February 5, 2024

Jason Bichler
Director of Buildings and Grounds
St. Michael-Albertville ISD #885
11343 50th Street NE
Albertville, MN 55301

Providing Trusted
Health and Safety Solutions

RE: Lead-in-Water First Draw – Follow-up Testing #2
IEA Project #202310887

Dear Mr. Bichler:

At the request of St. Michael-Albertville ISD #885, IEA, Inc. (IEA) collected six (6) follow-up water samples for lead analyses in response to previously elevated sample results. This current sampling occurred on January 25, 2024. The purpose of the sampling was to document lead content of water in the six (6) locations post-remediation and to compare the results to initial "first draw" sampling conducted on November 14-15, 2023, as well as the follow-up sampling conducted on January 9, 2024, and document current lead content in the sampled locations regarding the district designated action level of 5 parts per billion (ppb).

INTRODUCTION

Minnesota Statute 121A.335 requires public school buildings serving pre-kindergarten through grade 12 to test for lead in potable water fixtures every five years. The *3Ts for Reducing Lead in Drinking Water Toolkit (2018)* and the Lead Contamination Control Act (LCCA) of 1988 were created by the Environmental Protection Agency (EPA) to identify and reduce lead in drinking water. Lead is a metal that usually enters drinking water through the distribution system, including pipes, solders, faucets, and valves. Lead content in water may increase when the water is allowed to sit undisturbed in the system. Exposure to lead is a health concern.

The EPA recommends taking action when elevated lead levels are noted in water fixtures. The MDH and MDE recommend taking a fixture out of service if levels are 20 parts per billion (ppb) or higher. The MDH and MDE also recommend taking action according to their guidelines for fixtures with levels of 2 parts per billion (ppb) or higher.

First draw samples, collected on November 14-15, 2023, showed one hundred forty-five (145) samples had elevated lead content above the Action Level. Follow-up first draw samples collected on January 9, 2024, showed six (6) samples in Room H106 at Middle School West had elevated lead content above the Action Level after the fixtures were replaced. This round of follow-up sampling is occurring to measure the lead content after filters have been installed for each fixture.

METHODOLOGY

IEA collected six (6) first-draw (unless otherwise noted) samples of approximately 250 milliliters (ml) of water. "First draw" means the samples are collected before the fixture is used or flushed during the day. The first-draw sample results reflect a worst-case scenario, i.e., the highest lead level that would be consumed by building occupants. MDH recommends water stand in pipes for at least 8 hours, but not more than 18 hours prior to sampling identified fixtures.

Water samples were analyzed by Minnesota Valley Testing Laboratories (MVTL) in New Ulm, Minnesota, which uses EPA-approved analytical methods and quality control/assurance procedures. Samples were analyzed using the ICP/MS EPA Method 200.8.

RESULTS & DISCUSSION

The lead-in-water sampling results ranged from 1.67 ppb to 3.29 ppb. These six (6) locations are displayed in *Table 1: Water Testing Results*. The laboratory reports are provided in Appendix A. Laboratory results are reported in micrograms per liter (µg/L) which is equivalent to ppb.

Table 1: Water Testing Results – November 14 and 15, 2023, January 9, 2024, and January 25, 2024

Sample Number	Building	Sampling Location	Fixture Type	Remediation Method	Lead Results (ppb)		
					11/14/2023 or 11/15/2023	1/9/2024	1/25/2024
01252024MSW-1	Middle School West	Room H106 North Wall	Sink	Fixture Replaced and Filter Installed	17.6	7.53	2.02
01252024MSW-2	Middle School West	Room H106 West Wall Middle	Sink	Fixture Replaced and Filter Installed	19	5.98	2.29
01252024MSW-3	Middle School West	Room H106 West Wall South	Sink	Fixture Replaced and Filter Installed	13.3	7.67	2.53
01252024MSW-4	Middle School West	Room H106 South Wall West	Sink	Fixture Replaced and Filter Installed	16.1	6.28	1.67
01252024MSW-5	Middle School West	Room H106 South Wall Middle	Sink	Fixture Replaced and Filter Installed	11.4	9.23	3.29
01252024MSW-6	Middle School West	Room H106 South Wall East	Sink	Fixture Replaced and Filter Installed	15.8	5.98	1.71

ppb – parts per billion

RECOMMENDATIONS

All six (6) re-sampled fixtures from the January 25, 2024, sampling showed lead level(s) below the district designated action level of 5 ppb. Based on the sample result(s), no further action is required at this time.

In addition, MDH recommends labeling water fixtures not included in the sampling program, including bathroom taps, hose bibbs, laboratory faucets/sinks, or custodial closet sinks.

