Field Environmental
consulting

8612 Eagle Creek Parkway, Savage, MN 55378-1284
Tel: 952 746-5880 ◆ Fax: 952 746-5882
mailbox@FieldConsultingInc.com

November 24, 2020

ISD #831
6100 North 210th Street
Forest Lake, MN 55025
Attn: Bill Schwartz

RE: Final Report – First Draw Lead in Drinking Water Sampling
SITES: Maintenance Building, Transportation Facility, Forest Lake Sports Center

PROJECT #: **20101**

I. INTRODUCTION

This report presents the results of testing for lead in drinking water using first draw sampling following the Minnesota Department of Health (MDH) guide "Reducing Lead in Drinking Water: A Technical Guidance and Model Plan for Minnesota's Public Schools (Revision April 2018)." Following MDH guidance, Field Environmental Consulting, Inc. (FIELD ENVIRONMENTAL) tested water outlets in November 2020 using *high* and *medium* priority sampling strategies at the Maintenance Building, Transportation Facility and Sports Center.

II. DISCUSSION

Lead is a toxic metal that is harmful to human health when it is ingested or inhaled. Unlike other environmental contaminates, lead is stored in bones and can be released over time into the bloodstream. Lead exposure is a serious health concern, especially for young children and infants. Children's bodies absorb more of the lead they are exposed to than adults. Exposure to high levels of lead in children and infants may result in developmental delays, lower IQ's, hearing loss, hyperactivity, and learning disabilities. Children under the age of six are the most at risk population. Damage from lead exposure in children is permanent. Fortunately, the impacts of lead exposure can be minimized with good nutrition, a stimulating education, and a supportive environment.

High blood lead levels in adults have been linked to increased blood pressure, poor muscle coordination, nerve damage, decreased fertility, and hearing and vision impairment. Pregnant women and their fetuses are especially vulnerable to lead exposure since lead can significantly harm the fetus, causing lower birth weight and slowing normal mental and physical developments.

The only way to determine how much lead may be present in drinking water is to have the water tested. Per Minnesota Statute, Section 121A.335, *Lead in School Drinking Water*, schools are required to test each tap used for drinking or food preparation at least once every five years.

III. METHODOLOGY

FIELD ENVIRONMENTAL collected first draw samples. First draw samples are collected prior to the fixture being used or flushed for the day when water has sat undisturbed in the plumbing system for at least six (6) hours; not exceeding eighteen (18) hours. Water was collected immediately in the morning before it could be used for other purposes. First draw samples were collected using sterile 250 milliliter (mL) sampling bottles with a nitric acid (HNO_3) preservative. The bottles were filled to the top, capped, recorded, and transported to a certified drinking water laboratory. Results from first draw sampling indicate lead levels for water that has been in direct contact with the tap or fixture and the section of

plumbing closest to the outlet. Analysis was conducted by Pace Analytical Services, Inc. of Minneapolis, Minnesota using EPA Method 200.8 ICPMS for determination of lead in drinking water. Pace Analytical Services, Inc. provided results in micrograms/liter (µg/L) which is also commonly expressed as parts per billion (ppb).

IV. RESULTS

Given that lead is still found in many environments and products, it is important to recognize that attaining zero exposure to lead in drinking water may not be reasonable, or even possible. However, MDH strongly recommends that schools take remedial action if samples from drinking water produce lead levels greater than 20 ppb (or 20 µg/L, micrograms per liter). This is commonly referred to as the Action Level.

A complete table of all sample locations and corresponding results is provided in Appendix A. Building maps indicating sampling locations and color-coded results are provided in Appendix B. Pace Analytical laboratory reports are provided in Appendix C.

Maintenance Building:

None of the three (3) samples collected in the Maintenance Building were above the recommended limit of 20 ppb.

Site Name: **Maintenance Building**
Date: **11/6/2020**

Floor	Location	Sample ID	Type DF = Drinking Fountain SNK = Sink WC = Water Cooler BF = Bottle Filler K=Kettle	Lead Result (ppb)
First	Kitchen	1	SNK	1.1
First	Hall	2	WC	0.81
First	Kitchen	3	WC	ND

ND=none detected

Transportation Facility:

None of the seven (7) samples collected in the Maintenance Building were above the recommended limit of 20 ppb.

Site Name: **Transportation Facility**
Dates: **11/6/2020**

Floor	Location	Sample ID	Type DF = Drinking Fountain SNK = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Bunn = Coffee Maker	Lead Result (ppb)
First	Kitchen	1	WC	ND
First	Kitchen	2	SNK	0.36
First	Kitchen	3	Bunn	6.7
First	Hall	4	WC	ND
First	Hall	5	BF	ND
First	Hall	6	WC	ND
First	Garage	7	SNK	1

ND=none detected

Sports Center:

None of the twelve (12) samples collected at the Forest Lake Sports Center were above the recommended limit of 20 ppb.

Site Name: **Sports Center** Dates: **11/13/2020**				
Floor	**Location**	**Sample ID**	**Type** **DF = Drinking Fountain** **SNK = Sink** **WC = Water Cooler** **BF = Bottle Filler** **K=Kettle**	**Lead Result (ppb)**
First	North Hallway	1	WC	ND
First	North Hallway	2	WC	ND
First	North Hallway	3	BF	ND
First	South Hallway	4	WC	ND
First	South Hallway	5	WC	ND
First	South Hallway	6	BF	ND
Second	Concession	7	SNK	2.5
Second	North Hallway	8	WC	0.41
Second	North Hallway	9	WC	0.61
Second	Concession	10	SNK	1.5
Second	South Hallway	11	WC	0.16
Second	South Hallway	12	WC	0.20

ND=none detected

V. RECOMMENDATIONS

As stated in the MDH guidance, priority action should be taken to reduce exposure to lead for those water outlets above the action level. However, all collected samples were below the action level and require no remedial efforts.

Water from other fixtures such as bathroom taps, hose bibs, or custodial closet sinks (*low priority* outlets) which are not normally deigned for human consumption should be clearly marked as such, otherwise, the District should consider testing for lead concentration for those additional taps/fixtures. FIELD ENVIRONMENTAL provided labels for labeling those fixtures.

Minnesota Statutes section 121A.335, subdivision 5 requires a school district to "make the results of testing available to the public for review and must notify parents of the availability of the information." ISD #831 is required to communicate lead in drinking water results. School employees, students, and parents shall be informed of the results within a reasonable time. Results of first draw sampling and any follow-up testing should be easily accessible along with documentation of lead hazard reduction options.

VI. REMARKS

The environmental services performed by FIELD ENVIRONMENTAL's technicians, analysts and project managers for this project have been conducted in a manner consistent with the degree of care and technical skill exercised by environmental professionals currently practicing in this area under similar budget and time constraints. Recommendations contained in this report represent our professional judgment at the time the project was performed.

