

ISD# 196  
14309 Diamond Path  
Rosemount, MN 55124  
Attn: Mr. Chris Pint

RE: **Final Report: Lead in Drinking Water Sampling – Post Mitigation**

SITES: **Apple Valley High, Rosemount High, School of Environmental Studies, Black Hawk Middle, Dakota Hills Middle, Falcon Ridge Middle, Scott Highlands Middle, Valley Middle and the District Service Center**

PROJECT #: 19179

## I. INTRODUCTION

This report presents the results of testing for lead in drinking water after mitigation methods were completed 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 March 2019).”

Per the Final Report (dated December 20, 2019), Field Environmental Consulting, Inc. (FIELD ENVIRONMENTAL) tested water outlets using *high* and *medium* priority sampling strategies for seventeen (17) sites per District request.

Apple Valley High, Rosemount High, School of Environmental Studies, Black Hawk Middle, Dakota Hills Middle, Falcon Ridge Middle, Scott Highlands Middle, Valley Middle and the District Service Center had drinking or food preparation water outlets with lead concentrations greater than 20 ppb. Priority was given to correct these identified taps/fixtures.

## II. DISCUSSION

Lead is a toxic metal that is harmful to human health when it is ingested or inhaled. Unlike other environmental contaminants, 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 water 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. 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 ( $\mu\text{g/L}$ ) which is also commonly expressed as parts per billion (ppb).

In addition to collecting first draw samples, FIELD ENVIRONMENTAL obtained flush draw samples to determine if running the water for one (1) minute was an allowable, successful method to reduce lead content. A flush sample is water emitted from an outlet after a stated flush time (in this case, one (1) minute). This sample is representative of the water that is in the plumbing upstream from the tap. Analysis was conducted by Pace Analytical Services, Inc. of Minneapolis, Minnesota using EPA Method 200.8 ICPMS for determination of trace elements in drinking water.

### 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  $\mu\text{g/L}$ ). This is commonly referred to as the *action level*.

Following MDH's Recommended Lead Hazard Reduction Options, ISD #196 mitigated lead concentrations by:

- Permanently removing the tap/outlet from service.
- Replacing tap/outlet with "lead free" plumbing components in accordance with the Reduction of Lead in Drinking Water Act. Resampling was performed after replacement.
- Labeling those water taps/outlets that should not be used for drinking or food preparation with a sign or label stating, "water not for drinking" or "water not for consumption."

School Name: **Apple Valley High School (AVHS)**

Date: **11/7/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Boys Dressing Room	50*	S	50

\*UPDATE: Sink in Boys Dressing Room Labeled "Water Not for Drinking" in Accordance with MDH Guidelines.



School Name: **Rosemount High School (RHS)**Date: **11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
Basement	N/A	IMC	72*	WC	28.3

\*UPDATE: Water Cooler in Basement IMC was Permanently Removed.

School Name: **School of Environmental Studies (SES)**Date: **11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	118	Deli/Serving	3*	S	45.5

Update: Water to Sink in Deli/Serving has been Permanently Turned Off.

School Name: **Black Hawk Middle School (BHMS)**Date: **11/7/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Kitchen	2*	SPRAY	86.6

Sprayer in Kitchen Labeled "Water Not for Drinking or Food Preparation" in Accordance with MDH Guidelines.



School Name: **Dakota Hills Middle School (DHMS)**Date: **11/7/2019 & 5/15/2020**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
Lower	N/A	Serving	3	S	30.5	45.5	1
Lower	N/A	Kitchen - East by Dish Wash	10	S	49.7	0.79	0.42
Lower	N/A	Kitchen	12	Misc - Steamer	25.7	6	0.9

School Name: **Falcon Ridge Middle School (FRMS)**Date: **11/7/2019 & 5/15/2020**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
Lower	N/A	Kitchen	37	S	34.5	18.8	1.5
Lower	N/A	Serving Area	42	S	27.2	3.4	0.13

School Name: **Scott Highlands Middle School (SHMS)**Date: **11/7/2019 & 5/15/2020**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
First	N/A	Kitchen - South Wall - Right	4	SPRAY	23.9	81.4	6



**School Name: Valley Middle School (VMS)****Date: 11/7/2019 & 5/15/2020**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
First	N/A	Kitchen	2	S	43.7	7.4	1.8
First	516	Left Sink	37*	S	23.8	-	-
First	516	Middle Sink	38*	S	24.5	-	-
First	516	Right Sink	39*	S	21.2	-	-

\*UPDATE: Sinks in Room 516 Labeled "Water Not for Drinking" in Accordance with MDH Guidelines.

**School Name: District Service Center (DSC)****Date: 11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Conf Hall	4*	S	26.3

\*UPDATE: Sink in Conference Hall was Permanently Removed.

**V. RECOMMENDATIONS AND CONCLUSIONS**

Lead in water concentrations were below the action level for those replaced fixtures at Dakota Hills Middle School kitchen, Falcon Ridge Middle School kitchen and serving area and Valley Middle School kitchen. First draw lead in water levels were still above 20 ppb for the Dakota Hills Middle School sink located in the serving area and spray nozzle within the kitchen of Scott Highlands Middle School. However, flushing for one (1) minute for both these taps greatly reduces lead concentrations to well below 20 ppb. Therefore, per MDH guidelines, ISD #196 can institute a flush program for those taps and mark with a label that states, "flush water for 1 min prior to use."

Minnesota Statutes section 121A.335 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 #196 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.

Per statute, follow-up testing is required every five years.



## **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 & IAQ Manager  
Amy@fieldconsultinginc.com

### **Attachments**

Appendix A: Results & Locations, Drawings, and Laboratory Reports



## **APPENDIX A**

### **School Results & Locations, Drawings, and Laboratory Reports**



School Name: **Apple Valley High School (AVHS)**Date: **11/7/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Kitchen	1	SPRAY	1.2
First	N/A	Kitchen	2	S	7.4
First	N/A	Kitchen	3	S	4
First	N/A	Kitchen	4	WC	3.4
First	N/A	Kitchen	5	S	6.3
First	N/A	Kitchen	6	SPRAY	2.9
First	N/A	Kitchen	7	S	1.3
First	N/A	Kitchen	8	S	3.2
First	N/A	Kitchen	9	S	5.8
First	N/A	Custodial Break Room	10	S	0.94
First	N/A	Cafeteria	11	WC	0.62
First	N/A	Boys Locker Room	12	WC	0.5
First	N/A	Entry Left	13	WC	ND
First	N/A	Entry Right	14	WC	ND
First	N/A	Entry Right	15	BF	ND
First	N/A	Arena	16	WC	1.3
First	N/A	Arena	17	WC	ND
First	N/A	Arena	18	BF	ND
First	N/A	Arena	19	S	9.2
First	N/A	Across from Gym C	20	WC	ND
First	N/A	Across from Gym C	21	BF	ND
First	F156	Training	22	S	1.8
First	N/A	Women Team Room	23	DF	7.5
First	N/A	Gym D	24	WC	2.5
First	N/A	F161	25	WC	0.1
First	N/A	Outside D168	26	WC	1.8
First	D168	Classroom	27	S	2.6
First	N/A	Hall Outside D170	28	WC	ND
First	N/A	Hall Outside D170	29	BF	ND
First	D170	Classroom	30	S	2
First	D140	Classroom	31	S	0.94
First	D139	Classroom	32	S	1.6
First	N/A	Hall Outside D137	33	WC	1
First	N/A	Door 4	34	WC	0.32
First	N/A	Door 4	35	WC	0.31
First	N/A	Hall Outside B118	36	WC	ND
First	N/A	Hall Outside B118	37	BF	ND
First	B119	Classroom	38	S	5.9
First	N/A	Nurse	39	S	3.2
First	N/A	Front Office	40	WC	ND
First	A104	Classroom	41	WC	ND
First	A104	Classroom	42	WC	ND
First	A104		43	BF	ND
First	A105	Classroom	44	S	0.75
First	A153	Classroom	45	WC	0.81
First	A154	Classroom	46	WC	ND
First	A154	Classroom	47	BF	ND
First	A154	Classroom	48	S	14.2