It is recommended that a copy of the district's Lead-in-Drinking Water Testing Report be made available to staff and the public through the district's administrative offices. Per Minnesota Statutes, section 121A.335, a school district that has tested its buildings for the presence of lead shall make the results of the testing available to the public for review and must notify parents of the availability of the information.

GENERAL CONDITIONS

The analysis and opinions expressed in this report are based upon data obtained from St. Michael-Albertville ISD #885 at the indicated locations. This report does not reflect variations in conditions that may occur across the site, property, or facility. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #11536 dated August 15, 2023, regarding lead-in-water sampling for St. Michael-Albertville ISD #885, including the General Conditions attached thereto, no warranties are extended or made.

Please contact IEA if you would like assistance with any of the above recommendations or have questions regarding this report.

Sincerely,

IEA, Inc.

Daniel Holcomb, CSP, CHMM
EH&S Senior Account Manager

DH/wb 020524

Enc.

Appendix A

Laboratory Testing Reports and Building Maps

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Workorder: Middle School West (39480)
Account #: 2190
Project #: 202310887

Client: Institute for Environmental Assessment (IEA)
PO: 202310887

Emma Squires-Sperling
IEA / Brooklyn Park
9201 W Broadway Suite #600
Brooklyn Park, MN 55445

Certificate of Analysis

Approval

All data reported has been reviewed and approved by:

Dave Smahel, Inorganic Chemistry/Feed Lab Manager New Ulm, MN

Analyses performed under Minnesota Department of Health Accreditation conforms to the current TNI standards.

NEW ULM LAB CERTIFICATIONS:
MN LAB # 027-015-125ND WW/DW # R-040

BISMARCK LAB CERTIFICATIONS:
MN LAB # 038-999-267ND W/DW # ND-016

Workorder Comments

All samples were preserved with nitric acid upon receipt at the laboratory.

Report Date: Friday, February 2, 2024 11:24:47 AM

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Workorder: Middle School West (39480) **Client:** Institute for Environmental Assessment (IEA)

Analytical Results

Lab ID: 39480001 **Date Collected:** 01/25/2024 07:00 **Matrix:** Potable Water
Sample ID: 01252024MSW-1 **Date Received:** 01/25/2024 13:30
Temp @ Receipt (C):
Sample Desc: Room H106 North Wall-SNK

Parameter	Results	Units	MCL	Method	Analyzed	Qual
Lead	**2.02**	ug/L	15	EPA 200.8	02/01/2024 17:31	

Lab ID: 39480002 **Date Collected:** 01/25/2024 07:00 **Matrix:** Potable Water
Sample ID: 01252024MSW-2 **Date Received:** 01/25/2024 13:30
Temp @ Receipt (C):
Sample Desc: Room H106 West Wall-Middle SNK

Parameter	Results	Units	MCL	Method	Analyzed	Qual
Lead	**2.29**	ug/L	15	EPA 200.8	02/01/2024 17:32	

Lab ID: 39480003 **Date Collected:** 01/25/2024 07:00 **Matrix:** Potable Water
Sample ID: 01252024MSW-3 **Date Received:** 01/25/2024 13:30
Temp @ Receipt (C):
Sample Desc: Room H106 West Wall-South SNK

Parameter	Results	Units	MCL	Method	Analyzed	Qual
Lead	**2.53**	ug/L	15	EPA 200.8	02/01/2024 17:33	

Lab ID: 39480004 **Date Collected:** 01/25/2024 07:00 **Matrix:** Potable Water
Sample ID: 01252024MSW-4 **Date Received:** 01/25/2024 13:30
Temp @ Receipt (C):
Sample Desc: Room H106 South Wall-West SNK

Parameter	Results	Units	MCL	Method	Analyzed	Qual
Lead	**1.67**	ug/L	15	EPA 200.8	02/01/2024 17:34	

Lab ID: 39480005 **Date Collected:** 01/25/2024 07:00 **Matrix:** Potable Water
Sample ID: 01252024MSW-5 **Date Received:** 01/25/2024 13:30
Temp @ Receipt (C):
Sample Desc: Room H106 South Wall-Middle SNK

Parameter	Results	Units	MCL	Method	Analyzed	Qual
Lead	**3.29**	ug/L	15	EPA 200.8	02/01/2024 17:35	

Lab ID: 39480006 **Date Collected:** 01/25/2024 07:00 **Matrix:** Potable Water
Sample ID: 01252024MSW-6 **Date Received:** 01/25/2024 13:30
Temp @ Receipt (C):
Sample Desc: Room H106 South Wall-East SNK

Parameter	Results	Units	MCL	Method	Analyzed	Qual
Lead	**1.71**	ug/L	15	EPA 200.8	02/01/2024 17:36	