No warranty or guarantee, expressed or implied, is made regarding the findings, conclusions, or recommendations contained in this report.

FIELD ENVIRONMENTAL appreciates the opportunity to provide services to meet your environmental needs.

Any questions regarding the fieldwork, sample results or presented findings should be directed to Field Environmental Consulting, Inc.

PREPARED and REVIEWED BY:

Field Environmental Consulting, Inc.

Amy Murray, CSP (#27824)
EHS Manager
Amy@fieldconsultinginc.com

Parker Prose
Safety & IAQ Specialist
ParkerP@fieldconsultinginc.com

Attachments
Appendix A: Locations and Results Tables
Appendix B: Drawings
Appendix C: Laboratory Reports

APPENDIX A

LOCATIONS AND RESULTS TABLES

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Site Name: Maintenance Building
Dates: 11/6/2020

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain SNK = Sink WC = Water Cooler BF = Bottle Filler	Lead Result (ppb)
First	-	Kitchen	1	SNK	1.1
First	-	Hall	2	WC	0.81
First	-	Kitchen	3	WC	ND

ND = None Detected

Site Name: Sports Center
Date: 11/13/2020

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain SNK = Sink WC = Water Cooler BF = Bottle Filler	Lead Result (ppb)
First	-	North Hallway	1	WC	ND
First	-	North Hallway	2	WC	ND
First	-	North Hallway	3	BF	ND
First	-	South Hallway	4	WC	ND
First	-	South Hallway	5	WC	ND
First	-	South Hallway	6	BF	ND
Second	-	Concession	7	SNK	2.5
Second	-	North Hallway	8	WC	0.41
Second	-	North Hallway	9	WC	0.61
Second	-	Concession	10	SNK	1.5
Second	-	South Hallway	11	WC	0.16
Second	-	South Hallway	12	WC	0.2

ND = None Detected

Site Name: Transportation Facility
Date: 11/6/2020

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain SNK = Sink WC = Water Cooler BF = Bottle Filler Bunn = Coffee Maker	Lead Result (ppb)
First	-	Kitchen	1	WC	ND
First	-	Kitchen	2	SNK	0.36
First	-	Kitchen	3	Bunn	6.7
First	-	Hall	4	WC	ND
First	-	Hall	5	BF	ND
First	-	Hall	6	WC	ND
First	-	Garage	7	SNK	1

ND = None Detected

Field Environmental consulting

APPENDIX B

Drawings

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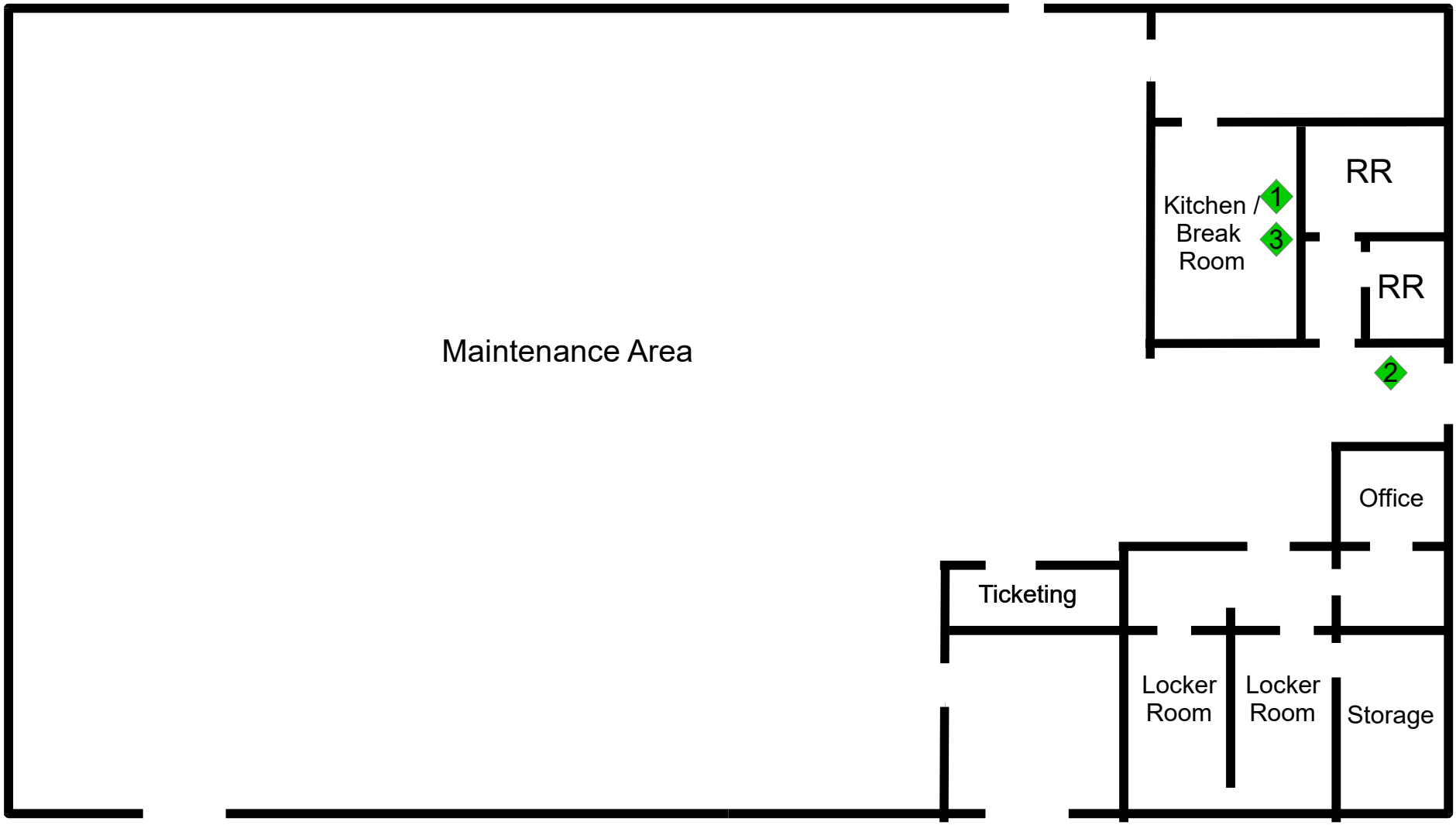
Maintenance Garage
Lead in Drinking Water
Project # 20101

First Draw Sampling (November 2020)