School Name: **Apple Valley High School (AVHS)**

Date: **11/7/2019**



Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Girls Dressing Room	49	S	20.1
First	N/A	Boys Dressing Room	50*	S	<b>50</b>
First	N/A	Hallway Outside E148	51	WC	1.6
Second	C216	Classroom	52	WC	5.3
Second	W219	Classroom	53	WC	1
Second	K207	Classroom	54	WC	2
Second	K207	Classroom	55	WC	2.3
Second	N/A	Hallway Outside N237	56	WC	ND
Second	N/A	Hallway Outside N237	57	WC	ND
Second	N/A	Hallway Outside N237	58	BF	ND
Second	N237	Classroom	59	S	0.4
Second	N/A	Hallway Outside M229	60	WC	ND
Second	N/A	Hallway Outside M229	61	WC	ND
Second	N/A	Hallway Outside M229	62	BF	ND
Second	N/A	Hallway Outside M224	63	WC	ND
Second	N/A	Hallway Outside M224	64	WC	ND
Second	N/A	Hallway Outside M224	65	BF	ND

*\*UPDATE: Sink in Boys Dressing Room Labeled "Water Not for Drinking" in Accordance with MDH Guidelines.*

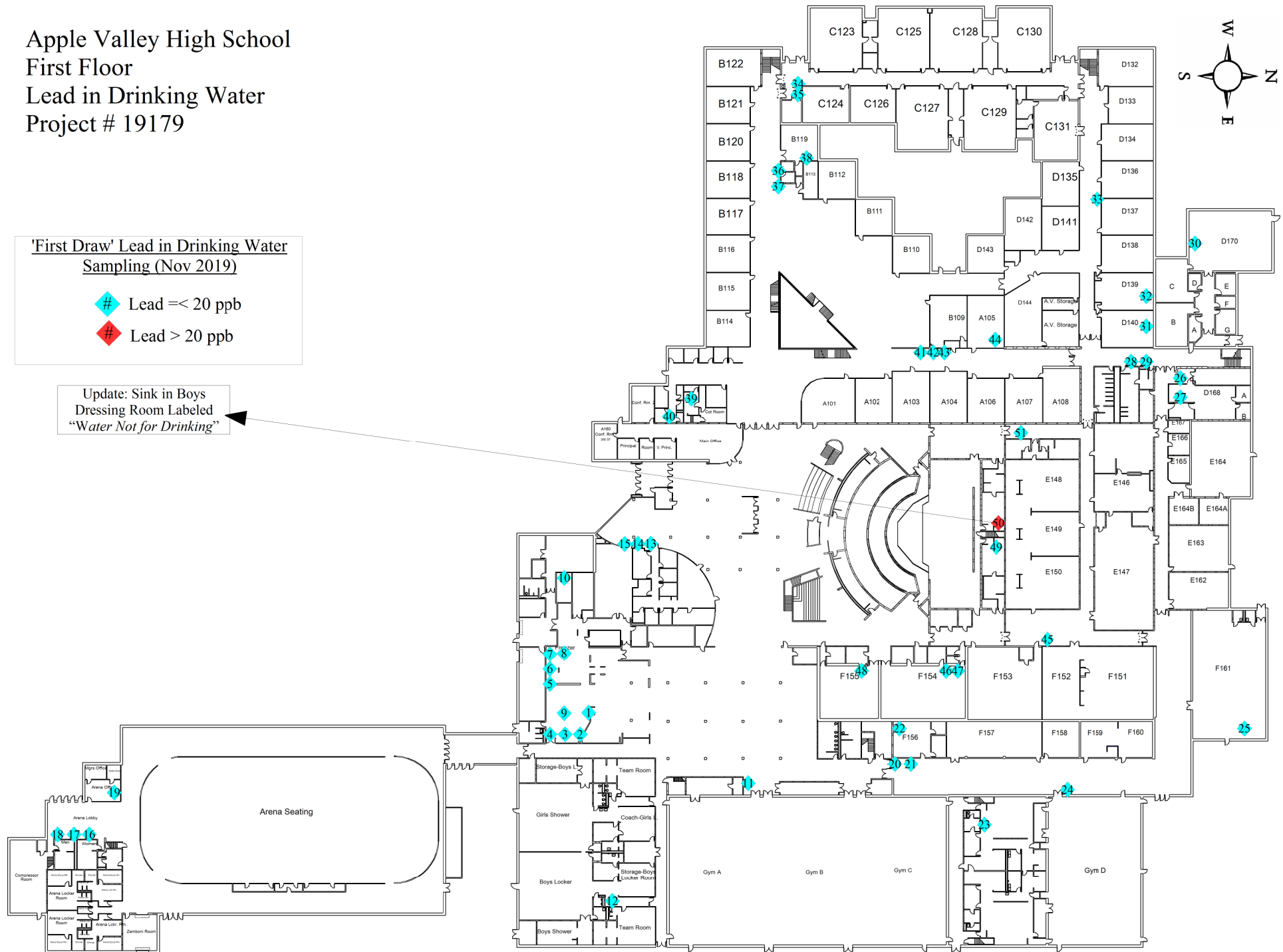


Apple Valley High School  
First Floor  
Lead in Drinking Water  
Project # 19179

'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

-  Lead  $\leq$  20 ppb
-  Lead  $>$  20 ppb

Update: Sink in Boys  
Dressing Room Labeled  
"Water Not for Drinking"





Apple Valley High School  
Second Floor  
Lead in Drinking Water  
Project # 19179