Report Date: Friday, February 2, 2024 11:24:47 AM

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Workorder: Middle School West (39480) **Client:** Institute for Environmental Assessment (IEA)

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Workorder: Middle School West (39480) **Client:** Institute for Environmental Assessment (IEA)

1 of 1

39480

Chain of Custody

9201 West Broadway North, Suite 600
Brooklyn Park, MN 55445
763.315.7900 1.800.233.9513

Client Name	St. Michael-Albertville ISD #885	Building Name	Middle School West	Analytical Lab	MVTL
Contact Name	Emma Squires-Sperling Daniel Holcomb	Project #	202310887	Project Name	2023-2024 STMA LIW
Phone #	763-315-7900	IEA Fax #	763-315-7927	Written Sample Results To	lab@ieasafety.com
Other Information					
Sampled By	Daniel Holcomb	Date 1/25/2024	Time 7:00 AM	Analyzed By (Company)	Analyst / Date & Time
Reviewed By		Date	Time		
Shipped By	Daniel Holcomb	Date 1/26/2024	Time	Turnaround Time	Notes
Received By		Date	Time	Sample Condition	Temperature

Lab Number	Sample Number	Sample Location	Sample Type: Water	Soil	Other	Date Sampled	Volume/ Bottle Type	Analysis Required	Comments & Observations
	01252024MSW-1	Room H106 North Wall - SNK	X			1/25/2024	250mL unpreserved	Lead	
	01252024MSW-2	Room H106 West Wall - Middle SNK	X			1/25/2024	250mL unpreserved	Lead	
	01252024MSW-3	Room H106 West Wall - South SNK	X			1/25/2024	250mL unpreserved	Lead	
	01252024MSW-4	Room H106 South Wall - West SNK	X			1/25/2024	250mL unpreserved	Lead	
	01252024MSW-5	Room H106 South Wall - Middle SNK	X			1/25/2024	250mL unpreserved	Lead	
	01252024MSW-6	Room H106 South Wall - East SNK	X			1/25/2024	250mL unpreserved	Lead	

25 Jan 24 0940 AMB
25 Jan 24 1530 18.8 TM774

AMB SS 25JAN24 1330 18.8C TM774

Original - Analytical Lab
Copy - Client File
Copy - IEA Lab

MINNESOTA VALLEY TESTING LABORATORIES, INC.

1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Member ACIL

Workorder: Middle School West (39480) **Client:** Institute for Environmental Assessment (IEA)

