<0.23	1.0	10/09/17 11:26	
Naphthalene	ug/L	<2.5	5.0	10/09/17 11:26	
o-Xylene	ug/L	<0.50	1.0	10/09/17 11:26	
Styrene	ug/L	<0.50	1.0	10/09/17 11:26	
Tetrachloroethene	ug/L	<0.50	1.0	10/09/17 11:26	
Tetrahydrofuran	ug/L	<2.0	5.0	10/09/17 11:26	
Toluene	ug/L	<0.50	1.0	10/09/17 11:26	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	10/09/17 11:26	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	10/09/17 11:26	
Trichloroethene	ug/L	<0.33	1.0	10/09/17 11:26	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

METHOD BLANK: 1586191 Matrix: Water
Associated Lab Samples: 40158121001, 40158121002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	10/09/17 11:26	
Vinyl chloride	ug/L	<0.18	1.0	10/09/17 11:26	
4-Bromofluorobenzene (S)	%	81	61-130	10/09/17 11:26	
Dibromofluoromethane (S)	%	107	67-130	10/09/17 11:26	
Toluene-d8 (S)	%	98	70-130	10/09/17 11:26	

LABORATORY CONTROL SAMPLE: 1586192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	43.6	87	70-130	
1,1,2-Trichloroethane	ug/L	50	53.2	106	70-130	
1,1-Dichloroethane	ug/L	50	52.2	104	71-132	
1,1-Dichloroethene	ug/L	50	44.8	90	75-130	
1,2-Dibromo-3-chloropropane	ug/L	50	45.0	90	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	53.0	106	70-130	
1,2-Dichlorobenzene	ug/L	50	49.5	99	70-130	
1,2-Dichloroethane	ug/L	50	38.1	76	70-131	
1,2-Dichloropropane	ug/L	50	50.7	101	80-120	
1,3-Dichlorobenzene	ug/L	50	49.6	99	70-130	
1,4-Dichlorobenzene	ug/L	50	50.1	100	70-130	
Benzene	ug/L	50	48.9	98	73-145	
Bromodichloromethane	ug/L	50	47.7	95	70-130	
Bromoform	ug/L	50	49.3	99	67-130	
Bromomethane	ug/L	50	36.8	74	26-128	
Carbon disulfide	ug/L	50	47.3	95	72-156	
Carbon tetrachloride	ug/L	50	44.8	90	70-133	
Chlorobenzene	ug/L	50	54.0	108	70-130	
Chloroethane	ug/L	50	42.9	86	58-120	
Chloroform	ug/L	50	49.0	98	80-121	
Chloromethane	ug/L	50	29.0	58	40-127	
cis-1,2-Dichloroethene	ug/L	50	51.7	103	70-130	
cis-1,3-Dichloropropene	ug/L	50	46.9	94	70-130	
Dibromochloromethane	ug/L	50	47.6	95	70-130	
Dichlorodifluoromethane	ug/L	50	28.3	57	20-135	
Ethylbenzene	ug/L	50	54.2	108	87-129	
m&p-Xylene	ug/L	100	117	117	70-130	
Methyl-tert-butyl ether	ug/L	50	46.1	92	66-143	
Methylene Chloride	ug/L	50	49.1	98	70-130	
o-Xylene	ug/L	50	55.3	111	70-130	
Styrene	ug/L	50	55.1	110	70-130	
Tetrachloroethene	ug/L	50	47.9	96	70-130	
Toluene	ug/L	50	55.0	110	82-130	
trans-1,2-Dichloroethene	ug/L	50	49.1	98	75-132	
trans-1,3-Dichloropropene	ug/L	50	49.4	99	70-130	

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

LABORATORY CONTROL SAMPLE: 1586192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	50.7	101	70-130	
Trichlorofluoromethane	ug/L	50	37.1	74	76-133	L2
Vinyl chloride	ug/L	50	35.1	70	57-136	
4-Bromofluorobenzene (S)	%			104	61-130	
Dibromofluoromethane (S)	%			94	67-130	
Toluene-d8 (S)	%			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1586451 1586452

Parameter	Units	40158124001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	43.4	43.6	87	87	70-134	0	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	56.1	54.2	112	108	70-130	3	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	51.9	47.6	104	95	71-133	9	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	41.6	46.7	83	93	75-136	12	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	48.4	44.3	97	89	63-123	9	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	54.0	53.0	108	106	70-130	2	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	49.4	49.7	99	99	70-130	1	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	38.5	40.6	77	81	70-131	5	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	54.8	55.5	110	111	80-120	1	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	51.1	50.2	102	100	70-130	2	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	51.5	51.6	103	103	70-130	0	20	
Benzene	ug/L	<0.50	50	50	48.4	48.7	97	97	73-145	1	20	
Bromodichloromethane	ug/L	<0.50	50	50	50.2	51.6	100	103	70-130	3	20	
Bromoform	ug/L	<0.50	50	50	51.6	48.7	103	97	67-130	6	20	
Bromomethane	ug/L	<2.4	50	50	32.9	32.2	66	64	26-129	2	20	
Carbon disulfide	ug/L	<0.61	50	50	42.8	47.3	86	95	72-156	10	30	
Carbon tetrachloride	ug/L	<0.50	50	50	45.1	46.9	90	94	70-134	4	20	
Chlorobenzene	ug/L	<0.50	50	50	53.7	53.2	107	106	70-130	1	20	
Chloroethane	ug/L	<0.37	50	50	37.3	41.5	75	83	58-120	11	20	
Chloroform	ug/L	<2.5	50	50	47.6	47.2	95	94	80-121	1	20	
Chloromethane	ug/L	<0.50	50	50	20.7	21.3	41	43	40-128	3	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	53.2	45.5	106	91	70-130	16	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	49.6	46.7	99	93	70-130	6	20	
Dibromochloromethane	ug/L	<0.50	50	50	48.5	46.4	97	93	70-130	4	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	12.2	13.2	24	26	20-146	7	20	
Ethylbenzene	ug/L	<0.50	50	50	53.7	52.7	107	105	87-129	2	20	
m&p-Xylene	ug/L	<1.0	100	100	114	111	114	111	70-130	3	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	49.3	45.8	99	92	66-143	7	20	
Methylene Chloride	ug/L	<0.23	50	50	49.9	53.7	100	107	70-130	7	20	
o-Xylene	ug/L	<0.50	50	50	55.2	55.1	110	110	70-130	0	20	
Styrene	ug/L	<0.50	50	50	55.5	53.1	111	106	70-130	4	20	
Tetrachloroethene	ug/L	<0.50	50	50	49.2	47.0	98	94	70-130	4	20	
Toluene	ug/L	<0.50	50	50	54.1	53.9	108	108	82-131	0	20	

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1586451 1586452

Parameter	Units	40158124001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	48.6	53.0	97	106	75-135	9	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	49.8	43.3	100	87	70-130	14	20	
Trichloroethene	ug/L	<0.33	50	50	50.8	51.7	102	103	70-130	2	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	32.9	36.2	66	72	76-150	9	20	M0
Vinyl chloride	ug/L	<0.18	50	50	27.1	29.2	54	58	56-143	7	20	M1
4-Bromofluorobenzene (S)	%						104	104	61-130			
Dibromofluoromethane (S)	%						98	98	67-130			
Toluene-d8 (S)	%						104	103	70-130			

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 269903 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

METHOD BLANK: 1586466 Matrix: Water
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	10/10/17 07:45	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	10/10/17 07:45	
1,1-Dichloroethane	ug/L	<0.24	1.0	10/10/17 07:45	
1,1-Dichloroethene	ug/L	<0.41	1.0	10/10/17 07:45	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	10/10/17 07:45	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	10/10/17 07:45	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	10/10/17 07:45	
1,2-Dichloroethane	ug/L	<0.17	1.0	10/10/17 07:45	
1,2-Dichloropropane	ug/L	<0.23	1.0	10/10/17 07:45	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	10/10/17 07:45	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	10/10/17 07:45	
2-Butanone (MEK)	ug/L	<3.0	20.0	10/10/17 07:45	
Acetone	ug/L	<3.0	20.0	10/10/17 07:45	
Benzene	ug/L	<0.50	1.0	10/10/17 07:45	
Bromodichloromethane	ug/L	<0.50	1.0	10/10/17 07:45	
Bromoform	ug/L	<0.50	1.0	10/10/17 07:45	
Bromomethane	ug/L	<2.4	5.0	10/10/17 07:45	
Carbon disulfide	ug/L	<0.61	5.0	10/10/17 07:45	
Carbon tetrachloride	ug/L	<0.50	1.0	10/10/17 07:45	
Chlorobenzene	ug/L	<0.50	1.0	10/10/17 07:45	
Chloroethane	ug/L	<0.37	1.0	10/10/17 07:45	
Chloroform	ug/L	<2.5	5.0	10/10/17 07:45	
Chloromethane	ug/L	<0.50	1.0	10/10/17 07:45	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	10/10/17 07:45	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	10/10/17 07:45	
Dibromochloromethane	ug/L	<0.50	1.0	10/10/17 07:45	
Dibromomethane	ug/L	<0.43	1.0	10/10/17 07:45	
Dichlorodifluoromethane	ug/L	<0.22	1.0	10/10/17 07:45	
Ethylbenzene	ug/L	<0.50	1.0	10/10/17 07:45	
m&p-Xylene	ug/L	<1.0	2.0	10/10/17 07:45	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	10/10/17 07:45	
Methylene Chloride	ug/L	<0.23	1.0	10/10/17 07:45	
Naphthalene	ug/L	<2.5	5.0	10/10/17 07:45	
o-Xylene	ug/L	<0.50	1.0	10/10/17 07:45	
Styrene	ug/L	<0.50	1.0	10/10/17 07:45	
Tetrachloroethene	ug/L	<0.50	1.0	10/10/17 07:45	
Tetrahydrofuran	ug/L	<2.0	5.0	10/10/17 07:45	
Toluene	ug/L	<0.50	1.0	10/10/17 07:45	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	10/10/17 07:45	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	10/10/17 07:45	
Trichloroethene	ug/L	<0.33	1.0	10/10/17 07:45	