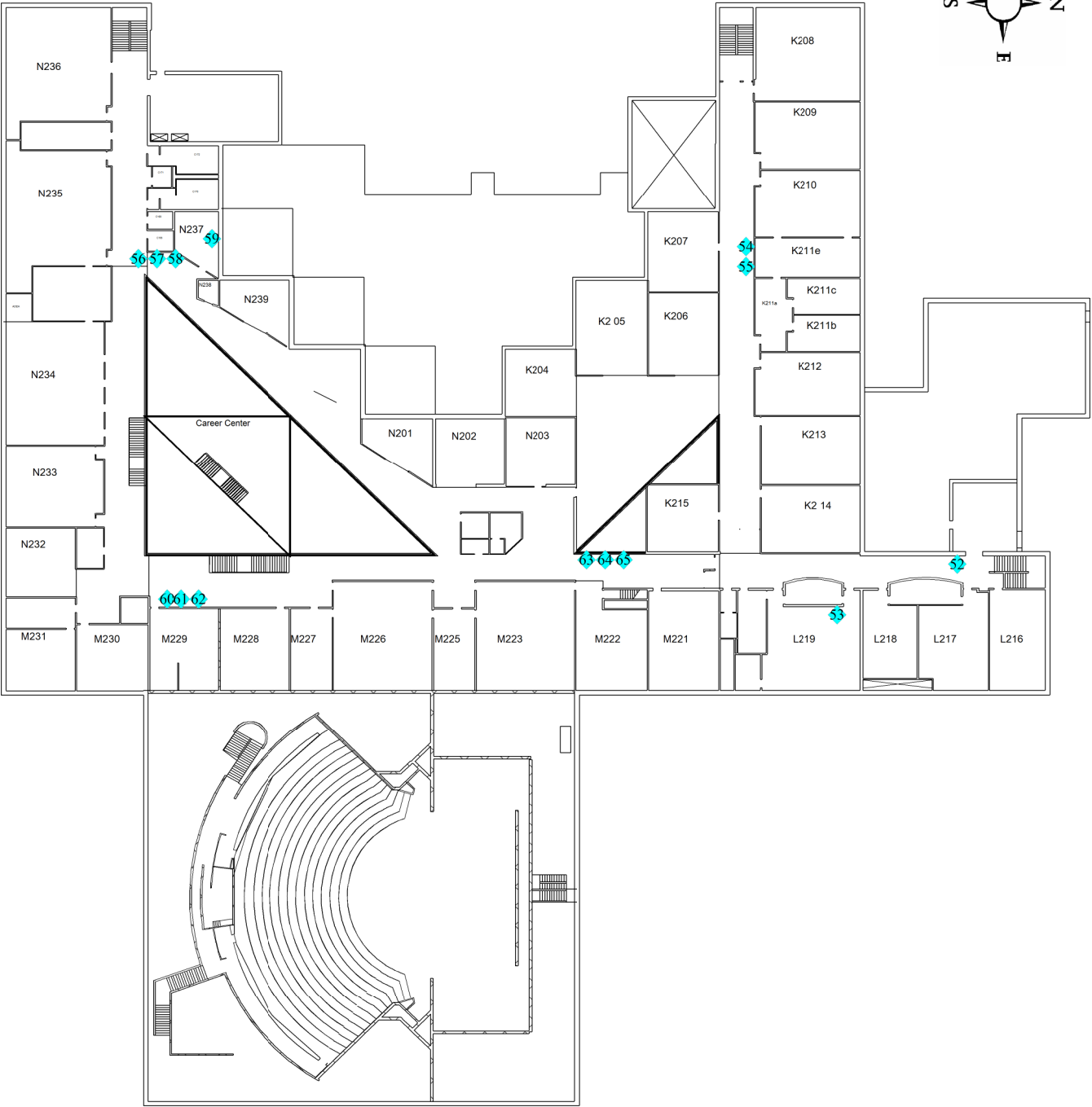
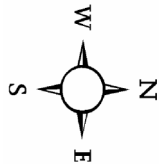
'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)



Lead  $\leq$  20 ppb



Lead  $>$  20 ppb





School Name: **Rosemount High School (RHS)**Date: **11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Hall	1	BF	ND
First	N/A	Hall	2	WC	ND
First	N/A	Hall	3	WC	ND
First	N/A	Hall	4	WC	ND
First	N/A	Hall	5	BF	ND
First	N/A	Hall	6	WC	ND
First	N/A	Hall	7	WC	ND
First	N/A	Hall	8	BF	ND
First	N/A	Hall	9	WC	ND
First	N/A	Hall	10	WC	ND
First	N/A	Hall	11	BF	ND
First	N/A	Hall	12	WC	ND
First	N/A	Hall	13	WC	ND
First	N/A	Hall	14	BF	ND
First	N/A	Hall	15	WC	ND
First	N/A	Hall	16	BF	ND
First	N/A	Hall	17	DF	0.94
First	N/A	Hall	18	DF	0.44
First	N/A	Hall	19	WC	ND
First	N/A	Hall	20	BF	ND
First	N/A	Hall	21	WC	0.12
First	112	FACS	22	S	2.1
First	112	FACS	23	S	0.87
First	112	FACS	24	S	0.4
First	112	FACS	25	S	0.87
First	112	FACS	26	S	0.48
First	112	FACS	27	S	0.46
First	112	FACS Office	28	S	4.1
First	N/A	Hall	29	WC	ND
First	N/A	Hall	30	WC	ND
First	N/A	Hall	31	BF	ND
First	N/A	IMC	32	WC	2.6
First	N/A	Hall	33	DF	3.6
First	N/A	Faculty	34	S	1.7
First	N/A	Faculty	35	MISC	ND
Basement	N/A	Hall	36	DF	1.2
Basement	N/A	Hall	37	WC	0.36
Basement	N/A	Vestibule	38	WC	ND
Basement	N/A	Vestibule	39	BF	ND
Basement	N/A	Hall	40	DF	5.1
Basement	N/A	Hall	41	WC	ND
Basement	N/A	Hall	42	BF	ND
Basement	N/A	Women's Locker Room	43	DF	0.95
Basement	N/A	Women's Locker Room	44	DF	6.6
Basement	N/A	Hall	45	WC	ND
Basement	N/A	Hall	46	BF	ND
Basement	N/A	Hall	47	DF	0.23
Basement	N/A	Hall	48	BF	ND