- Lead < 2 ppb
- 2 ppb <= Lead <= 20 ppb
- Lead > 20 ppb

Field Environmental consulting

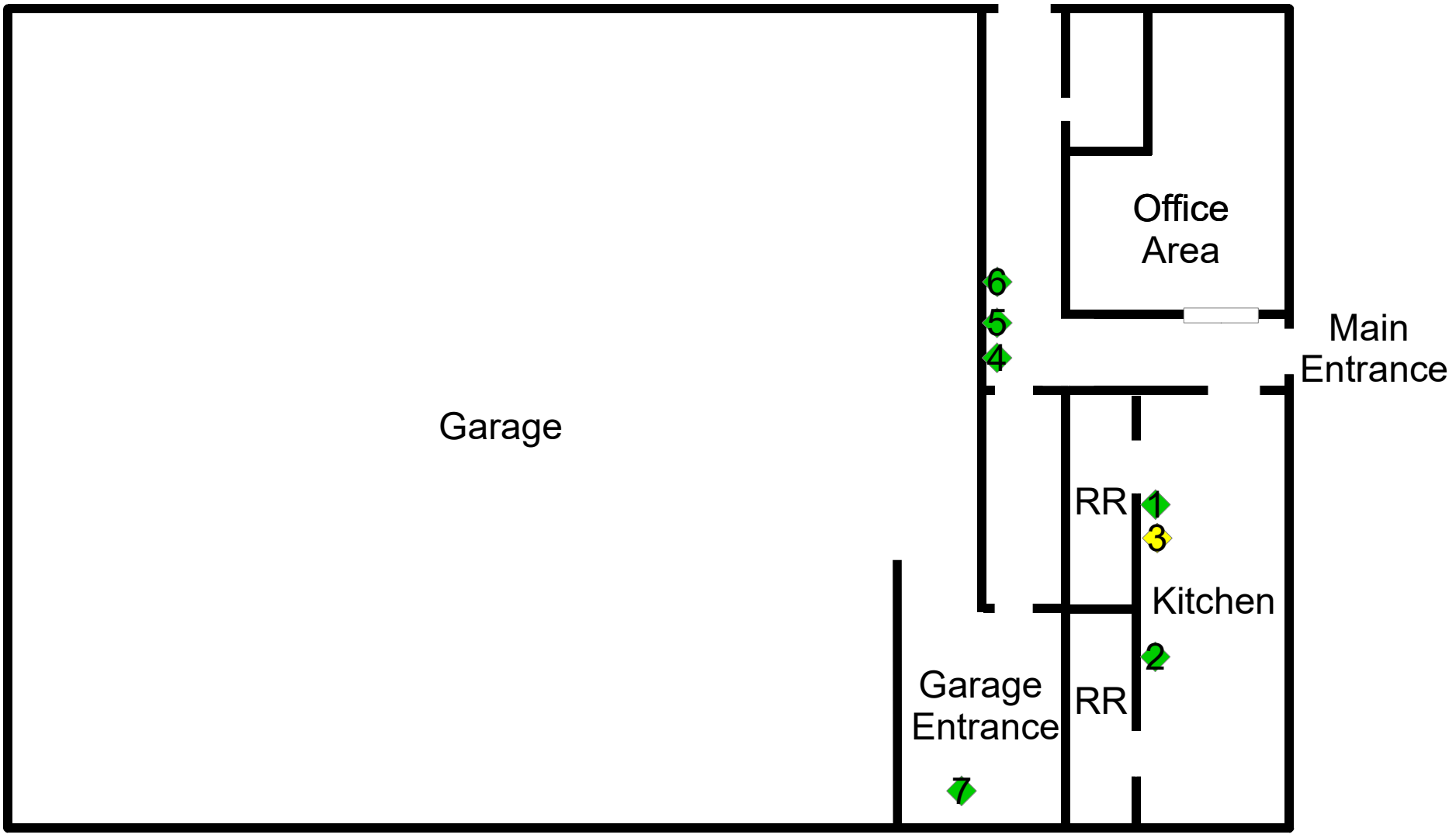


Transportation Facility
Lead in Drinking Water
Project # 20101

First Draw Sampling (November 2020)

- Lead < 2 ppb
- 2 ppb <= Lead <= 20 ppb
- Lead > 20 ppb

Field Environmental consulting

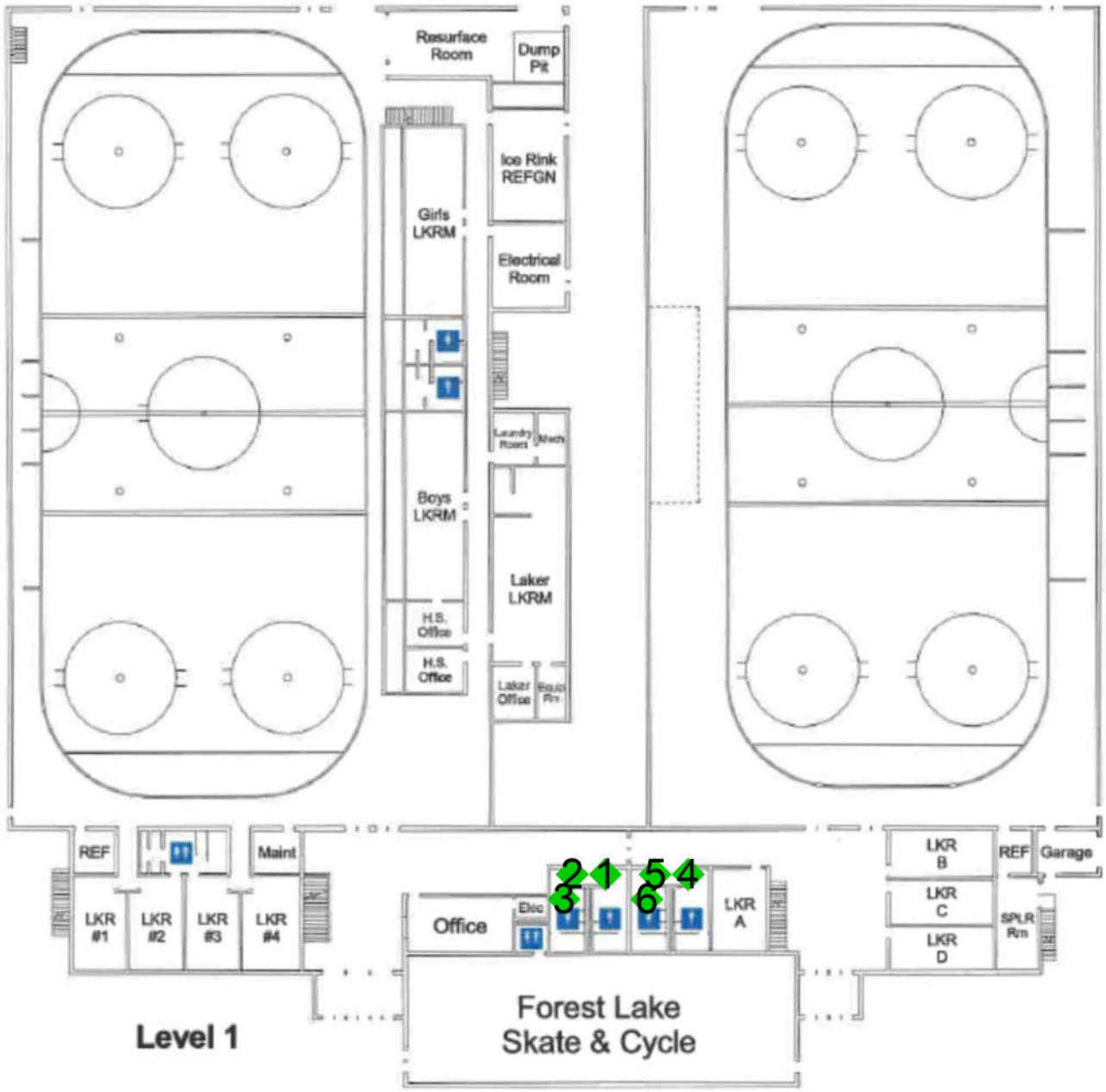


Sports Center
Lead in Drinking Water
Project # 20101

Field Environmental consulting

First Draw Sampling (November 2020)