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

METHOD BLANK: 1586466 Matrix: Water
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	10/10/17 07:45	
Vinyl chloride	ug/L	<0.18	1.0	10/10/17 07:45	
4-Bromofluorobenzene (S)	%	85	61-130	10/10/17 07:45	
Dibromofluoromethane (S)	%	112	67-130	10/10/17 07:45	
Toluene-d8 (S)	%	93	70-130	10/10/17 07:45	

LABORATORY CONTROL SAMPLE: 1586467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	59.6	119	70-130	
1,1,2-Trichloroethane	ug/L	50	43.2	86	70-130	
1,1-Dichloroethane	ug/L	50	52.7	105	71-132	
1,1-Dichloroethene	ug/L	50	51.6	103	75-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.0	102	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	48.6	97	70-130	
1,2-Dichlorobenzene	ug/L	50	51.6	103	70-130	
1,2-Dichloroethane	ug/L	50	54.1	108	70-131	
1,2-Dichloropropane	ug/L	50	46.1	92	80-120	
1,3-Dichlorobenzene	ug/L	50	54.4	109	70-130	
1,4-Dichlorobenzene	ug/L	50	53.3	107	70-130	
Benzene	ug/L	50	47.6	95	73-145	
Bromodichloromethane	ug/L	50	54.9	110	70-130	
Bromoform	ug/L	50	49.9	100	67-130	
Bromomethane	ug/L	50	32.8	66	26-128	
Carbon disulfide	ug/L	50	43.1	86	72-156	
Carbon tetrachloride	ug/L	50	69.5	139	70-133	L1
Chlorobenzene	ug/L	50	54.2	108	70-130	
Chloroethane	ug/L	50	36.9	74	58-120	
Chloroform	ug/L	50	54.9	110	80-121	
Chloromethane	ug/L	50	32.6	65	40-127	
cis-1,2-Dichloroethene	ug/L	50	49.0	98	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.4	99	70-130	
Dibromochloromethane	ug/L	50	54.9	110	70-130	
Dichlorodifluoromethane	ug/L	50	21.3	43	20-135	
Ethylbenzene	ug/L	50	54.3	109	87-129	
m&p-Xylene	ug/L	100	117	117	70-130	
Methyl-tert-butyl ether	ug/L	50	46.4	93	66-143	
Methylene Chloride	ug/L	50	53.0	106	70-130	
o-Xylene	ug/L	50	57.8	116	70-130	
Styrene	ug/L	50	57.4	115	70-130	
Tetrachloroethene	ug/L	50	56.5	113	70-130	
Toluene	ug/L	50	49.1	98	82-130	
trans-1,2-Dichloroethene	ug/L	50	51.1	102	75-132	
trans-1,3-Dichloropropene	ug/L	50	48.8	98	70-130	

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

LABORATORY CONTROL SAMPLE: 1586467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	55.2	110	70-130	
Trichlorofluoromethane	ug/L	50	52.8	106	76-133	
Vinyl chloride	ug/L	50	31.8	64	57-136	
4-Bromofluorobenzene (S)	%			102	61-130	
Dibromofluoromethane (S)	%			105	67-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1586581 1586582

Parameter	Units	40158144005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<1.0	50	50	56.4	52.0	113	104	70-134	8	20	
1,1,2-Trichloroethane	ug/L	<1.0	50	50	39.1	38.3	78	77	70-130	2	20	
1,1-Dichloroethane	ug/L	<1.0	50	50	50.9	49.2	102	98	71-133	3	20	
1,1-Dichloroethene	ug/L	<1.0	50	50	48.3	43.2	97	86	75-136	11	20	
1,2-Dibromo-3-chloropropane	ug/L	<5.0	50	50	45.2	45.9	90	92	63-123	2	20	
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	50	45.4	41.3	91	83	70-130	9	20	
1,2-Dichlorobenzene	ug/L	<1.0	50	50	51.3	48.2	103	96	70-130	6	20	
1,2-Dichloroethane	ug/L	<1.0	50	50	52.0	48.1	104	96	70-131	8	20	
1,2-Dichloropropane	ug/L	<1.0	50	50	44.5	42.5	89	85	80-120	5	20	
1,3-Dichlorobenzene	ug/L	<1.0	50	50	52.1	51.3	104	102	70-130	2	20	
1,4-Dichlorobenzene	ug/L	<1.0	50	50	52.9	50.0	106	100	70-130	6	20	
Benzene	ug/L	<1.0	50	50	45.8	42.8	92	86	73-145	7	20	
Bromodichloromethane	ug/L	<1.0	50	50	51.5	49.9	103	100	70-130	3	20	
Bromoform	ug/L	<1.0	50	50	49.1	49.1	98	98	67-130	0	20	
Bromomethane	ug/L	<5.0	50	50	33.8	30.4	68	61	26-129	11	20	
Carbon disulfide	ug/L	<5.0	50	50	43.7	41.1	87	82	72-156	6	30	
Carbon tetrachloride	ug/L	<1.0	50	50	66.0	62.0	132	124	70-134	6	20	
Chlorobenzene	ug/L	<1.0	50	50	52.1	48.2	104	96	70-130	8	20	
Chloroethane	ug/L	<1.0	50	50	32.6	32.5	65	65	58-120	1	20	
Chloroform	ug/L	<5.0	50	50	54.4	49.7	109	99	80-121	9	20	
Chloromethane	ug/L	<1.0	50	50	33.5	29.5	67	59	40-128	13	20	
cis-1,2-Dichloroethene	ug/L	<1.0	50	50	48.1	44.2	96	88	70-130	8	20	
cis-1,3-Dichloropropene	ug/L	<1.0	50	50	47.9	43.2	96	86	70-130	10	20	
Dibromochloromethane	ug/L	<1.0	50	50	54.3	50.0	109	100	70-130	8	20	
Dichlorodifluoromethane	ug/L	<1.0	50	50	20.0	17.9	40	36	20-146	11	20	
Ethylbenzene	ug/L	<1.0	50	50	51.2	47.7	102	95	87-129	7	20	
m&p-Xylene	ug/L	<2.0	100	100	105	100	105	100	70-130	5	20	
Methyl-tert-butyl ether	ug/L	<1.0	50	50	43.4	41.7	87	83	66-143	4	20	
Methylene Chloride	ug/L	<1.0	50	50	51.9	47.0	104	94	70-130	10	20	
o-Xylene	ug/L	<1.0	50	50	53.9	48.4	108	97	70-130	11	20	
Styrene	ug/L	<1.0	50	50	52.1	48.9	104	98	70-130	6	20	
Tetrachloroethene	ug/L	<1.0	50	50	54.1	50.2	108	100	70-130	7	20	
Toluene	ug/L	<1.0	50	50	47.3	46.9	95	94	82-131	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1586581 1586582

Parameter	Units	40158144005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<1.0	50	50	50.9	48.7	102	97	75-135	4	20	
trans-1,3-Dichloropropene	ug/L	<1.0	50	50	46.8	42.7	94	85	70-130	9	20	
Trichloroethene	ug/L	<1.0	50	50	51.6	50.2	103	100	70-130	3	20	
Trichlorofluoromethane	ug/L	<1.0	50	50	51.0	46.8	102	94	76-150	9	20	
Vinyl chloride	ug/L	<1.0	50	50	32.2	28.0	64	56	56-143	14	20	
4-Bromofluorobenzene (S)	%						97	94	61-130			
Dibromofluoromethane (S)	%						111	109	67-130			
Toluene-d8 (S)	%						96	93	70-130			

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 272283
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40159679001