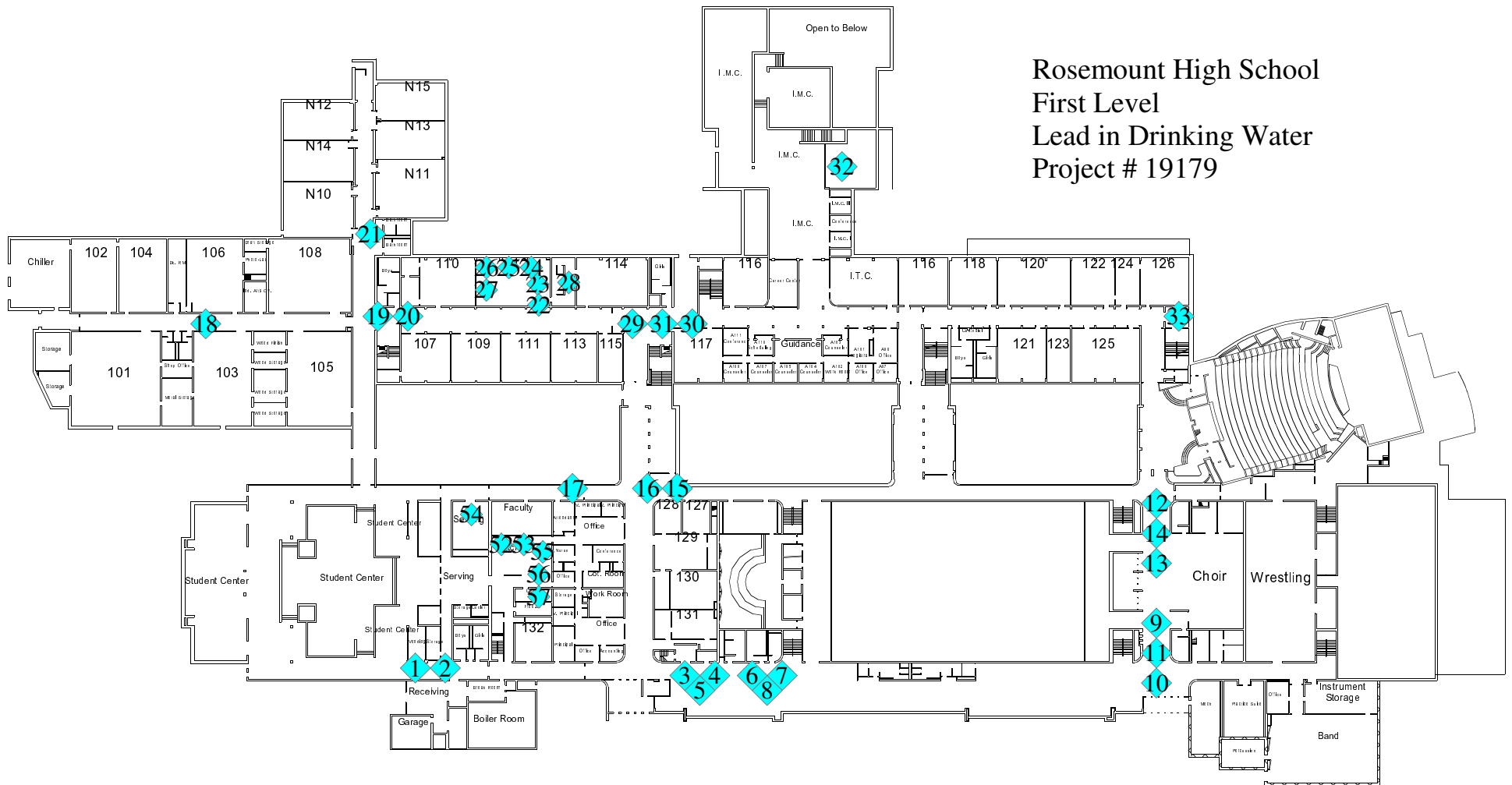
School Name: **Rosemount High School (RHS)**Date: **11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
Basement	N/A	Hall	49	WC	ND
Basement	N/A	Men's Locker Room	50	WC	0.22
Basement	N/A	Men's Locker Room	51	WC	ND
First	N/A	Kitchen	52	S	1.5
First	N/A	Kitchen	53	S	0.88
First	N/A	Serving	54	S	6.8
First	N/A	Kitchen	55	S	1
First	N/A	Kitchen	56	S	2.2
First	N/A	Kitchen	57	SPRAY	0.39
Second	N/A	Hall	58	WC	0.12
Second	211	Faculty	59	S	2.7
Second	N/A	Hall	60	WC	ND
Second	N/A	Hall	61	BF	ND
Second	N/A	Hall	62	DF	0.93
Second	N/A	Hall	63	DF	0.92
Second	N/A	Hall	64	BF	ND
Second	N/A	Hall	65	WC	ND
Second	N/A	Hall	66	WC	ND
Second	N/A	Hall	67	BF	ND
Second	N/A	Hall	68	WC	ND
Second	N/A	Hall	69	WC	ND
Second	N/A	Hall	70	BF	ND
Second	N/A	Hall	71	DF	0.88
Basement	N/A	IMC	72*	WC	<b>28.3</b>

\*UPDATE: Water Cooler in Basement IMC was Permanently Removed.



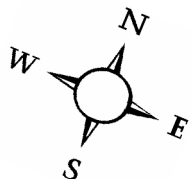
Rosemount High School  
First Level  
Lead in Drinking Water  
Project # 19179



'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

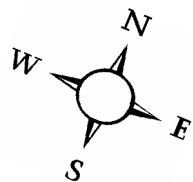
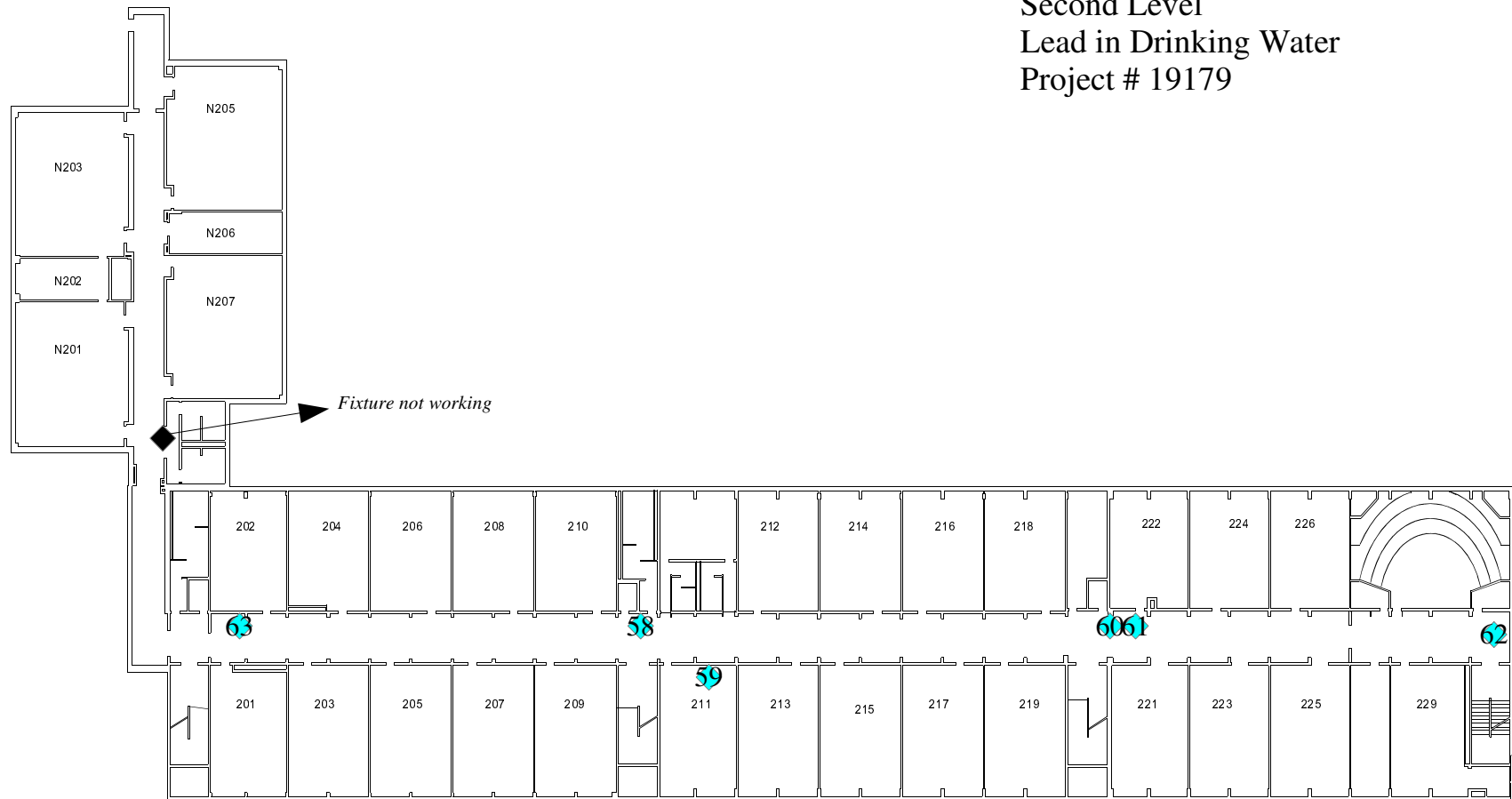
◆ Lead <= 20 ppb