- Lead < 2 ppb
- 2 ppb <= Lead <= 20 ppb
- Lead > 20 ppb

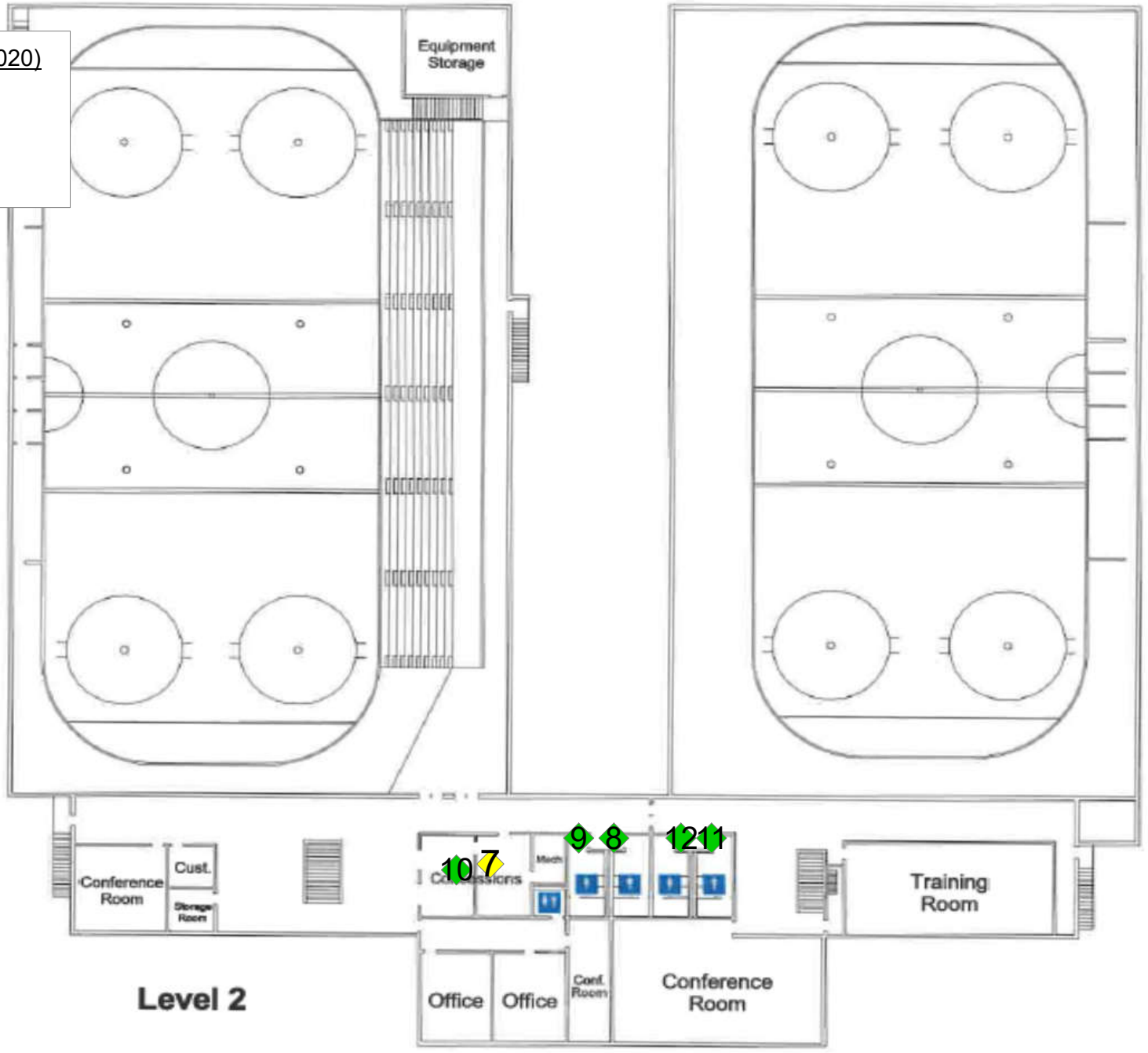


Sports Center
Lead in Drinking Water
Project # 20101

Field Environmental consulting

First Draw Sampling (November 2020)

- Lead < 2 ppb
- 2 ppb <= Lead <= 20 ppb
- Lead > 20 ppb



APPENDIX C

LABORATORY REPORTS

Field Environmental consulting

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 16, 2020

Amy Weinzierl
Field Environmental Consulting
8612 Eagle Creek Parkway
Savage, MN 55378

RE: Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

Dear Amy Weinzierl:

Enclosed are the analytical results for sample(s) received by the laboratory on November 06, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Minneapolis

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

Sincerely,

Jared Dickinson
jared.dickinson@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Steve Field, Field Environmental Consulting
General Mailbox, Field Environmental Consulting

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

Pace Analytical Services - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
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Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10538385001	**01-MAINT-KITCHEN-SNK**	Drinking Water	11/06/20 05:30	11/06/20 11:07
10538385002	**02-MAINT-HALL-WC**	Drinking Water	11/06/20 05:30	11/06/20 11:07
10538385003	**03-MAINT-KITCHEN-WC**	Drinking Water	11/06/20 05:30	11/06/20 11:07

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SAMPLE ANALYTE COUNT

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10538385001	**01-MAINT-KITCHEN-SNK**	EPA 200.8	PW1	1
10538385002	**02-MAINT-HALL-WC**	EPA 200.8	PW1	1
10538385003	**03-MAINT-KITCHEN-WC**	EPA 200.8	PW1	1

PASI-M = Pace Analytical Services - Minneapolis

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

Sample: 01-MAINT-KITCHEN-SNK **Lab ID: 10538385001** Collected: 11/06/20 05:30 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**1.1**	ug/L	0.10	1		11/16/20 12:54	7439-92-1	