METHOD BLANK: 1601759
Matrix: Water
Associated Lab Samples: 40159679001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	10/31/17 07:48	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	10/31/17 07:48	
1,1-Dichloroethane	ug/L	<0.24	1.0	10/31/17 07:48	
1,1-Dichloroethene	ug/L	<0.41	1.0	10/31/17 07:48	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	10/31/17 07:48	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	10/31/17 07:48	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	10/31/17 07:48	
1,2-Dichloroethane	ug/L	<0.17	1.0	10/31/17 07:48	
1,2-Dichloropropane	ug/L	<0.23	1.0	10/31/17 07:48	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	10/31/17 07:48	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	10/31/17 07:48	
2-Butanone (MEK)	ug/L	<3.0	20.0	10/31/17 07:48	
Acetone	ug/L	<3.0	20.0	10/31/17 07:48	
Benzene	ug/L	<0.50	1.0	10/31/17 07:48	
Bromodichloromethane	ug/L	<0.50	1.0	10/31/17 07:48	
Bromoform	ug/L	<0.50	1.0	10/31/17 07:48	
Bromomethane	ug/L	<2.4	5.0	10/31/17 07:48	
Carbon disulfide	ug/L	<0.61	5.0	10/31/17 07:48	
Carbon tetrachloride	ug/L	<0.50	1.0	10/31/17 07:48	
Chlorobenzene	ug/L	<0.50	1.0	10/31/17 07:48	
Chloroethane	ug/L	<0.37	1.0	10/31/17 07:48	
Chloroform	ug/L	<2.5	5.0	10/31/17 07:48	
Chloromethane	ug/L	<0.50	1.0	10/31/17 07:48	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	10/31/17 07:48	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	10/31/17 07:48	
Dibromochloromethane	ug/L	<0.50	1.0	10/31/17 07:48	
Dibromomethane	ug/L	<0.43	1.0	10/31/17 07:48	
Dichlorodifluoromethane	ug/L	<0.22	1.0	10/31/17 07:48	
Ethylbenzene	ug/L	<0.50	1.0	10/31/17 07:48	
m&p-Xylene	ug/L	<1.0	2.0	10/31/17 07:48	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	10/31/17 07:48	
Methylene Chloride	ug/L	<0.23	1.0	10/31/17 07:48	
Naphthalene	ug/L	<2.5	5.0	10/31/17 07:48	
o-Xylene	ug/L	<0.50	1.0	10/31/17 07:48	
Styrene	ug/L	<0.50	1.0	10/31/17 07:48	
Tetrachloroethene	ug/L	<0.50	1.0	10/31/17 07:48	
Tetrahydrofuran	ug/L	<2.0	5.0	10/31/17 07:48	
Toluene	ug/L	<0.50	1.0	10/31/17 07:48	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	10/31/17 07:48	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	10/31/17 07:48	
Trichloroethene	ug/L	<0.33	1.0	10/31/17 07:48	

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

METHOD BLANK: 1601759 Matrix: Water
Associated Lab Samples: 40159679001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	10/31/17 07:48	
Vinyl chloride	ug/L	<0.18	1.0	10/31/17 07:48	
4-Bromofluorobenzene (S)	%	86	61-130	10/31/17 07:48	
Dibromofluoromethane (S)	%	93	67-130	10/31/17 07:48	
Toluene-d8 (S)	%	103	70-130	10/31/17 07:48	

LABORATORY CONTROL SAMPLE: 1601760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	49.6	47.8	96	70-130	
1,1,2-Trichloroethane	ug/L	49.6	50.3	101	70-130	
1,1-Dichloroethane	ug/L	49.6	56.3	113	71-132	
1,1-Dichloroethene	ug/L	49.6	52.3	105	75-130	
1,2-Dibromo-3-chloropropane	ug/L	49.6	46.5	94	63-123	
1,2-Dibromoethane (EDB)	ug/L	49.6	49.6	100	70-130	
1,2-Dichlorobenzene	ug/L	49.6	51.6	104	70-130	
1,2-Dichloroethane	ug/L	49.6	48.7	98	70-131	
1,2-Dichloropropane	ug/L	49.6	49.0	99	80-120	
1,3-Dichlorobenzene	ug/L	49.6	52.6	106	70-130	
1,4-Dichlorobenzene	ug/L	49.6	51.5	104	70-130	
Benzene	ug/L	49.6	48.7	98	73-145	
Bromodichloromethane	ug/L	49.6	48.6	98	70-130	
Bromoform	ug/L	49.6	44.1	89	67-130	
Bromomethane	ug/L	50	29.8	60	26-128	
Carbon disulfide	ug/L	49.6	51.5	104	72-156	
Carbon tetrachloride	ug/L	49.6	43.1	87	70-133	
Chlorobenzene	ug/L	49.6	52.8	107	70-130	
Chloroethane	ug/L	50	55.5	111	58-120	
Chloroform	ug/L	49.6	48.7	98	80-121	
Chloromethane	ug/L	50	26.2	52	40-127	
cis-1,2-Dichloroethene	ug/L	49.6	44.2	89	70-130	
cis-1,3-Dichloropropene	ug/L	49.6	43.4	87	70-130	
Dibromochloromethane	ug/L	49.6	45.2	91	70-130	
Dichlorodifluoromethane	ug/L	50	26.8	54	20-135	
Ethylbenzene	ug/L	49.6	55.7	112	87-129	
m&p-Xylene	ug/L	99.2	98.3	99	70-130	
Methyl-tert-butyl ether	ug/L	49.6	54.5	110	66-143	
Methylene Chloride	ug/L	49.6	49.2	99	70-130	
o-Xylene	ug/L	49.6	53.6	108	70-130	
Styrene	ug/L	49.6	50.2	101	70-130	
Tetrachloroethene	ug/L	49.6	49.7	100	70-130	
Toluene	ug/L	49.6	52.1	105	82-130	
trans-1,2-Dichloroethene	ug/L	49.6	54.9	111	75-132	
trans-1,3-Dichloropropene	ug/L	49.6	42.9	86	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

LABORATORY CONTROL SAMPLE: 1601760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	49.6	51.6	104	70-130	
Trichlorofluoromethane	ug/L	50	58.1	116	76-133	
Vinyl chloride	ug/L	50	49.8	100	57-136	
4-Bromofluorobenzene (S)	%			104	61-130	
Dibromofluoromethane (S)	%			95	67-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1602265 1602266

Parameter	Units	40159614001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	49.6	49.6	47.3	40.6	95	82	70-134	15	20	
1,1,2-Trichloroethane	ug/L	<0.20	49.6	49.6	38.4	38.6	77	78	70-130	0	20	
1,1-Dichloroethane	ug/L	<0.24	49.6	49.6	56.0	48.1	113	97	71-133	15	20	
1,1-Dichloroethene	ug/L	<0.41	49.6	49.6	51.9	46.2	105	93	75-136	12	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	49.6	49.6	29.8	31.7	60	64	63-123	6	20	M1
1,2-Dibromoethane (EDB)	ug/L	<0.18	49.6	49.6	36.9	37.6	74	76	70-130	2	20	
1,2-Dichlorobenzene	ug/L	<0.50	49.6	49.6	42.2	44.4	85	89	70-130	5	20	
1,2-Dichloroethane	ug/L	<0.17	49.6	49.6	44.0	37.9	89	76	70-131	15	20	
1,2-Dichloropropane	ug/L	<0.23	49.6	49.6	44.0	39.9	89	80	80-120	10	20	
1,3-Dichlorobenzene	ug/L	<0.50	49.6	49.6	43.0	45.9	87	93	70-130	7	20	
1,4-Dichlorobenzene	ug/L	<0.50	49.6	49.6	41.4	43.9	83	89	70-130	6	20	
Benzene	ug/L	<0.50	49.6	49.6	46.3	40.9	93	82	73-145	12	20	
Bromodichloromethane	ug/L	<0.50	49.6	49.6	43.7	39.5	88	80	70-130	10	20	
Bromoform	ug/L	<0.50	49.6	49.6	33.3	33.1	67	67	67-130	1	20	
Bromomethane	ug/L	<2.4	50	50	29.7	27.4	59	55	26-129	8	20	
Carbon disulfide	ug/L	<0.61	49.6	49.6	50.9	45.9	103	92	72-156	10	30	
Carbon tetrachloride	ug/L	<0.50	49.6	49.6	42.5	38.2	86	77	70-134	11	20	
Chlorobenzene	ug/L	<0.50	49.6	49.6	44.8	44.5	90	90	70-130	1	20	
Chloroethane	ug/L	<0.37	50	50	48.4	41.7	97	83	58-120	15	20	
Chloroform	ug/L	<2.5	49.6	49.6	47.4	41.4	96	83	80-121	14	20	
Chloromethane	ug/L	<0.50	50	50	24.9	22.2	50	44	40-128	12	20	
cis-1,2-Dichloroethene	ug/L	<0.26	49.6	49.6	43.6	40.0	88	81	70-130	9	20	
cis-1,3-Dichloropropene	ug/L	<0.50	49.6	49.6	39.2	36.2	79	73	70-130	8	20	
Dibromochloromethane	ug/L	<0.50	49.6	49.6	35.2	35.2	71	71	70-130	0	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	25.7	23.3	51	47	20-146	10	20	
Ethylbenzene	ug/L	<0.50	49.6	49.6	48.1	47.8	97	96	87-129	1	20	
m&p-Xylene	ug/L	<1.0	99.2	99.2	85.7	85.8	86	86	70-130	0	20	
Methyl-tert-butyl ether	ug/L	<0.17	49.6	49.6	47.1	42.5	95	86	66-143	10	20	
Methylene Chloride	ug/L	<0.23	49.6	49.6	48.6	42.5	98	86	70-130	13	20	
o-Xylene	ug/L	<0.50	49.6	49.6	46.0	46.4	93	94	70-130	1	20	
Styrene	ug/L	<0.50	49.6	49.6	42.1	42.5	85	86	70-130	1	20	
Tetrachloroethene	ug/L	<0.50	49.6	49.6	42.5	41.1	86	83	70-130	3	20	
Toluene	ug/L	<0.50	49.6	49.6	44.2	43.8	89	88	82-131	1	20	

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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 INVESTIGATION WELLS
Pace Project No.: 40158121