◆ Lead > 20 ppb





Rosemount High School  
Second Level  
Lead in Drinking Water  
Project # 19179

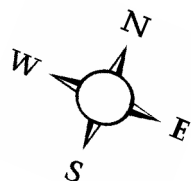
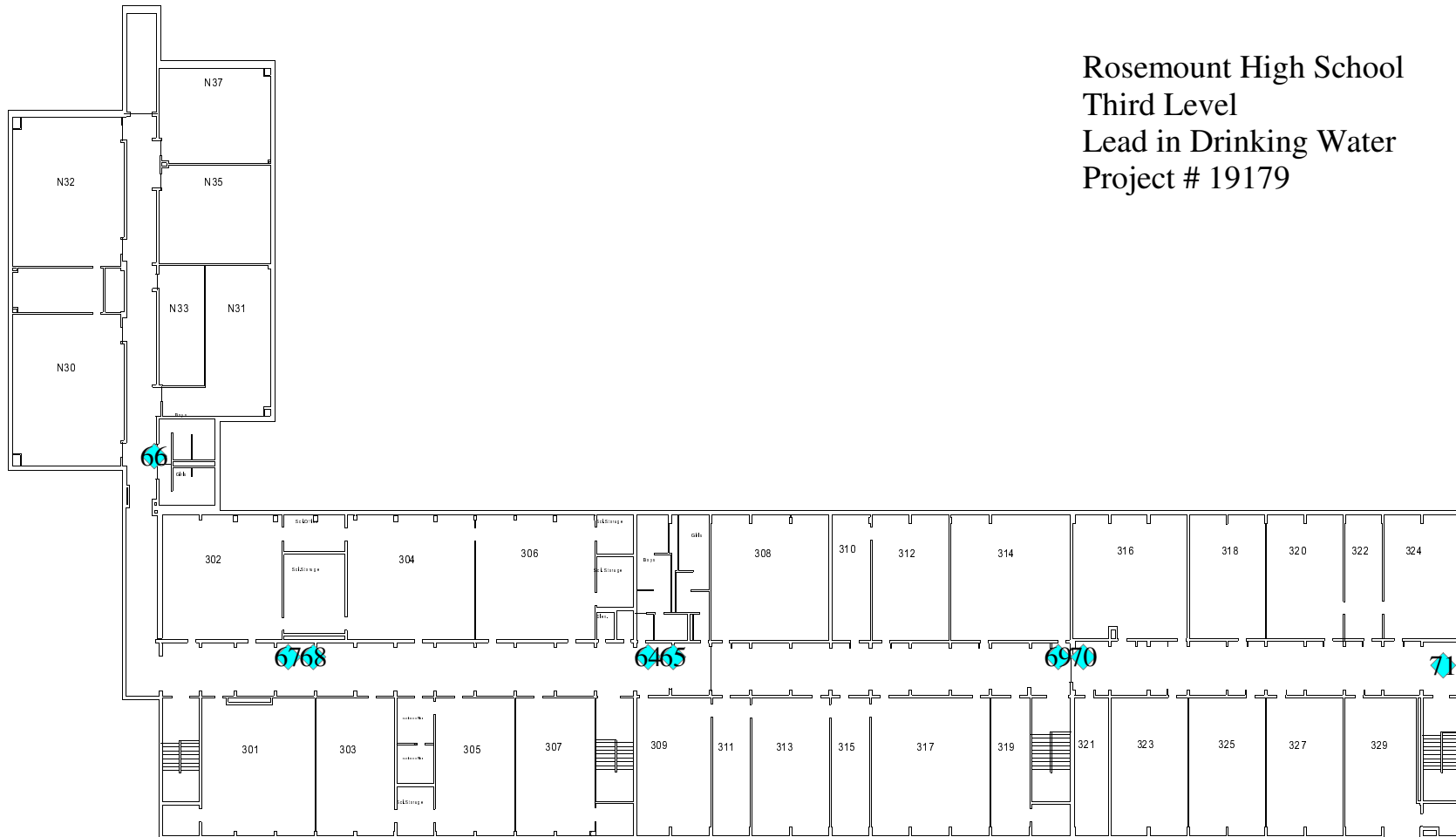


'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

- # Lead  $\leq$  20 ppb
- # Lead  $>$  20 ppb



Rosemount High School  
Third Level  
Lead in Drinking Water  
Project # 19179

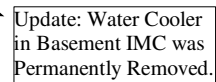


'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

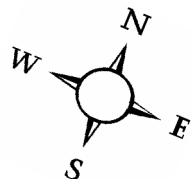
- ◆ # Lead  $\leq$  20 ppb
- ◆ # Lead  $>$  20 ppb