Sample: 02-MAINT-HALL-WC **Lab ID: 10538385002** Collected: 11/06/20 05:30 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**0.81**	ug/L	0.10	1		11/16/20 12:57	7439-92-1	

Sample: 03-MAINT-KITCHEN-WC **Lab ID: 10538385003** Collected: 11/06/20 05:30 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/16/20 12:59	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

QC Batch: 709940
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: ICPMS Metals, Drinking Water
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10538385001, 10538385002, 10538385003

METHOD BLANK: 3792232 Matrix: Water
Associated Lab Samples: 10538385001, 10538385002, 10538385003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	11/16/20 12:22	

LABORATORY CONTROL SAMPLE: 3792233

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	105	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3797994 3797995

Parameter	Units	10538349021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	0.43	100	100	102	104	102	103	70-130	1	20	

MATRIX SPIKE SAMPLE: 3797996

Parameter	Units	10538385003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	100	107	107	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538385

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10538385001	**01-MAINT-KITCHEN-SNK**	EPA 200.8	709940		
10538385002	**02-MAINT-HALL-WC**	EPA 200.8	709940		
10538385003	**03-MAINT-KITCHEN-WC**	EPA 200.8	709940		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

WO#: 10538385

10538385

Company: FIELD ENVIRONMENTAL CONSULTING

Billing Information:

Address: 8612 EAGLE CREEK PKWY, SAVAGE, MN 55378

Report To: AMY MURRAY

Email To:

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: 20101 - FOREST LAKE LIW

State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone:
Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): PARKER PROSE

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature): [signature]

Turnaround Date Required:

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal:
[ ] Dispose as appropriate [ ] Return
[ ] Archive: ____________
[ ] Hold: ____________

Rush:
[ ] Same Day [ ] Next Day
[ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day
(Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: ____________

** Preservative Types: (1) ... acetate, (6) methanol, (7) sodium ... ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____________

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: LEAD 200.8	Lab Sample # / Comments
01-MAINT-Kitchen-SNK	DW	Grab	11/6/20	5:30AM					1	001
02-MAINT-HALL-WC	↓	↓	↓	↓					↓	002
03-MAINT-Kitchen-WC	↓	↓	↓	↓					↓	003

Lab Profile/Line:

Lab Sample Receipt Checklist:

- Custody Seals Present/Intact Y N NA
- Custody Signatures Present Y N NA
- Collector Signature Present Y N NA
- Bottles Intact Y N NA
- Correct Bottles Y N NA
- Sufficient Volume Y N NA
- Samples Received on Ice Y N NA
- VOA - Headspace Acceptable Y N NA
- USDA Regulated Soils Y N NA
- Samples in Holding Time Y N NA
- Residual Chlorine Present Y N NA
- Cl Strips: ____________
- Sample pH Acceptable Y N NA
- pH Strips: ____________
- Sulfide Present Y N NA
- Lead Acetate Strips: ____________

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2556971

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: ____________
Cooler 1 Temp Upon Receipt: ____oC
Cooler 1 Therm Corr. Factor: ____oC
Cooler 1 Corrected Temp: 10.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY
PARKER W. [signature]	11/6/20 11:00 AM	[signature] PACE	11/6/20 1107	Table #:
				Acctnum:
				Template:
				Prelogin:
				PM:
				PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 1

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 12Aug2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.01**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: Field Environmental Consulting

Project #: **WO#: 10538385**

PM: JDD Due Date: 11/20/20
CLIENT: FIELD ENV

Courier: ☐Fed Ex ☐UPS ☐USPS ☒Client ☐Pace ☐SpeeDee ☐Commercial

Tracking Number: _____ See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐Yes ☒No **Seals Intact?** ☐Yes ☒No **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

Packing Material: ☐Bubble Wrap ☐Bubble Bags ☒None ☐Other:_____ **Temp Blank?** ☐Yes ☒No

Thermometer: ☐T1(0461) ☐T2(1336) ☐T3(0459) ☐T4(0254) ☒T5(0489) **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

Did Samples Originate in West Virginia? ☐Yes ☒No **Were All Container Temps Taken?** ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:**_____ °C **Average Corrected Temp (no temp blank only):** 16.0 °C ☒See Exceptions ENV-FRM-MIN4-0142 ☐1 Container

Correction Factor: +0.1 **Cooler Temp Corrected w/temp blank:**_____ °C

USDA Regulated Soil: (☒ N/A, water sample/Other:_____)
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Date/Initials of Person Examining Contents: MV2 11-6-20
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒Yes	☐No		1.
Chain of Custody Relinquished?	☒Yes	☐No		2.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	3.
Samples Arrived within Hold Time?	☒Yes	☐No		4.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No		5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other_____
Rush Turn Around Time Requested?	☐Yes	☒No		6.
Sufficient Volume?	☒Yes	☐No		7.
Correct Containers Used?	☒Yes	☐No		8.
-Pace Containers Used?	☒Yes	☐No		
Containers Intact?	☒Yes	☐No		9.
Field Filtered Volume Received for Dissolved Tests?	☐Yes	☐No	☒N/A	10. Is sediment visible in the dissolved container? ☐Yes ☐No
Is sufficient information available to reconcile the samples to the COC?	☒Yes	☐No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ **ENV-FRM-MIN4-0142**
Matrix: ☒Water ☐Soil ☐Oil ☐Other_____				
All containers needing acid/base preservation have been checked?	☒Yes	☐No	☐N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☒Yes	☐No	☐N/A	☐NaOH ☒HNO_3 1-2 1 ☐H_2SO_4 ☐Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐Yes	☐No	☒N/A	Positive for Res. Chlorine? ☐Yes ☐No **pH Paper Lot#** **See Exception** ☐ **ENV-FRM-MIN4-0142**
				Res. Chlorine: 0-6 Roll 221419 / 0-6 Strip / 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐Yes	☐No	☒N/A	13. **See Exception** ☐ **ENV-FRM-MIN4-0140**
Headspace in VOA Vials (greater than 6mm)?	☐Yes	☐No	☒N/A	
Trip Blank Present?	☐Yes	☐No	☒N/A	14.
Trip Blank Custody Seals Present?	☐Yes	☐No	☒N/A	Pace Trip Blank Lot # (if purchased):_____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted:_____ Date/Time:_____

Comments/Resolution:_____

Project Manager Review: _____ **Date:** 11/9/20

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: MV2

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) Exception Form**	Document Revised: 04Jun2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0142 Rev.01**	Pace Analytical Services - **Minneapolis**

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp
15.9	16.0	16.0
14.2	14.3	
16.1	16.2	
17.7	17.8	

Tracking Number/Temperature	

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 16, 2020

Amy Weinzierl
Field Environmental Consulting
8612 Eagle Creek Parkway
Savage, MN 55378

RE: Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Dear Amy Weinzierl:

Enclosed are the analytical results for sample(s) received by the laboratory on November 06, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Minneapolis