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1602265 1602266

Parameter	Units	40159614001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<0.26	49.6	49.6	55.1	48.3	111	97	75-135	13	20	
trans-1,3-Dichloropropene	ug/L	<0.23	49.6	49.6	33.8	33.4	68	67	70-130	1	20	M1
Trichloroethene	ug/L	<0.33	49.6	49.6	47.3	43.0	95	87	70-130	10	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	56.7	43.8	113	88	76-150	26	20	R1
Vinyl chloride	ug/L	<0.18	50	50	46.9	41.0	94	82	56-143	13	20	
4-Bromofluorobenzene (S)	%						104	101	61-130			
Dibromofluoromethane (S)	%						100	99	67-130			
Toluene-d8 (S)	%						97	102	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270214
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40158121001

METHOD BLANK: 1587830 Matrix: Water
Associated Lab Samples: 40158121001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	10/13/17 13:39	

LABORATORY CONTROL SAMPLE: 1587831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1587832 1587833

Parameter	Units	40158115010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	85.3	100	100	188	190	103	105	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1587834 1587835

Parameter	Units	40158140002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	123	100	100	222	222	100	99	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270549 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

METHOD BLANK: 1590095 Matrix: Water
Associated Lab Samples: 40158227001, 40158227002, 40158227003, 40158227004, 40158227005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	10/16/17 19:12	

LABORATORY CONTROL SAMPLE: 1590096

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.8	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1590097 1590098

Parameter	Units	40158163015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	39.5	20	20	58.4	58.5	94	95	90-110	0	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1590099 1590100

Parameter	Units	40158313004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	14.6	20	20	35.1	35.3	102	103	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 273212
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40159679001

METHOD BLANK: 1607534 Matrix: Water
Associated Lab Samples: 40159679001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	11/07/17 10:48	

LABORATORY CONTROL SAMPLE: 1607535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1607536 1607537

Parameter	Units	40159659001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	20	20	28.1	28.0	114	113	90-110	0	15	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1607538 1607539

Parameter	Units	40159810001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	69.6	100	100	179	179	109	110	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270240 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40158121001

METHOD BLANK: 1587980 Matrix: Water
Associated Lab Samples: 40158121001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<7.0	23.5	10/12/17 11:09	

LABORATORY CONTROL SAMPLE: 1587981

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1587982 1587983

Parameter	Units	40158117004 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, Dissolved	mg/L	192	200	200	384	389	96	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1587984 1587985

Parameter	Units	40158140008 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, Dissolved	mg/L	323	200	200	528	522	103	100	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270242 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40158227001, 40158227002, 40158227003

METHOD BLANK: 1587990 Matrix: Water
Associated Lab Samples: 40158227001, 40158227002, 40158227003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<7.0	23.5	10/12/17 11:30	

LABORATORY CONTROL SAMPLE: 1587991

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1587992 1587993

Parameter	Units	40158163013 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, Dissolved	mg/L	21.5J	100	100	120	116	99	94	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1587994 1587995

Parameter	Units	40158227003 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, Dissolved	mg/L	310	200	200	517	511	104	101	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 INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 270436 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40158227004, 40158227005

METHOD BLANK: 1589341 Matrix: Water
Associated Lab Samples: 40158227004, 40158227005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<7.0	23.5	10/13/17 10:03	

LABORATORY CONTROL SAMPLE: 1589342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	100	106	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1589343 1589344

Parameter	Units	40158308004 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, Dissolved	mg/L	509	500	500	1000	987	99	96	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1589345 1589346

Parameter	Units	40158390003 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, Dissolved	mg/L	346	200	200	536	540	95	97	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 INVESTIGATION WELLS
Pace Project No.: 40158121

QC Batch: 272774 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40159679001

METHOD BLANK: 1604656 Matrix: Water
Associated Lab Samples: 40159679001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	<7.0	23.5	11/02/17 11:43	

LABORATORY CONTROL SAMPLE: 1604657

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1604658 1604659

Parameter	Units	40159679005 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, Dissolved	mg/L	527	500	500	969	980	88	91	90-110	1	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1604660 1604661

Parameter	Units	40159816007 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, Dissolved	mg/L	468	500	500	921	894	91	85	90-110	3	20	M0

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 INVESTIGATION WELLS
Pace Project No.: 40158121

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40158121001	**MW-1B**	EPA 6010	270499		
40158227001	**P-402E**	EPA 6010	270500		
40158227002	**P-422B**	EPA 6010	270500		
40158227003	**P-424SS**	EPA 6010	270500		
40158227004	**P-424D**	EPA 6010	270500		
40158227005	**P-423D**	EPA 6010	270500		
40159679001	**P-426D**	EPA 6010	272667		
40158121001	**MW-1B**	EPA 8260	269830		
40158121002	**TRIP BLANK**	EPA 8260	269830		
40158227001	**P-402E**	EPA 8260	269903		
40158227002	**P-422B**	EPA 8260	269903		
40158227003	**P-424SS**	EPA 8260	269903		
40158227004	**P-424D**	EPA 8260	269903		
40158227005	**P-423D**	EPA 8260	269903		
40159679001	**P-426D**	EPA 8260	272283		
40158121001	**MW-1B**				
40158227001	**P-402E**				
40158227002	**P-422B**				
40158227003	**P-424SS**				
40158227004	**P-424D**				
40158227005	**P-423D**				
40158227006	**P-401D**				
40159679001	**P-426D**				
40159954004	**P-402E**				
40159954005	**P-422B**				
40159954006	**P-423D**				
40159954007	**P-424D**				
40159954008	**P-424SS**				
40159954009	**P-426D**				
40159954010	**MW-1B**				
40158121001	**MW-1B**	EPA 300.0	270214		
40158227001	**P-402E**	EPA 300.0	270549		
40158227002	**P-422B**	EPA 300.0	270549		
40158227003	**P-424SS**	EPA 300.0	270549		
40158227004	**P-424D**	EPA 300.0	270549		
40158227005	**P-423D**	EPA 300.0	270549		
40159679001	**P-426D**	EPA 300.0	273212		
40158121001	**MW-1B**	EPA 310.2	270240		
40158227001	**P-402E**	EPA 310.2	270242		
40158227002	**P-422B**	EPA 310.2	270242		
40158227003	**P-424SS**	EPA 310.2	270242		
40158227004	**P-424D**	EPA 310.2	270436		
40158227005	**P-423D**	EPA 310.2	270436		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL INVESTIGATION WELLS
Pace Project No.: 40158121

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40159679001	**P-426D**	EPA 310.2	272774		

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CHAIN-OF-CUSTODY / Analytical Request Document

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40158124

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information: Emm
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: LGRL Investigation Wells	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: Pace Profile #: 4172 line 29

REGULATORY AGENCY

__NPDES X GROUND WATER __DRINKING WATER
__UST __RCRA OTHER______

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

Filtered (Y/N): N / Y / Y

Requested Analysis

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	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Nitric	HCL	Unpreserved	8260 NR 507 VOCs	diss chloride, alkalinity	diss 6010 - hard	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	MW-1B	001	WG	—	—	—	10/5	1320	13.6	5	1	3	1	X	X	X	3-40mL	B2-250mL P
2	TripBlank	002	—	—	—	—	—	—	—	2		2		X				2-40mL B
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

AD

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
[signature] / ESC	10/5	1800					Y/N	Y/N	Y/N
Walter	10/6/17	0845	[signature] Pace	10/6/17	0845	ROT	Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N

SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Brenda Fritsch
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM / DD / YY): 10/05/17

Sample Condition Upon Receipt

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

Pace Analytical™

Client Name: ADS

Project # WO#: 40158121

40158121

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: waba

Tracking #: 1511055

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: N/A Type of Ice: (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature: Uncorr: ROI /Corr: Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 10-6-17
Initials: SLW

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 <2; NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No	Initial when completed: KW / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14.
Trip Blank Present:	☑Yes ☐No ☐N/A	15.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 387		

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 10/6/17

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CHAIN-OF-CUSTODY / Analytical Request Document

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

SSM

40158227

Page: 1 of 1

Section A **Required** Client Information:	Section B **Required** Project Information:	Section C Invoice Information:
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: LGRL Investigation Wells	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: 4172 line 29

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ 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: Nitric	Preservatives: HCL	Preservatives: Unpreserved	Filtered (Y/N)	Requested Analysis: 8260 NR 507 VOCs	Requested Analysis: diss chloride, alkalinity	Requested Analysis: diss 6010 - hard	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
														N	Y	Y			
1	P-401D				~~10/6/17~~	—	10/6/17	—	—	0									
2	P-402E	001			—			1030	14.4	5	1	3	1		X	X	2-2=40mL	P	D3-40mLV
3	P-422B	002			—			1115	14.4	5	1	3	1		X	X			
4	P-424SS	003			—			1300	13.8	5	1	3	1		X	X			
5	P-424D	004			—			1330	12.8	5	1	3	1		X	X			
6	P-423D	005			—		10/6/17	1415		5	1	3	1		X	X			
7																			
8																			
9																			
10																			
11																			
12																			

Additional Comments:

EDD=LF#030168

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[illegible]/BSC	10/6/17	1700			
ES Logistics	10/7/17	0815	Katie Schramm Pace	10/7/17	0815

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
R01	Y/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 Eric Mark

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/6/17

Sample Condition Upon Receipt

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

Project #: **WO# : 40158227**

40158227

Client Name: ADS Glacier Ridge

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace ☐ Other: CS Logistics

Tracking #:

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 NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: /Corr: R01 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 10/7/17
Initials: KJ