### Rosemount High - Basement



*Fixture not working*



◆ # Lead  $\leq 20$  ppb  
◆ # Lead  $> 20$  ppb



School Name: **School of Environmental Studies (SES)**

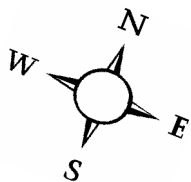
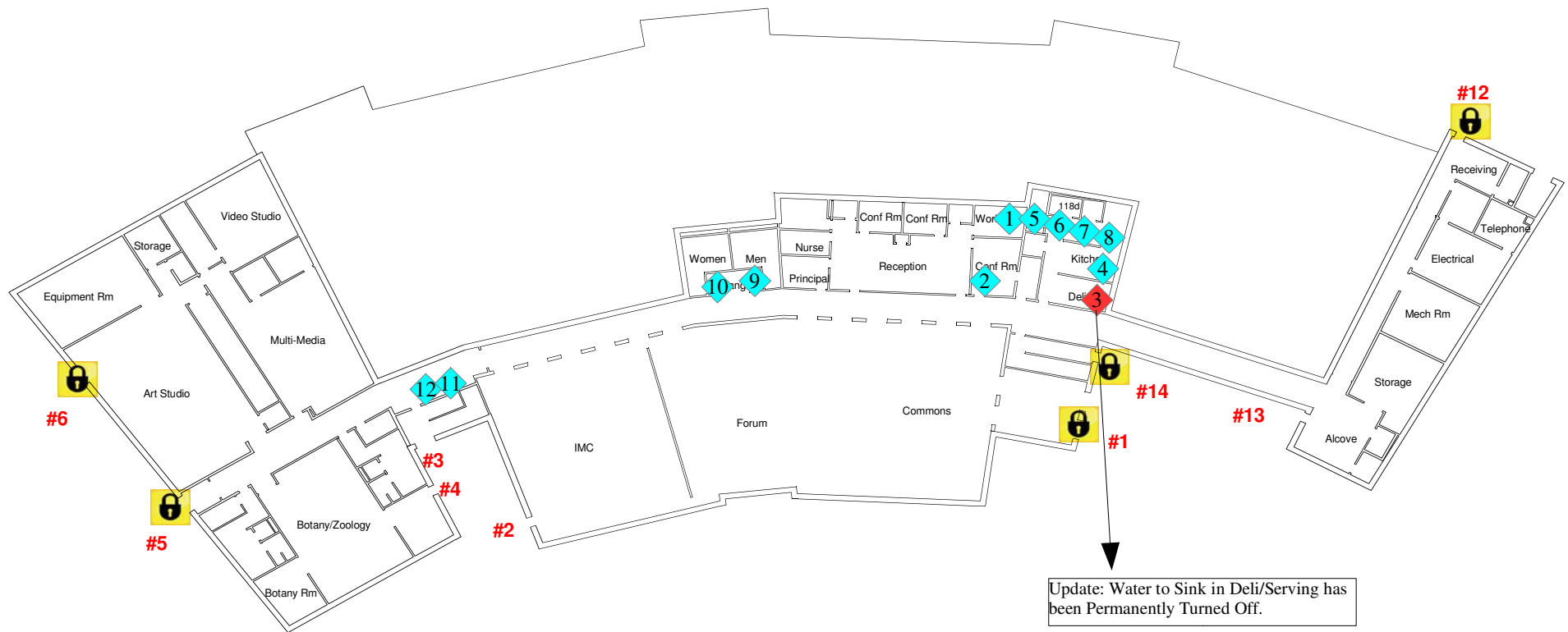
Date: **11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	120	Nurse	1	S	3.3
First	119	Work Room	2	S	4
First	118	Deli/Serving	3*	S	45.5
First	118	Kitchen	4	S	11.2
First	118	Dishwash	5	S	4.7
First	118	Dishwash	6	SPRAY	1.3
First	118	Dishwash	7	S	4.6
First	118	Dishwash	8	S	6.8
First	130	Hallway	9	WC	0.17
First	131	Hallway	10	WC	0.28
First	116	Hallway - Left	11	WC	0.36
First	116	Hallway - Right	12	WC	0.7
Second	239	Hallway - Left	13	WC	0.43
Second	239	Hallway - Left	14	WC	0.39
Second	239	Hallway - Right	15	BF	0.25
Second	218	Hallway - Left	16	WC	0.38
Second	218	Hallway - Left	17	WC	0.45
Second	218	Hallway - Right	18	BF	0.23

Update: Water to Sink in Deli/Serving has been Permanently Turned Off.



School of Environmental Studies  
First Level  
Lead in Drinking Water  
Project # 19179

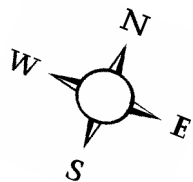


'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)



- ◆ Lead  $\leq$  20 ppb
- ◆ Lead  $>$  20 ppb



School of Environmental Studies  
Second Level  
Lead in Drinking Water  
Project # 19179



'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

-  Lead  $\leq$  20 ppb
-  Lead  $>$  20 ppb



School Name: **Scott Highlands Middle School (SHMS)**Date: **11/7/2019 & 5/15/2020**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
First	N/A	Custodian Office	1	WC	0.48	-	-
First	N/A	Kitchen - East wall	2	S	9.7	-	-
First	N/A	Kitchen - South Wall - Left	3	S	1.8	-	-
First	N/A	Kitchen - South Wall - Right	4	SPRAY	23.9	81.4	6
First	N/A	Kitchen - North Wall	5	S	3.5	-	-
First	N/A	Dishwash - South West	6	SPRAY	2.8	-	-
First	N/A	Dishwash - West	7	SPRAY	3.5	-	-
First	N/A	Dishwash - North West	8	S	6.7	-	-
First	N/A	Dishwash - North	9	S	11.7	-	-
First	N/A	Staff Breakroom Hall	10	WC	0.34	-	-
First	N/A	Outside Fitness Room	11	WC	0.52	-	-
First	N/A	Staff Lounge	12	S	5.1	-	-
First	N/A	East Gym	13	WC	1.3	-	-
First	N/A	West Gym	14	WC	1.2	-	-
First	N/A	Boys Locker Room	15	WC	2.6	-	-
First	N/A	Girls Locker Room	16	WC	1.7	-	-
First	N/A	Pool	17	WC	1.7	-	-
First	N/A	Workroom	18	S	4.4	-	-
First	N/A	Lecture Room A	19	WC	0.32	-	-
First	N/A	Nurses Office	20	S	0.95	-	-
First	23	Classroom	21	WC	0.43	-	-
First	22	Classroom	22	S	6.7	-	-
First	21	Classroom	23	S	2.1	-	-
First	18	Classroom	24	S	4.2	-	-
First	N/A	Hallway Outside Classroom 10	25	WC	ND	-	-
First	N/A	Hallway Outside Classroom 10	26	BF	ND	-	-
First	14	Classroom - South Fixture	27	S	7.3	-	-
First	6	FACS Room	28	S	2.9	-	-
First	6	FACS Room	29	S	1.7	-	-
First	6	FACS Room	30	S	1.3	-	-
First	6	FACS Room	31	S	2	-	-
First	6	FACS Room	32	S	1.7	-	-
First	6	FACS Room	33	S	1.9	-	-
First	6	FACS Room	34	S	2	-	-
First	8	Classroom	35	S	1.1	-	-
First	8	Classroom	36	S	0.59	-	-
First	9	Art Classroom	37	S	3.2	-	-
First	9	Art Classroom	38	S	2.2	-	-
First	N/A	Music Classroom	39	WC	0.28	-	-