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

Sincerely,

Jared Dickinson
jared.dickinson@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Steve Field, Field Environmental Consulting
General Mailbox, Field Environmental Consulting

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Pace Analytical Services - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10538384001	**01-TRANSPORTATION-KITCHEN-WC**	Drinking Water	11/06/20 05:00	11/06/20 11:07
10538384002	**02-TRANSPORTATION-KITCHEN-SNK**	Drinking Water	11/06/20 05:00	11/06/20 11:07
10538384003	**03-TRANSPORTATION-KITCHEN-BUNN**	Drinking Water	11/06/20 05:00	11/06/20 11:07
10538384004	**04-TRANSPORTATION-HALL-WC**	Drinking Water	11/06/20 05:00	11/06/20 11:07
10538384005	**05-TRANSPORTATION-HALL-BF**	Drinking Water	11/06/20 05:00	11/06/20 11:07
10538384006	**06-TRANSPORTATION-HALL-RWC**	Drinking Water	11/06/20 05:00	11/06/20 11:07
10538384007	**07-TRANSPORTATION-GARAGE-SNK**	Drinking Water	11/06/20 05:00	11/06/20 11:07

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SAMPLE ANALYTE COUNT

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10538384001	**01-TRANSPORTATION-KITCHEN-WC**	EPA 200.8	PW1	1
10538384002	**02-TRANSPORTATION-KITCHEN-SNK**	EPA 200.8	PW1	1
10538384003	**03-TRANSPORTATION-KITCHEN-BUNN**	EPA 200.8	PW1	1
10538384004	**04-TRANSPORTATION-HALL-WC**	EPA 200.8	PW1	1
10538384005	**05-TRANSPORTATION-HALL-BF**	EPA 200.8	PW1	1
10538384006	**06-TRANSPORTATION-HALL-RWC**	EPA 200.8	PW1	1
10538384007	**07-TRANSPORTATION-GARAGE-SNK**	EPA 200.8	PW1	1

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Sample: 01-TRANSPORTATION-KITCHEN-WC **Lab ID: 10538384001** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/16/20 12:35	7439-92-1	

Sample: 02-TRANSPORTATION-KITCHEN-SNK **Lab ID: 10538384002** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**0.36**	ug/L	0.10	1		11/16/20 12:37	7439-92-1	

Sample: 03-TRANSPORTATION-KITCHEN-BUNN **Lab ID: 10538384003** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**6.7**	ug/L	0.10	1		11/16/20 12:44	7439-92-1	

Sample: 04-TRANSPORTATION-HALL-WC **Lab ID: 10538384004** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/16/20 12:46	7439-92-1	

Sample: 05-TRANSPORTATION-HALL-BF **Lab ID: 10538384005** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/16/20 12:48	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Sample: 06-TRANSPORTATION-HALL-RWC **Lab ID: 10538384006** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/16/20 12:50	7439-92-1	

Sample: 07-TRANSPORTATION-GARAGE-SNK **Lab ID: 10538384007** Collected: 11/06/20 05:00 Received: 11/06/20 11:07 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**1.0**	ug/L	0.10	1		11/16/20 12:52	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

QC Batch: 709940 | Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 | Analysis Description: ICPMS Metals, Drinking Water
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10538384001, 10538384002, 10538384003, 10538384004, 10538384005, 10538384006, 10538384007

METHOD BLANK: 3792232 Matrix: Water
Associated Lab Samples: 10538384001, 10538384002, 10538384003, 10538384004, 10538384005, 10538384006, 10538384007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	11/16/20 12:22	

LABORATORY CONTROL SAMPLE: 3792233

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	105	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3797994 3797995

Parameter	Units	10538349021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	0.43	100	100	102	104	102	103	70-130	1	20	

MATRIX SPIKE SAMPLE: 3797996

Parameter	Units	10538385003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	100	107	107	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20101 - Forest Lake LIW
Pace Project No.: 10538384

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10538384001	**01-TRANSPORTATION-KITCHEN-WC**	EPA 200.8	709940		
10538384002	**02-TRANSPORTATION-KITCHEN-SNK**	EPA 200.8	709940		
10538384003	**03-TRANSPORTATION-KITCHEN-BUNN**	EPA 200.8	709940		
10538384004	**04-TRANSPORTATION-HALL-WC**	EPA 200.8	709940		
10538384005	**05-TRANSPORTATION-HALL-BF**	EPA 200.8	709940		
10538384006	**06-TRANSPORTATION-HALL-RWC**	EPA 200.8	709940		
10538384007	**07-TRANSPORTATION-GARAGE-SNK**	EPA 200.8	709940		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or

WO# : 10538384

10538384

Company: Field Environmental Consulting	Billing Information:
Address: 8612 Eagle Creek Pkwy, Savage MN 55378	
Report To: Amy Murray	Email To: MAILBOX@FIELDCONSULTINGINC.COM
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 20101 - Forest Lake LIW	State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Darcer Prose	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses	Lab Profile/Line:
01-TRANSPORTATION-Kitchen-WC	DW	GRAB	11/6/20	5:00AM					X LEAD 200.8	001
02-TRANSPORTATION-Kitchen-SINK										002
03-TRANSPORTATION-Kitchen-BATH										003
04-TRANSPORTATION-HALL WC										004
05-TRANSPORTATION-HALL-BF										005
06-TRANSPORTATION-HALL BWC										006
07-TRANSPORTATION-GARAGE-SINK										007

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2556970

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: oC
Cooler 1 Therm Corr. Factor: oC
Cooler 1 Corrected Temp: 16.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	11/6/20 11:00AM		11/6/20 1107
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: of:

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 12Aug2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.01**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: Field Environmental Consulting

Project #: WO#: 10538384

PM: JDD Due Date: 11/20/20

CLIENT: FIELD ENV

Courier: ☐Fed Ex ☐UPS ☐USPS ☒Client ☐Pace ☐SpeeDee ☐Commercial

Tracking Number: _____ See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐Yes ☒No **Seals Intact?** ☐Yes ☒No **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

Packing Material: ☐Bubble Wrap ☐Bubble Bags ☒None ☐Other:_____ **Temp Blank?** ☐Yes ☒No

Thermometer: ☐T1(0461) ☐T2(1336) ☐T3(0459) ☐T4(0254) ☒T5(0489) **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

Did Samples Originate in West Virginia? ☐Yes ☒No **Were All Container Temps Taken?** ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** _____ °C **Average Corrected Temp (no temp blank only):** 16.0 °C ☒See Exceptions ENV-FRM-MIN4-0142 ☐1 Container

Correction Factor: +0.1 **Cooler Temp Corrected w/temp blank:** _____ °C

USDA Regulated Soil: (☒ N/A, water sample/Other:_____) **Date/Initials of Person Examining Contents:** MKZ 11-6-20