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No KJ 10/7/17	Initial when completed KJ / Lab Std #ID of preservative / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A KJ 10/7/17	14
Trip Blank Present:	☐Yes ☐No ☐N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Clr **Date:** 10/9/17

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CHAIN-OF-CUSTODY / Analytical Request Document

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

4015 9679

Page: 1 of 1

Section A **Required** Client Information:	Section B **Required** Project Information:	Section C Invoice Information:
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: / Fax:	Project Name: LGRL Investigation Wells + GRL/LGRLGW	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: 4172 line 29

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ 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 #	Section D SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Nitric	HCL	Unpreserved	Filtered (Y/N)	Requested Analysis: 8260 NR 507 VOCs	diss chloride, alkalinity	diss 6010 - hard	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
													N	Y	Y			
1	P-426D	W	G			10/27	1135	2.1	5	1	3	1		X	X	X	3-40mL VB	2-250mL AD
2	A-3A ☆						1210	9.6						X	X	X		
3	MW-204A ☆						1230	9.5						X	X	X		2-40mL VB
4	Trip Blank								2		2			X				
5	Dup-4	W	G			10/27	1210	9.6	5	1	3	1		X	X	X		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments:

☆ Wells are shared between GRL + LGRL 10-27-17 BF

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	10/27	1770			
[signature]	10/28/17	0810	[signature]	10/28/17	0810

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
A01	Y/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: Brenda Fritsch

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 10/27/17

Sample Condition Upon Receipt

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

Pace Analytical™

Project #: **WO# : 40159679**

40159679

Client Name: ADS Glacier Ridge Waltz

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other:

Tracking #: 153663 7-1

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 NA **Type of Ice:** (We) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RoI /Corr: **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 10/28/17
Initials: SSM

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

				Comments:
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	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☐Yes	☒No	☐N/A	8. No MS/MSD vol SSM 10/28/17
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☒N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☒Yes	☐No	☐N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☒Yes	☐No	☐N/A	13. ☒HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☒Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☒Yes	☐No		Initial when completed SSM / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14.
Trip Blank Present:	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present	☒Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): 387				

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Ice **Date:** 10/30/17

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

December 05, 2017

General Manager
Advanced Disposal Glacier Ridge Landfill LLC
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Dear General Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on December 01, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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
Frank Perugini, Environmental Sampling Corporation
Kari Rabideau, Advanced Disposal Hickory Meadows Landfill, LLC
Ashley Radunzel, SCS ENGINEERS
ESC Staff, ESC

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Green Bay Certification IDs

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 P-429SS - VOCs
Pace Project No.: 40161642

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40161642001	**P-429SS**	Water	11/30/17 13:10	12/01/17 08:50
40161642002	**TRIP BLANK**	Water	11/30/17 00:00	12/01/17 08:50

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SAMPLE ANALYTE COUNT

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40161642001	**P-429SS**	EPA 8260	HNW	46	PASI-G
			AXL	6	PASI-G
40161642002	**TRIP BLANK**	EPA 8260	HNW	46	PASI-G

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Sample: P-429SS **Lab ID: 40161642001** Collected: 11/30/17 13:10 Received: 12/01/17 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		12/04/17 14:14	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		12/04/17 14:14	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		12/04/17 14:14	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		12/04/17 14:14	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		12/04/17 14:14	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		12/04/17 14:14	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		12/04/17 14:14	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		12/04/17 14:14	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		12/04/17 14:14	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		12/04/17 14:14	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		12/04/17 14:14	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		12/04/17 14:14	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		12/04/17 14:14	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		12/04/17 14:14	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		12/04/17 14:14	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		12/04/17 14:14	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		12/04/17 14:14	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		12/04/17 14:14	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		12/04/17 14:14	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		12/04/17 14:14	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		12/04/17 14:14	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		12/04/17 14:14	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		12/04/17 14:14	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		12/04/17 14:14	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 14:14	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		12/04/17 14:14	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		12/04/17 14:14	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	61-130		1		12/04/17 14:14	460-00-4	
Dibromofluoromethane (S)	108	%	67-130		1		12/04/17 14:14	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Sample: P-429SS **Lab ID: 40161642001** Collected: 11/30/17 13:10 Received: 12/01/17 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	97	%	70-130		1		12/04/17 14:14	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.09**	Std. Units			1		11/30/17 13:10		
Field Specific Conductance	**412**	umhos/cm			1		11/30/17 13:10		
Turbidity	**N**	NTU			1		11/30/17 13:10		
Apparent Color	**N**	no units			1		11/30/17 13:10		
Odor	**N**	no units			1		11/30/17 13:10		
Temperature, Water (C)	**15.3**	deg C			1		11/30/17 13:10		

REPORT OF LABORATORY ANALYSIS

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

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Sample: TRIP BLANK **Lab ID: 40161642002** Collected: 11/30/17 00:00 Received: 12/01/17 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		12/04/17 15:21	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		12/04/17 15:21	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		12/04/17 15:21	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		12/04/17 15:21	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		12/04/17 15:21	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		12/04/17 15:21	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		12/04/17 15:21	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		12/04/17 15:21	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		12/04/17 15:21	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		12/04/17 15:21	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		12/04/17 15:21	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		12/04/17 15:21	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		12/04/17 15:21	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		12/04/17 15:21	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		12/04/17 15:21	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		12/04/17 15:21	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		12/04/17 15:21	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		12/04/17 15:21	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		12/04/17 15:21	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		12/04/17 15:21	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		12/04/17 15:21	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		12/04/17 15:21	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		12/04/17 15:21	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		12/04/17 15:21	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		12/04/17 15:21	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		12/04/17 15:21	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		12/04/17 15:21	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	61-130		1		12/04/17 15:21	460-00-4	
Dibromofluoromethane (S)	106	%	67-130		1		12/04/17 15:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Sample: TRIP BLANK **Lab ID: 40161642002** Collected: 11/30/17 00:00 Received: 12/01/17 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	95	%	70-130		1		12/04/17 15:21	2037-26-5	

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 P-429SS - VOCs
Pace Project No.: 40161642

QC Batch: 275880 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40161642001, 40161642002

METHOD BLANK: 1622691 Matrix: Water
Associated Lab Samples: 40161642001, 40161642002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	12/04/17 08:06	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	12/04/17 08:06	
1,1-Dichloroethane	ug/L	<0.24	1.0	12/04/17 08:06	
1,1-Dichloroethene	ug/L	<0.41	1.0	12/04/17 08:06	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	12/04/17 08:06	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	12/04/17 08:06	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
1,2-Dichloroethane	ug/L	<0.17	1.0	12/04/17 08:06	
1,2-Dichloropropane	ug/L	<0.23	1.0	12/04/17 08:06	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
2-Butanone (MEK)	ug/L	<3.0	20.0	12/04/17 08:06	
Acetone	ug/L	<3.0	20.0	12/04/17 08:06	
Benzene	ug/L	<0.50	1.0	12/04/17 08:06	
Bromodichloromethane	ug/L	<0.50	1.0	12/04/17 08:06	
Bromoform	ug/L	<0.50	1.0	12/04/17 08:06	
Bromomethane	ug/L	<2.4	5.0	12/04/17 08:06	
Carbon disulfide	ug/L	<0.61	5.0	12/04/17 08:06	
Carbon tetrachloride	ug/L	<0.50	1.0	12/04/17 08:06	
Chlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
Chloroethane	ug/L	<0.37	1.0	12/04/17 08:06	
Chloroform	ug/L	<2.5	5.0	12/04/17 08:06	
Chloromethane	ug/L	<0.50	1.0	12/04/17 08:06	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	12/04/17 08:06	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	12/04/17 08:06	
Dibromochloromethane	ug/L	<0.50	1.0	12/04/17 08:06	
Dibromomethane	ug/L	<0.43	1.0	12/04/17 08:06	
Dichlorodifluoromethane	ug/L	<0.22	1.0	12/04/17 08:06	
Ethylbenzene	ug/L	<0.50	1.0	12/04/17 08:06	
m&p-Xylene	ug/L	<1.0	2.0	12/04/17 08:06	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	12/04/17 08:06	
Methylene Chloride	ug/L	<0.23	1.0	12/04/17 08:06	
Naphthalene	ug/L	<2.5	5.0	12/04/17 08:06	
o-Xylene	ug/L	<0.50	1.0	12/04/17 08:06	
Styrene	ug/L	<0.50	1.0	12/04/17 08:06	
Tetrachloroethene	ug/L	<0.50	1.0	12/04/17 08:06	
Tetrahydrofuran	ug/L	<2.0	5.0	12/04/17 08:06	
Toluene	ug/L	<0.50	1.0	12/04/17 08:06	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	12/04/17 08:06	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	12/04/17 08:06	
Trichloroethene	ug/L	<0.33	1.0	12/04/17 08:06	

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 P-429SS - VOCs
Pace Project No.: 40161642

METHOD BLANK: 1622691 Matrix: Water
Associated Lab Samples: 40161642001, 40161642002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	12/04/17 08:06	
Vinyl chloride	ug/L	<0.18	1.0	12/04/17 08:06	
4-Bromofluorobenzene (S)	%	99	61-130	12/04/17 08:06	
Dibromofluoromethane (S)	%	97	67-130	12/04/17 08:06	
Toluene-d8 (S)	%	96	70-130	12/04/17 08:06	