'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

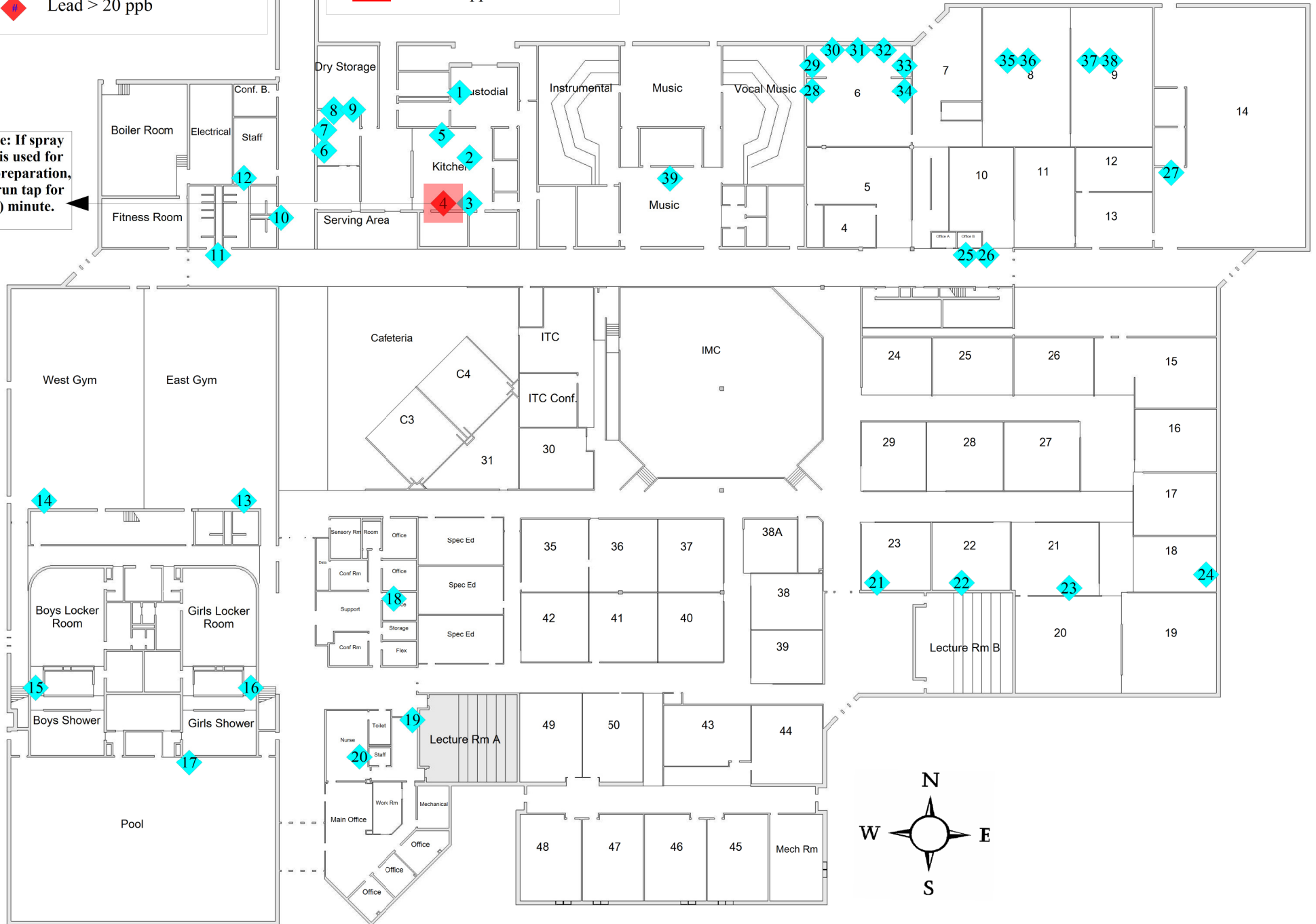
- ◆ Lead ≤ 20 ppb  
◆ Lead > 20 ppb

'First Draw' Lead in Drinking Water  
Resampling Post-Replacement  
(May 2020)

- Lead > 20 ppb

Scott Highland Middle  
Lead in Drinking Water  
Project # 19179

Update: If spray wand is used for food preparation, must run tap for one (1) minute.