Sample Condition Checklist

Date: 25JAN24 Time: 1330 ☐ AM ☒ PM By: SJ

Account Name: St. Michael-Albertville ISD MSW Account #: —

Bill of Lading #: — Cooler #: —

Temp: 18.8 °C ROI ☐ Ambient ☒ Tracking #: —

TM#: 774 Ice Crystals Present in Sample ☐

MVTL Courier: Dan Other: —

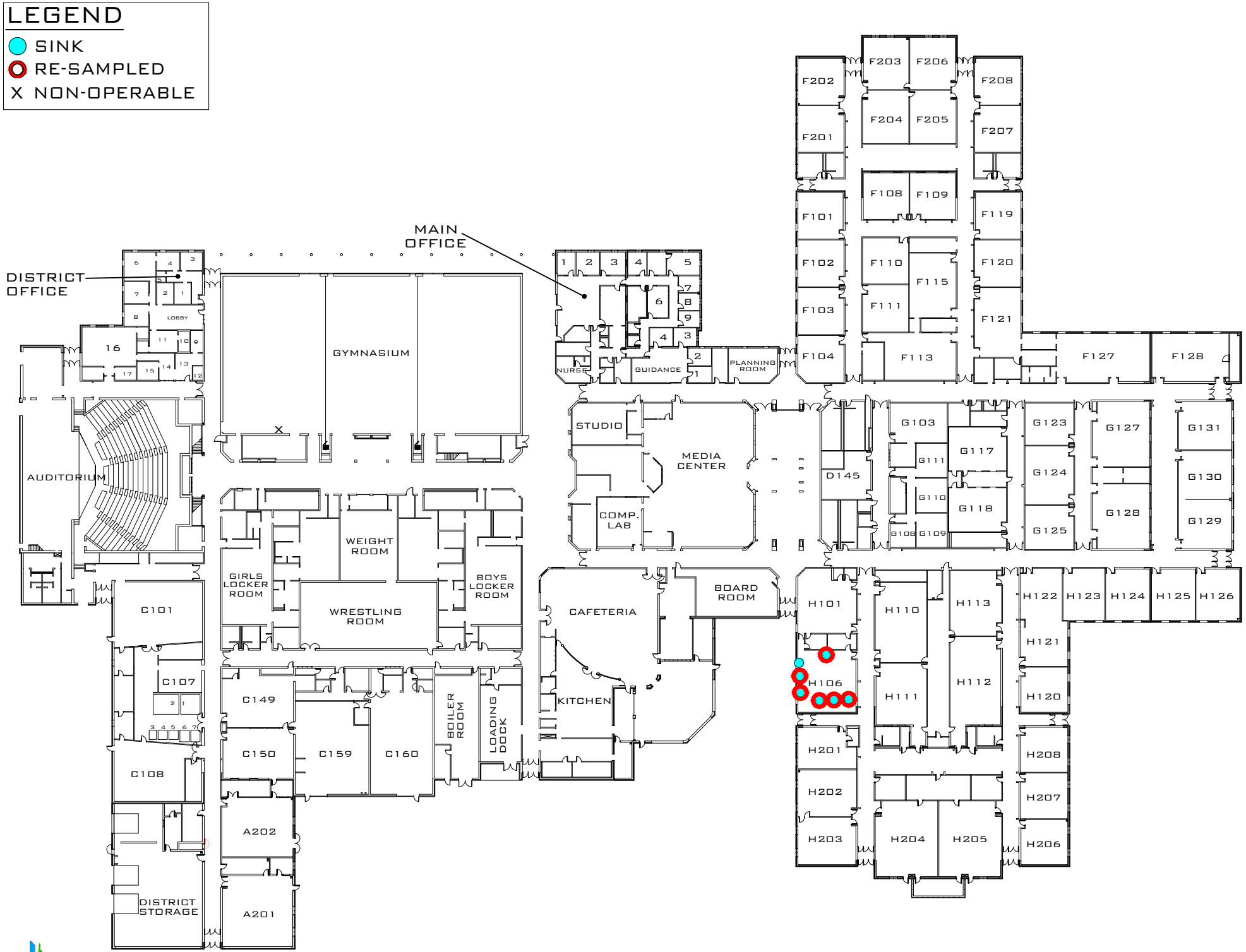
MVTL Route: Metro Walk-In ☐ Mail ☐ UPS Air ☐ UPS Ground ☐ FedEx Air ☐ Fed Ex Ground ☐ SpeeDee ☐

Containers Supplied by MVTL: Yes ☒ No ☐ Designate customer supplied containers as "Other" in container size column

Comments:

Number	Containers Size (mL)	Container Type	Preservation	pH
6	(100) (120) (125) **(250)** (290) (500) (1000) Other	(G) **(P)** (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ **NONE** HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 **N/A** Add
	(100) (120) (125) (250) (290) (500) (1000) Other	(G) (P) (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ NONE HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 N/A Add
	(100) (120) (125) (250) (290) (500) (1000) Other	(G) (P) (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ NONE HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 N/A Add
	(100) (120) (125) (250) (290) (500) (1000) Other	(G) (P) (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ NONE HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 N/A Add
	(100) (120) (125) (250) (290) (500) (1000) Other	(G) (P) (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ NONE HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 N/A Add
	(100) (120) (125) (250) (290) (500) (1000) Other	(G) (P) (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ NONE HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 N/A Add
	(100) (120) (125) (250) (290) (500) (1000) Other	(G) (P) (AG) (AP)	$NaHSO_4$ $Na_2O_3S_2$ NONE HNO_3 H_2SO_4 NaOH HCl SUB*	<2 >9 >12 N/A Add
	Low Level Mercury Kit	**!!DO NOT OPEN THE PLASTIC BAGS HOLDING THE SAMPLE BOTTLES!!**		
	4 oz Jar	Clear Amber	MeOH None	n/a
	2 oz Jar	Clear Amber	MeOH None	n/a
	Vials Individual Set of 2 Set of 3	Clear Amber	HCl H_3PO_4 H_2SO_4 None	n/a
	Vials Individual Set of 2 Set of 3	Clear Amber	HCl H_3PO_4 H_2SO_4 None	n/a
	Trip Blank Individual Set of 2 Set of 3	n/a		
	Moisture Vial	n/a		
	Manure Bottle	n/a		

*ANY CONTAINER SENT TO A SUBCONTRACT LABORATORY WILL NOT BE CHECKED FOR PRESERVATION!



INSTITUTE FOR ENVIRONMENTAL ASSESSMENT
9201 West Broadway Brooklyn Park, MN 55445
Tel: 763.315.7900 Toll Free: 800.233.9513
Fax: 763.315.7920

MIDDLE SCHOOL WEST

FIRST LEVEL FLOOR PLAN | JAN. 2024