LABORATORY CONTROL SAMPLE: 1622692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.8	100	70-130	
1,1,2-Trichloroethane	ug/L	50	45.8	92	70-130	
1,1-Dichloroethane	ug/L	50	50.1	100	71-132	
1,1-Dichloroethene	ug/L	50	47.0	94	75-130	
1,2-Dibromo-3-chloropropane	ug/L	50	41.4	83	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	48.4	97	70-130	
1,2-Dichlorobenzene	ug/L	50	47.0	94	70-130	
1,2-Dichloroethane	ug/L	50	49.7	99	70-131	
1,2-Dichloropropane	ug/L	50	47.9	96	80-120	
1,3-Dichlorobenzene	ug/L	50	46.7	93	70-130	
1,4-Dichlorobenzene	ug/L	50	46.4	93	70-130	
Benzene	ug/L	50	50.1	100	73-145	
Bromodichloromethane	ug/L	50	45.7	91	70-130	
Bromoform	ug/L	50	43.2	86	67-130	
Bromomethane	ug/L	50	30.6	61	26-128	
Carbon disulfide	ug/L	50	47.5	95	72-156	
Carbon tetrachloride	ug/L	50	47.3	95	70-133	
Chlorobenzene	ug/L	50	48.1	96	70-130	
Chloroethane	ug/L	50	40.3	81	58-120	
Chloroform	ug/L	50	49.3	99	80-121	
Chloromethane	ug/L	50	34.2	68	40-127	
cis-1,2-Dichloroethene	ug/L	50	47.0	94	70-130	
cis-1,3-Dichloropropene	ug/L	50	44.0	88	70-130	
Dibromochloromethane	ug/L	50	44.2	88	70-130	
Dichlorodifluoromethane	ug/L	50	25.3	51	20-135	
Ethylbenzene	ug/L	50	49.4	99	87-129	
m&p-Xylene	ug/L	100	100	100	70-130	
Methyl-tert-butyl ether	ug/L	50	49.0	98	66-143	
Methylene Chloride	ug/L	50	46.4	93	70-130	
o-Xylene	ug/L	50	49.3	99	70-130	
Styrene	ug/L	50	50.6	101	70-130	
Tetrachloroethene	ug/L	50	45.4	91	70-130	
Toluene	ug/L	50	47.6	95	82-130	
trans-1,2-Dichloroethene	ug/L	50	50.0	100	75-132	
trans-1,3-Dichloropropene	ug/L	50	42.3	85	70-130	

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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 P-429SS - VOCs
Pace Project No.: 40161642

LABORATORY CONTROL SAMPLE: 1622692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	49.5	99	70-130	
Trichlorofluoromethane	ug/L	50	43.3	87	76-133	
Vinyl chloride	ug/L	50	40.1	80	57-136	
4-Bromofluorobenzene (S)	%			102	61-130	
Dibromofluoromethane (S)	%			98	67-130	
Toluene-d8 (S)	%			95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622693 1622694

Parameter	Units	40161649002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	46.5	51.1	93	102	70-134	9	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	43.6	47.5	87	95	70-130	9	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	45.3	50.8	91	102	71-133	11	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	43.1	47.2	86	94	75-136	9	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	40.4	42.9	81	86	63-123	6	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	44.1	49.1	88	98	70-130	11	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	45.1	47.9	90	95	70-130	6	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	46.2	50.8	92	102	70-131	9	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	42.5	48.7	85	97	80-120	14	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	44.7	46.5	89	93	70-130	4	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	44.4	46.4	88	92	70-130	4	20	
Benzene	ug/L	12.0	50	50	54.3	60.3	85	97	73-145	10	20	
Bromodichloromethane	ug/L	<0.50	50	50	41.2	46.2	82	92	70-130	11	20	
Bromoform	ug/L	<0.50	50	50	41.8	44.2	84	88	67-130	6	20	
Bromomethane	ug/L	<2.4	50	50	30.9	31.8	62	64	26-129	3	20	
Carbon disulfide	ug/L	<0.61	50	50	46.3	51.6	92	102	72-156	11	30	
Carbon tetrachloride	ug/L	<0.50	50	50	44.5	49.2	89	98	70-134	10	20	
Chlorobenzene	ug/L	<0.50	50	50	44.1	48.1	88	96	70-130	9	20	
Chloroethane	ug/L	<0.37	50	50	43.9	41.7	88	83	58-120	5	20	
Chloroform	ug/L	<2.5	50	50	46.0	50.2	92	100	80-121	9	20	
Chloromethane	ug/L	<0.50	50	50	32.9	33.7	66	67	40-128	2	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	43.4	48.2	87	96	70-130	10	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	39.6	44.1	79	88	70-130	11	20	
Dibromochloromethane	ug/L	<0.50	50	50	41.8	45.1	84	90	70-130	8	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	22.4	24.7	45	49	20-146	10	20	
Ethylbenzene	ug/L	<0.50	50	50	44.7	49.3	89	99	87-129	10	20	
m&p-Xylene	ug/L	<1.0	100	100	90.8	99.2	91	99	70-130	9	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	44.1	49.8	88	100	66-143	12	20	
Methylene Chloride	ug/L	<0.23	50	50	43.7	48.8	87	98	70-130	11	20	
o-Xylene	ug/L	<0.50	50	50	45.8	49.8	92	100	70-130	8	20	
Styrene	ug/L	<0.50	50	50	46.6	50.0	93	100	70-130	7	20	
Tetrachloroethene	ug/L	<0.50	50	50	43.3	46.6	87	93	70-130	7	20	
Toluene	ug/L	<0.50	50	50	44.3	48.4	89	97	82-131	9	20	

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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 P-429SS - VOCs
Pace Project No.: 40161642

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622693 1622694

Parameter	Units	40161649002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	45.4	50.7	91	101	75-135	11	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	40.1	43.1	80	86	70-130	7	20	
Trichloroethene	ug/L	<0.33	50	50	43.8	50.9	88	102	70-130	15	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	45.2	46.5	90	93	76-150	3	20	
Vinyl chloride	ug/L	<0.18	50	50	38.1	39.8	76	80	56-143	4	20	
4-Bromofluorobenzene (S)	%						104	101	61-130			
Dibromofluoromethane (S)	%						103	102	67-130			
Toluene-d8 (S)	%						97	96	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL P-429SS - VOCs
Pace Project No.: 40161642

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40161642001	**P-429SS**	EPA 8260	275880		
40161642002	**TRIP BLANK**	EPA 8260	275880		
40161642001	**P-429SS**				

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

40161642

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

Page: 1 of 1

Section A **Required** Client Information:	Section B **Required** Project Information:	Section C Invoice Information:
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, Mari Bull - SCS Eng, Sherren Clark - SCS Eng, ESC Staff	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: GRL GW	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: 4172 line 5

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ DRINKING WATER
__ UST __ RCRA OTHER____

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

Filtered (Y/N): Y 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 (2017)	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	HN03	Unpreseved	HCL	Requested Analysis: 8260 VOC NR507	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	P429SS	001	GW	G	—	—	11/30	1340	15.3	3			3	x		3-40mL VB
2	Trip Blank	002	—	—	—	—	—	—	—	2			2	X		2-40mL VB
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Additional Comments:

* Please rush samples 2 day. Results by Tuesday Dec 5, 2017

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
[signature] / ESC	11/30/17	1700					Y/N	Y/N	Y/N
[signature]	12/1/17	0850	[signature] / Pace	12/1/17	0850	2.5	Y/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 Freimark

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 11/30/17

Sample Condition Upon Receipt

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

Pace Analytical™

Client Name: ADS Glacier Ridge

Project # **WO#: 40161642**

40161642

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: Walteo

Tracking #: 157387 4-1

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-4 **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 2 /Corr: 2.5 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 12/1/17
Initials: SM

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

				Comments:
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	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☒Yes	☐No	☐N/A	7. 2 Day TAT SM 12/1/17
Sufficient Volume:	☐Yes	☒No	☐N/A	8. No MS/MSD vol. SM 12/1/17
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☒N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☒N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☒Yes	☐No		Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14.
Trip Blank Present:	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present	☒Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): 388				

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 12/1/17

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

February 19, 2018

General Manager
Advanced Disposal Glacier Ridge Landfill LLC
N7296 Hwy V
Horicon, WI 53032

RE: Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Dear General Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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
Frank Perugini, Environmental Sampling Corporation
Kari Rabideau, Advanced Disposal Hickory Meadows Landfill, LLC
Ashley Radunzel, SCS ENGINEERS
ESC Staff, ESC

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

CERTIFICATIONS

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Green Bay Certification IDs

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 P-429SS FEB 2019
Pace Project No.: 40164262

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40164262001	**P-429SS**	Water	02/01/18 12:00	02/02/18 08:40
40164262002	**TRIP BLANK**	Water	02/01/18 00:00	02/02/18 08:40

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

SAMPLE ANALYTE COUNT

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40164262001	**P-429SS**	EPA 6010	JLD	1	PASI-G
		EPA 8260	LAP	46	PASI-G
			AXL	6	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
40164262002	**TRIP BLANK**	EPA 8260	LAP	46	PASI-G