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒Yes	☐No		1.
Chain of Custody Relinquished?	☒Yes	☐No		2.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	3.
Samples Arrived within Hold Time?	☒Yes	☐No		4.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No		5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other_____
Rush Turn Around Time Requested?	☐Yes	☒No		6.
Sufficient Volume?	☒Yes	☐No		7.
Correct Containers Used?	☒Yes	☐No		8.
-Pace Containers Used?	☒Yes	☐No		
Containers Intact?	☒Yes	☐No		9.
Field Filtered Volume Received for Dissolved Tests?	☐Yes	☐No	☒N/A	10. Is sediment visible in the dissolved container? ☐Yes ☐No
Is sufficient information available to reconcile the samples to the COC?	☒Yes	☐No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ **ENV-FRM-MIN4-0142**
Matrix: ☒Water ☐Soil ☐Oil ☐Other_____				
All containers needing acid/base preservation have been checked?	☒Yes	☐No	☐N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☒Yes	☐No	☐N/A AZ	☐ NaOH ☒ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate 1-7 1/1
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐Yes	☐No	☒N/A	Positive for Res. Chlorine? ☐Yes ☐No **pH Paper Lot#** **See Exception** ☐ **ENV-FRM-MIN4-0142**
				Res. Chlorine: 0-6 Roll 221419 / 0-6 Strip / 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐Yes	☐No	☒N/A	13. **See Exception** ☐ **ENV-FRM-MIN4-0140**
Headspace in VOA Vials (greater than 6mm)?	☐Yes	☐No	☒N/A	
Trip Blank Present?	☐Yes	☐No	☒N/A	14.
Trip Blank Custody Seals Present?	☐Yes	☐No	☒N/A	Pace Trip Blank Lot # (if purchased):_____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** 11/9/20

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: MKZ

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) Exception Form**	Document Revised: 04Jun2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0142 Rev.01**	Pace Analytical Services - **Minneapolis**

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp
15.9	16.0	16.0
14.2	14.3	
16.1	16.2	
17.7	17.8	

Tracking Number/Temperature	

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 24, 2020

Amy Weinzierl
Field Environmental Consulting
8612 Eagle Creek Parkway
Savage, MN 55378

RE: Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Dear Amy Weinzierl:

Enclosed are the analytical results for sample(s) received by the laboratory on November 13, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Minneapolis

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

Sincerely,

Jared Dickinson
jared.dickinson@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Steve Field, Field Environmental Consulting
General Mailbox, Field Environmental Consulting

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Pace Analytical Services - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10539262001	**01-FLSC-1st N-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262002	**02-FLSC-1st N-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262003	**03-FLSC-1st N-BF**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262004	**04-FLSC-1st S-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262005	**05-FLSC-1st S-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262006	**06-FLSC-1st S-BF**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262007	**07-FLSC-Concessions-SNK**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262008	**08-FLSC-2nd N-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262009	**09-FLSC-2nd N-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262010	**10-FLSC-Concessions-SNK**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262011	**11-FLSC-2nd S-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15
10539262012	**12-FLSC-2nd S-WC**	Drinking Water	11/13/20 06:00	11/13/20 15:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10539262001	**01-FLSC-1st N-WC**	EPA 200.8	PW1	1
10539262002	**02-FLSC-1st N-WC**	EPA 200.8	PW1	1
10539262003	**03-FLSC-1st N-BF**	EPA 200.8	PW1	1
10539262004	**04-FLSC-1st S-WC**	EPA 200.8	PW1	1
10539262005	**05-FLSC-1st S-WC**	EPA 200.8	PW1	1
10539262006	**06-FLSC-1st S-BF**	EPA 200.8	PW1	1
10539262007	**07-FLSC-Concessions-SNK**	EPA 200.8	PW1	1
10539262008	**08-FLSC-2nd N-WC**	EPA 200.8	PW1	1
10539262009	**09-FLSC-2nd N-WC**	EPA 200.8	PW1	1
10539262010	**10-FLSC-Concessions-SNK**	EPA 200.8	PW1	1
10539262011	**11-FLSC-2nd S-WC**	EPA 200.8	PW1	1
10539262012	**12-FLSC-2nd S-WC**	EPA 200.8	PW1	1

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Sample: 01-FLSC-1st N-WC **Lab ID: 10539262001** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/23/20 12:36	7439-92-1	

Sample: 02-FLSC-1st N-WC **Lab ID: 10539262002** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/23/20 12:38	7439-92-1	

Sample: 03-FLSC-1st N-BF **Lab ID: 10539262003** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/23/20 12:41	7439-92-1	

Sample: 04-FLSC-1st S-WC **Lab ID: 10539262004** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/23/20 12:43	7439-92-1	

Sample: 05-FLSC-1st S-WC **Lab ID: 10539262005** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/23/20 12:45	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Sample: 06-FLSC-1st S-BF **Lab ID: 10539262006** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	ND	ug/L	0.10	1		11/23/20 12:48	7439-92-1	

Sample: 07-FLSC-Concessions-SNK **Lab ID: 10539262007** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**2.5**	ug/L	0.10	1		11/23/20 12:56	7439-92-1	

Sample: 08-FLSC-2nd N-WC **Lab ID: 10539262008** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**0.41**	ug/L	0.10	1		11/23/20 12:59	7439-92-1	

Sample: 09-FLSC-2nd N-WC **Lab ID: 10539262009** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**0.61**	ug/L	0.10	1		11/23/20 13:01	7439-92-1	

Sample: 10-FLSC-Concessions-SNK **Lab ID: 10539262010** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**1.5**	ug/L	0.10	1		11/23/20 13:03	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Sample: 11-FLSC-2nd S-WC **Lab ID: 10539262011** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**0.16**	ug/L	0.10	1		11/23/20 13:06	7439-92-1	

Sample: 12-FLSC-2nd S-WC **Lab ID: 10539262012** Collected: 11/13/20 06:00 Received: 11/13/20 15:15 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8 Pace Analytical Services - Minneapolis							
Lead	**0.20**	ug/L	0.10	1		11/23/20 13:08	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

QC Batch: 711181 — Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 — Analysis Description: ICPMS Metals, Drinking Water
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10539262001, 10539262002, 10539262003, 10539262004, 10539262005, 10539262006, 10539262007, 10539262008, 10539262009, 10539262010, 10539262011, 10539262012

METHOD BLANK: 3798073 — Matrix: Water
Associated Lab Samples: 10539262001, 10539262002, 10539262003, 10539262004, 10539262005, 10539262006, 10539262007, 10539262008, 10539262009, 10539262010, 10539262011, 10539262012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	11/23/20 12:10	

LABORATORY CONTROL SAMPLE: 3798074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	109	109	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3804887 3804888

Parameter	Units	10539263001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	9.5	100	100	114	118	104	108	70-130	3	20	

MATRIX SPIKE SAMPLE: 3804889

Parameter	Units	10539262006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	100	104	104	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20101- Forest Lake LIW
Pace Project No.: 10539262