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Sample: P-429SS **Lab ID: 40164262001** Collected: 02/01/18 12:00 Received: 02/02/18 08:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Total Hardness by 2340B, Dissolved	**322000**	ug/L	2000	150	1		02/06/18 12:32		
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		02/06/18 13:39	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		02/06/18 13:39	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		02/06/18 13:39	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		02/06/18 13:39	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		02/06/18 13:39	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		02/06/18 13:39	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		02/06/18 13:39	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		02/06/18 13:39	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		02/06/18 13:39	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		02/06/18 13:39	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		02/06/18 13:39	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		02/06/18 13:39	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		02/06/18 13:39	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		02/06/18 13:39	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		02/06/18 13:39	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		02/06/18 13:39	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		02/06/18 13:39	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		02/06/18 13:39	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		02/06/18 13:39	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		02/06/18 13:39	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		02/06/18 13:39	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		02/06/18 13:39	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		02/06/18 13:39	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		02/06/18 13:39	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 13:39	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		02/06/18 13:39	156-60-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Sample: P-429SS **Lab ID: 40164262001** Collected: 02/01/18 12:00 Received: 02/02/18 08:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		02/06/18 13:39	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	86	%	61-130		1		02/06/18 13:39	460-00-4	
Dibromofluoromethane (S)	112	%	67-130		1		02/06/18 13:39	1868-53-7	
Toluene-d8 (S)	90	%	70-130		1		02/06/18 13:39	2037-26-5	
Field Data	Analytical Method:								
Field pH	**7.32**	Std. Units			1		02/01/18 12:00		
Field Specific Conductance	**674**	umhos/cm			1		02/01/18 12:00		
Turbidity	**N**	NTU			1		02/01/18 12:00		
Apparent Color	**N**	no units			1		02/01/18 12:00		
Odor	**N**	no units			1		02/01/18 12:00		
Temperature, Water (C)	**12.5**	deg C			1		02/01/18 12:00		
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Chloride, Dissolved	**1.3J**	mg/L	2.0	0.50	1		02/07/18 10:52	16887-00-6	
310.2 Alkalinity, Dissolved	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3, Dissolved	**318**	mg/L	47.0	14.1	2		02/15/18 14:22		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Sample: TRIP BLANK **Lab ID: 40164262002** Collected: 02/01/18 00:00 Received: 02/02/18 08:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		02/06/18 10:46	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		02/06/18 10:46	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		02/06/18 10:46	75-35-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		02/06/18 10:46	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		02/06/18 10:46	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		02/06/18 10:46	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		02/06/18 10:46	78-87-5	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	106-46-7	
2-Butanone (MEK)	**<3.0**	ug/L	20.0	3.0	1		02/06/18 10:46	78-93-3	
Acetone	**<3.0**	ug/L	20.0	3.0	1		02/06/18 10:46	67-64-1	
Benzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	71-43-2	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		02/06/18 10:46	74-83-9	
Carbon disulfide	**<0.61**	ug/L	5.0	0.61	1		02/06/18 10:46	75-15-0	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		02/06/18 10:46	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		02/06/18 10:46	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		02/06/18 10:46	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		02/06/18 10:46	75-71-8	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		02/06/18 10:46	1634-04-4	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		02/06/18 10:46	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		02/06/18 10:46	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	127-18-4	
Tetrahydrofuran	**<2.0**	ug/L	5.0	2.0	1		02/06/18 10:46	109-99-9	
Toluene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		02/06/18 10:46	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		02/06/18 10:46	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		02/06/18 10:46	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		02/06/18 10:46	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		02/06/18 10:46	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		02/06/18 10:46	95-47-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		02/06/18 10:46	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		02/06/18 10:46	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	82	%	61-130		1		02/06/18 10:46	460-00-4	
Dibromofluoromethane (S)	106	%	67-130		1		02/06/18 10:46	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

ANALYTICAL RESULTS

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Sample: TRIP BLANK **Lab ID: 40164262002** Collected: 02/01/18 00:00 Received: 02/02/18 08:40 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	89	%	70-130		1		02/06/18 10:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

QC Batch: 280593
QC Batch Method: EPA 6010
Analysis Method: EPA 6010
Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40164262001

METHOD BLANK: 1645950 Matrix: Water
Associated Lab Samples: 40164262001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L	<150	2000	02/06/18 11:33	

LABORATORY CONTROL SAMPLE: 1645951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness by 2340B, Dissolved	ug/L		33700			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1645952 1645953

Parameter	Units	40164200001 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, Dissolved	ug/L	403000			424000	423000				0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

QC Batch: 280478 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40164262001, 40164262002

METHOD BLANK: 1645605 Matrix: Water
Associated Lab Samples: 40164262001, 40164262002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.50	1.0	02/06/18 08:20	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	02/06/18 08:20	
1,1-Dichloroethane	ug/L	<0.24	1.0	02/06/18 08:20	
1,1-Dichloroethene	ug/L	<0.41	1.0	02/06/18 08:20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	02/06/18 08:20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	02/06/18 08:20	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	02/06/18 08:20	
1,2-Dichloroethane	ug/L	<0.17	1.0	02/06/18 08:20	
1,2-Dichloropropane	ug/L	<0.23	1.0	02/06/18 08:20	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	02/06/18 08:20	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	02/06/18 08:20	
2-Butanone (MEK)	ug/L	<3.0	20.0	02/06/18 08:20	
Acetone	ug/L	<3.0	20.0	02/06/18 08:20	
Benzene	ug/L	<0.50	1.0	02/06/18 08:20	
Bromodichloromethane	ug/L	<0.50	1.0	02/06/18 08:20	
Bromoform	ug/L	<0.50	1.0	02/06/18 08:20	
Bromomethane	ug/L	<2.4	5.0	02/06/18 08:20	
Carbon disulfide	ug/L	<0.61	5.0	02/06/18 08:20	
Carbon tetrachloride	ug/L	<0.50	1.0	02/06/18 08:20	
Chlorobenzene	ug/L	<0.50	1.0	02/06/18 08:20	
Chloroethane	ug/L	<0.37	1.0	02/06/18 08:20	
Chloroform	ug/L	<2.5	5.0	02/06/18 08:20	
Chloromethane	ug/L	<0.50	1.0	02/06/18 08:20	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	02/06/18 08:20	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	02/06/18 08:20	
Dibromochloromethane	ug/L	<0.50	1.0	02/06/18 08:20	
Dibromomethane	ug/L	<0.43	1.0	02/06/18 08:20	
Dichlorodifluoromethane	ug/L	<0.22	1.0	02/06/18 08:20	
Ethylbenzene	ug/L	<0.50	1.0	02/06/18 08:20	
m&p-Xylene	ug/L	<1.0	2.0	02/06/18 08:20	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	02/06/18 08:20	
Methylene Chloride	ug/L	<0.23	1.0	02/06/18 08:20	
Naphthalene	ug/L	<2.5	5.0	02/06/18 08:20	
o-Xylene	ug/L	<0.50	1.0	02/06/18 08:20	
Styrene	ug/L	<0.50	1.0	02/06/18 08:20	
Tetrachloroethene	ug/L	<0.50	1.0	02/06/18 08:20	
Tetrahydrofuran	ug/L	<2.0	5.0	02/06/18 08:20	
Toluene	ug/L	<0.50	1.0	02/06/18 08:20	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	02/06/18 08:20	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	02/06/18 08:20	
Trichloroethene	ug/L	<0.33	1.0	02/06/18 08:20	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

METHOD BLANK: 1645605 Matrix: Water
Associated Lab Samples: 40164262001, 40164262002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	<0.18	1.0	02/06/18 08:20	
Vinyl chloride	ug/L	<0.18	1.0	02/06/18 08:20	
4-Bromofluorobenzene (S)	%	88	61-130	02/06/18 08:20	
Dibromofluoromethane (S)	%	108	67-130	02/06/18 08:20	
Toluene-d8 (S)	%	94	70-130	02/06/18 08:20	

LABORATORY CONTROL SAMPLE: 1645606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.0	102	70-130	
1,1,2-Trichloroethane	ug/L	50	48.5	97	70-130	
1,1-Dichloroethane	ug/L	50	48.5	97	71-132	
1,1-Dichloroethene	ug/L	50	48.5	97	75-130	
1,2-Dibromo-3-chloropropane	ug/L	50	39.1	78	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	49.0	98	70-130	
1,2-Dichlorobenzene	ug/L	50	49.3	99	70-130	
1,2-Dichloroethane	ug/L	50	47.4	95	70-131	
1,2-Dichloropropane	ug/L	50	51.4	103	80-120	
1,3-Dichlorobenzene	ug/L	50	47.8	96	70-130	
1,4-Dichlorobenzene	ug/L	50	49.1	98	70-130	
Benzene	ug/L	50	52.7	105	73-145	
Bromodichloromethane	ug/L	50	51.3	103	70-130	
Bromoform	ug/L	50	45.5	91	67-130	
Bromomethane	ug/L	50	34.5	69	26-128	
Carbon disulfide	ug/L	50	53.2	106	72-156	
Carbon tetrachloride	ug/L	50	55.0	110	70-133	
Chlorobenzene	ug/L	50	51.1	102	70-130	
Chloroethane	ug/L	50	42.8	86	58-120	
Chloroform	ug/L	50	49.5	99	80-121	
Chloromethane	ug/L	50	38.6	77	40-127	
cis-1,2-Dichloroethene	ug/L	50	48.9	98	70-130	
cis-1,3-Dichloropropene	ug/L	50	46.6	93	70-130	
Dibromochloromethane	ug/L	50	45.8	92	70-130	
Dichlorodifluoromethane	ug/L	50	34.0	68	20-135	
Ethylbenzene	ug/L	50	50.3	101	87-129	
m&p-Xylene	ug/L	100	103	103	70-130	
Methyl-tert-butyl ether	ug/L	50	43.2	86	66-143	
Methylene Chloride	ug/L	50	47.6	95	70-130	
o-Xylene	ug/L	50	49.8	100	70-130	
Styrene	ug/L	50	50.8	102	70-130	
Tetrachloroethene	ug/L	50	48.9	98	70-130	
Toluene	ug/L	50	50.1	100	82-130	
trans-1,2-Dichloroethene	ug/L	50	50.2	100	75-132	
trans-1,3-Dichloropropene	ug/L	50	42.4	85	70-130	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

LABORATORY CONTROL SAMPLE: 1645606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	50	53.6	107	70-130	
Trichlorofluoromethane	ug/L	50	45.1	90	76-133	
Vinyl chloride	ug/L	50	43.8	88	57-136	
4-Bromofluorobenzene (S)	%			98	61-130	
Dibromofluoromethane (S)	%			97	67-130	
Toluene-d8 (S)	%			92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1646005 1646006

Parameter	Units	40164237002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.00050 mg/L	50	50	52.1	48.8	104	98	70-134	7	20	
1,1,2-Trichloroethane	ug/L	<0.00020 mg/L	50	50	50.3	51.2	101	102	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.00024 mg/L	50	50	49.5	49.0	99	98	71-133	1	20	
1,1-Dichloroethene	ug/L	<0.00041 mg/L	50	50	49.2	47.9	98	96	75-136	3	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	39.8	43.1	80	86	63-123	8	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	50.0	51.9	100	104	70-130	4	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	49.3	50.5	99	101	70-130	3	20	
1,2-Dichloroethane	ug/L	<0.00017 mg/L	50	50	44.8	45.1	90	90	70-131	1	20	
1,2-Dichloropropane	ug/L	<0.00023 mg/L	50	50	52.6	57.4	105	115	80-120	9	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	49.6	48.7	99	97	70-130	2	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	51.7	51.4	103	103	70-130	1	20	
Benzene	ug/L	<0.00050 mg/L	50	50	51.4	48.7	103	97	73-145	5	20	
Bromodichloromethane	ug/L	<0.00050 mg/L	50	50	49.7	56.4	99	113	70-130	13	20	
Bromoform	ug/L	<0.00050 mg/L	50	50	48.7	47.6	97	95	67-130	2	20	
Bromomethane	ug/L	<0.0024 mg/L	50	50	37.3	37.0	75	74	26-129	1	20	
Carbon disulfide	ug/L	<0.00061 mg/L	50	50	56.2	52.2	112	104	72-156	7	30	
Carbon tetrachloride	ug/L	<0.00050 mg/L	50	50	55.7	52.2	111	104	70-134	6	20	
Chlorobenzene	ug/L	<0.00050 mg/L	50	50	54.2	52.1	108	104	70-130	4	20	
Chloroethane	ug/L	<0.00037 mg/L	50	50	45.1	41.0	90	82	58-120	10	20	
Chloroform	ug/L	<0.0025 mg/L	50	50	49.2	47.0	98	94	80-121	5	20	
Chloromethane	ug/L	<0.00050 mg/L	50	50	40.4	39.3	81	79	40-128	3	20	

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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 P-429SS FEB 2019
Pace Project No.: 40164262

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1646005 1646006

Parameter	Units	40164237002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
cis-1,2-Dichloroethene	ug/L	<0.00026 mg/L	50	50	50.7	48.5	101	97	70-130	4	20	
cis-1,3-Dichloropropene	ug/L	<0.00050 mg/L	50	50	44.6	51.7	89	103	70-130	15	20	
Dibromochloromethane	ug/L	<0.00050 mg/L	50	50	49.5	48.4	99	97	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	39.1	38.3	78	77	20-146	2	20	
Ethylbenzene	ug/L	<0.00050 mg/L	50	50	52.2	51.5	104	103	87-129	1	20	
m&p-Xylene	ug/L	<1.0	100	100	109	106	109	106	70-130	3	20	
Methyl-tert-butyl ether	ug/L	<0.00017 mg/L	50	50	43.0	42.4	86	85	66-143	1	20	
Methylene Chloride	ug/L	<0.00023 mg/L	50	50	48.8	45.8	98	92	70-130	6	20	
o-Xylene	ug/L	<0.50	50	50	53.7	53.2	107	106	70-130	1	20	
Styrene	ug/L	<0.00050 mg/L	50	50	55.5	52.7	111	105	70-130	5	20	
Tetrachloroethene	ug/L	<0.00050 mg/L	50	50	50.0	49.6	100	99	70-130	1	20	
Toluene	ug/L	<0.00050 mg/L	50	50	52.4	52.2	105	104	82-131	0	20	
trans-1,2-Dichloroethene	ug/L	<0.00026 mg/L	50	50	51.6	50.0	103	100	75-135	3	20	
trans-1,3-Dichloropropene	ug/L	<0.00023 mg/L	50	50	44.8	43.0	90	86	70-130	4	20	
Trichloroethene	ug/L	<0.00033 mg/L	50	50	52.5	57.3	105	115	70-130	9	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	46.3	44.3	93	89	76-150	5	20	
Vinyl chloride	ug/L	<0.00018 mg/L	50	50	46.7	44.3	93	89	56-143	5	20	
4-Bromofluorobenzene (S)	%						101	98	61-130			
Dibromofluoromethane (S)	%						96	92	67-130			
Toluene-d8 (S)	%						95	93	70-130			

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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 P-429SS FEB 2019
Pace Project No.: 40164262

QC Batch: 280703 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40164262001

METHOD BLANK: 1646306 Matrix: Water
Associated Lab Samples: 40164262001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.50	2.0	02/07/18 10:30	

LABORATORY CONTROL SAMPLE: 1646307

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: 1646308 1646309

Parameter	Units	40164262001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.3J	20	20	21.9	21.7	103	102	90-110	1	15	

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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 P-429SS FEB 2019
Pace Project No.: 40164262

QC Batch: 281278 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved
Associated Lab Samples: 40164262001

METHOD BLANK: 1648804 Matrix: Water
Associated Lab Samples: 40164262001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	9.7J	23.5	02/15/18 14:19	

LABORATORY CONTROL SAMPLE: 1648805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3, Dissolved	mg/L	100	106	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1648806 1648807

Parameter	Units	40164262001 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, Dissolved	mg/L	318	200	200	513	506	97	94	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LGRL P-429SS FEB 2019
Pace Project No.: 40164262

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40164262001	**P-429SS**	EPA 6010	280593		
40164262001	**P-429SS**	EPA 8260	280478		
40164262002	**TRIP BLANK**	EPA 8260	280478		
40164262001	**P-429SS**				
40164262001	**P-429SS**	EPA 300.0	280703		
40164262001	**P-429SS**	EPA 310.2	281278		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

401642692

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

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
ADS Glacier Ridge	Report To: Same	Attention: Same
N7296 Hwy V	Copy To: Frank Perugini - ESC, ESC Staff, Sherren Clark - SCS Eng	Company Name:
Horicon, WI 53032		Address:
Email To: Kari Rabideau - ADS	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: LGRL Investigation Wells	Pace Project Manager: Cindy Varga
Requested Due Date/TAT:	Project Number:	Pace Profile #: 4172 line 29

REGULATORY AGENCY

__ NPDES _X_ GROUND WATER __ DRINKING WATER

__ UST __ RCRA OTHER_____

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

Section D Required Client Information

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 One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE	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: Nitric	Preservatives: HCL	Preservatives: Unpreserved	Filtered (Y/N)	Requested Analysis: 8260 NR 507 VOCs	Requested Analysis: diss chloride, alkalinity	Requested Analysis: diss 6010 - hard	Requested Analysis: Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
						2018							N	Y	Y			
1	P-429 DSS@ 001	GW	G			2/1	1200	12.5	5	1	3	1		X	X	X		
2	Trip Blank 002	—	—			—	—	—	2		2			X				
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments:

@ Revised per client. 2/12/18 cm

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
ESC	2/1/18	1700			
ESC	2/2/18	0840		2/2/18	0840

SAMPLE CONDITIONS

	Y/N	Y/N	Y/N	
KOI	N	Y	Y	
	Y/N	Y/N	Y/N	
	Y/N	Y/N	Y/N	
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Scott Premark

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 2/1/18

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

Client Name: ADS Glacier Ridge

Sample Preservation Receipt Form

Project # 40116426 02

All containers needing preservation have been checked and noted below: ☒Yes ☐No ☐N/A Lab Std #ID of preservation (if pH adjusted):

Initial when completed: 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	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001											1		1					3													X		2.5 / 5 / 10
002																		2															2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
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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

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	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 31Jan2018
	Document No.: **F-GB-C-031-rev.06**	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: ADS Glacier Ridge

Project #:

WO# : 40164262

40164262

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

Tracking #: 163884-2

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 - N/A **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RoI /Corr:

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

Person examining contents:
Date: 2/2/18
Initials: SSR

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume: ☐Yes ☒No ☐N/A MS/MSD	☐Yes ☒No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☒Yes ☐No ☐N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☒Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 394		

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

Person Contacted: Brenda Date/Time: 2/12/18

Comments/ Resolution:

Client ID should be P-429 SS instead of P-429D. COC updated accordingly. 2/12/18 cm

Project Manager Review: CM **Date:** 2/2/18