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10539262001	**01-FLSC-1st N-WC**	EPA 200.8	711181		
10539262002	**02-FLSC-1st N-WC**	EPA 200.8	711181		
10539262003	**03-FLSC-1st N-BF**	EPA 200.8	711181		
10539262004	**04-FLSC-1st S-WC**	EPA 200.8	711181		
10539262005	**05-FLSC-1st S-WC**	EPA 200.8	711181		
10539262006	**06-FLSC-1st S-BF**	EPA 200.8	711181		
10539262007	**07-FLSC-Concessions-SNK**	EPA 200.8	711181		
10539262008	**08-FLSC-2nd N-WC**	EPA 200.8	711181		
10539262009	**09-FLSC-2nd N-WC**	EPA 200.8	711181		
10539262010	**10-FLSC-Concessions-SNK**	EPA 200.8	711181		
10539262011	**11-FLSC-2nd S-WC**	EPA 200.8	711181		
10539262012	**12-FLSC-2nd S-WC**	EPA 200.8	711181		

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

2265989

Section A Required Client Information:

Company:	FIELD ENVIRONMENTAL CONSULTING
Address:	8612 EAGLE CREEK PKWY
Email To:	Mailbox@FieldConsultingInc.com
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Amy Murray
Copy To:	
Purchase Order No.:	
Project Name:	
Project Number:	20601- FOREST LAKE CLW

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☒ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

WO#: 10539262

10539262

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	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: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: CLAD 200.8	Residual Chlorine	Pace Project No./ Lab I.D.
1	01- FLSC- 1st N - WC	G	DW			11/13/20	6:00PM					P						Y		001
2	02- FLSC - 1st N - WC																			002
3	03- FLSC - 1st N - BF																			003
4	04- FLSC - 1st S - WC																			004
5	05- FLSC - 1st S - WC																			005
6	06- FLSC- 1st S- DP																			006
7	07- FLSC - Concessions - SNK																			007
8	08- FLSC - 2nd N - WC																			008
9	09- FLSC - 2nd N - WC																			009
10	10- FLSC - Concessions - SNK																			010
11	11- FLSC - 2nd S - WC																			011
12	12- FLSC - 2nd S - WC					J														012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	PARKER PHOSE FEC	11/13/20	@ 3:20pm	TIM K POCE	11/13/20	15:15	14.0	N	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: PARKER PHOSE

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/13/20

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

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®	Document Name: Sample Condition Upon Receipt (SCUR) - MN	Document Revised: 12Aug2020 Page 1 of 1
	Document No.: ENV-FRM-MIN4-0150 Rev.01	Pace Analytical Services - Minneapolis

Sample Condition Upon Receipt

Client Name: Fisio Environmental

Project #:

WO#: 10539262

PM: JDD Due Date: 12/01/20

CLIENT: FIELD ENV

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: _____ See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other: _____ **Temp Blank?** ☐ Yes ☒ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☐ T3(0459) ☐ T4(0254) ☒ T5(0489) **Type of Ice:** ☐ Wet ☐ Blue ☒ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** _____ °C **Average Corrected Temp (no temp blank only):** 14.0 °C ☒ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: _____ **Cooler Temp Corrected w/temp blank:** _____ °C

USDA Regulated Soil: (☒ N/A, water sample/Other: _____) **Date/Initials of Person Examining Contents:** TMC 11.13.20

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☒ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other _____
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used? -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		8.
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. If no, write ID/ Date/Time on Container Below: ☐ See Exception ENV-FRM-MIN4-0142
Matrix: ☒ Water ☐ Soil ☐ Oil ☐ Other _____				
All containers needing acid/base preservation have been checked?	☒ Yes	☐ No	☐ N/A	12. Sample # 1-12: 1
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☒ Yes	☐ No	☐ N/A	☐ NaOH ☒ HNO_3 1 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** ☐ See Exception ENV-FRM-MIN4-0142
				Res. Chlorine: 0-6 Roll 221419 | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. ☐ See Exception ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** 11/16/20

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: TMC (2)

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp
14.1		14.0
13.9		
14.0		
14.1		

Tracking Number/Temperature	

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

Office: 337-237-7123
P.O. Box 2003
Lafayette, LA 70502

C&G Containers Scientific
"The Total Package!"

Fax: 337-237-8712
2202 I-49 N. Service Rd.
Opelousas, La. 70570

CERTIFICATE OF ANALYSIS

This "Certificate of Analysis" represents a precleaned product that has been prepared in accordance with Performance-Based specifications. This product meets or exceeds analyte specifications established in the U. S. EPA OSWER Directive 9240.0-05A "Specification and Guidance for Contaminant-free Sample Containers" for use in Superfund and other Hazardous waste programs.

Group 2 Containers for Inorganics

Analyte	RL ug/L	Analyte	RL ug/L	Analyte	RL ug/L
Aluminum	20 U	Copper	1 U	Potassium	100 U
Antimony	0.5 U	Iron	50 U	Selenium	0.5 U
Arsenic	0.5 U	Lead	0.1 U	Silicon	50 U
Barium	0.3 U	Lithium	0.5 U	Silver	0.5 U
Beryllium	0.2 U	Magnesium	10 U	Sodium	50 U
Bismuth	0.5 U	Manganese	0.5 U	Strontium	0.5 U
Boron	10 U	Mercury	0.2 U	Thallium	0.1 U
Cadmium	0.08 U	Molybdenum	0.5 U	Tin	0.5 U
Calcium	40 U	Nickel	0.5 U	Titanium	1 U
Chromium	0.5 U	Palladium	0.5 U	Vanadium	1 U
Cobalt	0.5 U	Platinum	0.5 U	Zinc	5 U

Analyte	RL mg/L	Analyte	RL mg/L	Analyte	RL mg/L
Alkalinity	5.0 U	Chloride	0.5 U	Cyanide	0.02 U
Fluoride	0.1 U	Sulfide	0.05 U	Sulfate	0.5 U

NOTES:
a. Reporting Limit (RL) = The lowest concentration standard analyzed which can be verified.
b. U = The analyte was analyzed for but not detected above the Reporting Limit.

This "Certificate of Analysis" is provided for your records and is used to facilitate any required correspondences as needed.

Each container contains: 2.5 mL Nitric Acid (<20%)

Barcoded: Yes *Stirbars:* No *Tared Weight:* No

Part Number: LPV008220602P01

Item Description: 250cc Natural Oblong Leakproof WM w/ 45PP Cap

Protocol: A **Level:** 1

Group: 2 (applies)

Date Product Prepared: 10/16/2020

Lot Number: 101220-2EIZ

Chemical Lot No.: 1119120

Chemical Expiry Date: 1/7/2022

Lane Breaux **Chief Executive Officer**

Product processed at:
2202 I-49 N. Service Rd.
Opelousas LA 70570 USA