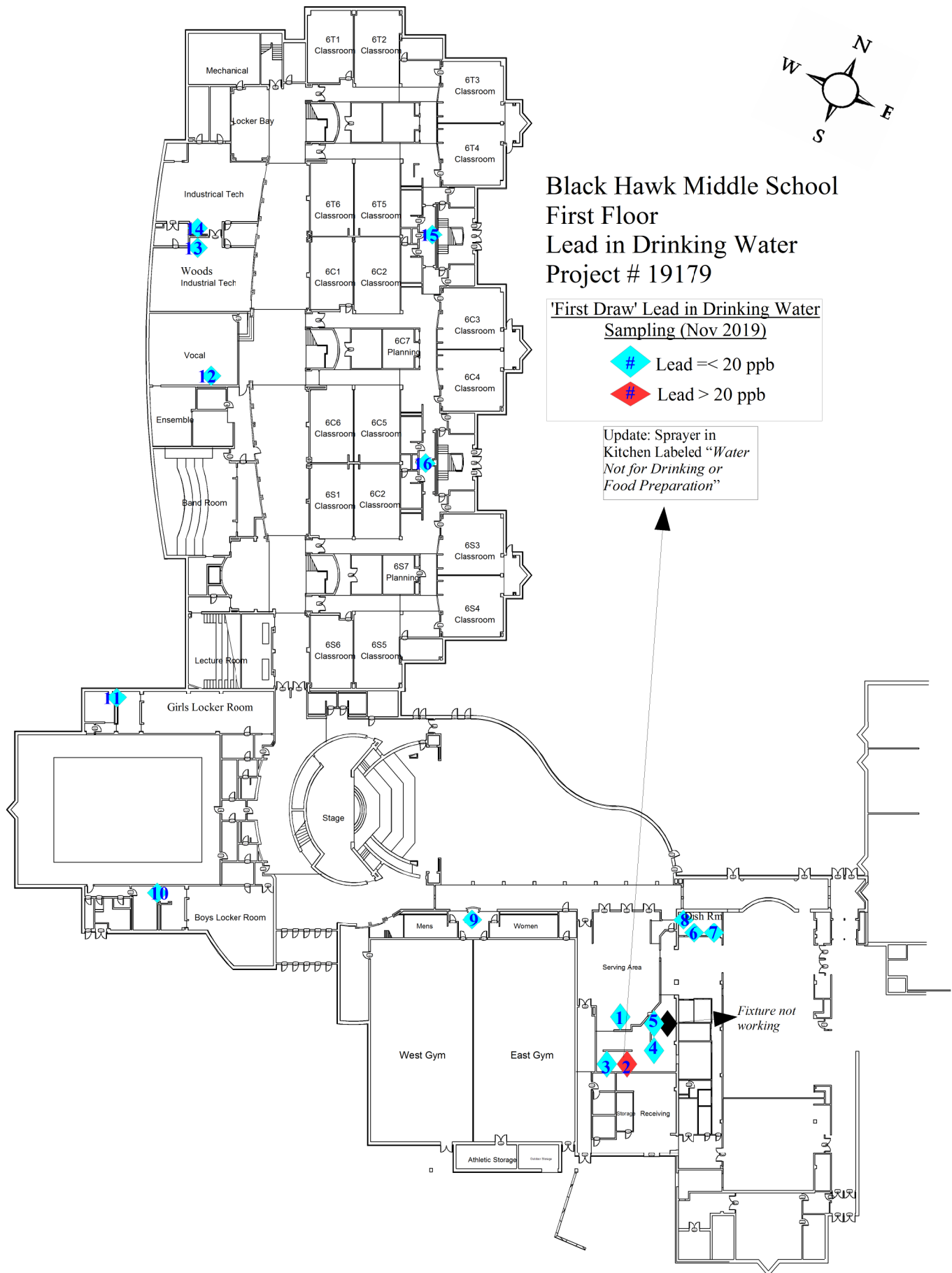


School Name: **Black Hawk Middle School (BHMS)**Date: **11/7/2019**



Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Serving	1	S	3.4
First	N/A	Kitchen	2*	SPRAY	86.6
First	N/A	Kitchen - Sink next to Spray	3	S	6.4
First	N/A	Kitchen - East	4	S	1.1
First	N/A	Kitchen - Northeast	5	S	5.3
First	N/A	Dish Room - South	6	S	15.8
First	N/A	Dish Room - North	7	S	16.2
First	N/A	Dish Room	8	SPRAY	1.7
First	N/A	Café by Bathroom	9	WC	0.41
First	N/A	Boys Locker Room	10	WC	ND
First	N/A	Girls Locker Room	11	WC	0.38
First	N/A	Vocal Room	12	WC	0.82
First	N/A	Woods Room	13	S	0.65
First	N/A	Industrial Tech Room	14	S	1.1
First	N/A	6T Hall	15	WC	ND
First	N/A	6C Hall	16	WC	0.22
Second	N/A	Foods/FACS - Northeast	17	S	2.9
Second	N/A	Foods/FACS - Southeast	18	S	3.6
Second	N/A	Foods/FACS - Southwall	19	S	5.9
Second	N/A	Foods/FACS - Southwall	20	S	2.7
Second	N/A	Foods/FACS - Southwest	21	S	15.9
Second	N/A	Foods/FACS - Northwest	22	S	4.9
Second	N/A	Foods/Facs - North	23	S	2.6
Second	N/A	7T Hall	24	WC	ND
Second	N/A	7S Hall	25	WC	1.4
Third	N/A	Special Ed	26	S	3.2
Third	N/A	Special Ed	27	S	4.6
Third	N/A	Work Room	28	S	9.7
Third	N/A	Nurse	29	S	3.5
Third	N/A	Nurse - Bath	30	S	1.5
Third	N/A	8T Hall	31	WC	0.25
Third	N/A	Lounge	32	S	1.5
Third	N/A	Lounge	33	Misc - Culligan	ND
Third	N/A	8S Hall	34	WC	0.2

\*UPDATE: Sprayer in Kitchen Labeled "Water Not for Drinking or Food Preparation" in Accordance with MDH Guidelines.





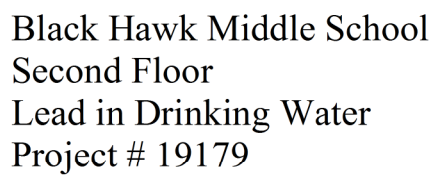
## 'First Draw' Lead in Drinking Water Sampling (Nov 2019)

	Lead $\leq$ 20 ppb
	Lead $>$ 20 ppb




*Fixture not working*




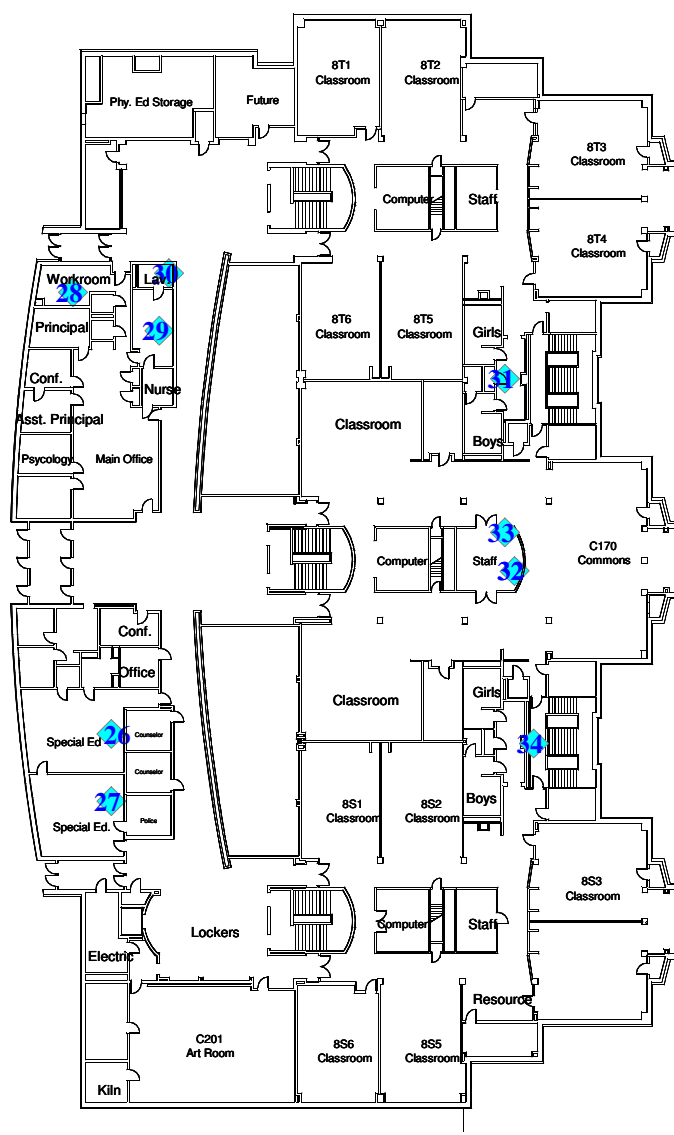


- ◆ Lead  $\leq 20$  ppb
- ◆ Lead  $> 20$  ppb



 Lead  $\leq 20$  ppb

 Lead  $> 20$  ppb





School Name: **Dakota Hills Middle School (DHMS)**Date: **11/7/2019 & 5/15/2020**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
Lower	N/A	Cafeteria	1	BF	ND	-	-
Lower	N/A	Cafeteria	2	WC	ND	-	-
Lower	N/A	Serving	3	S	30.5	45.5	1
Lower	N/A	Kitchen - Dish Wash	4	Spray	5.2	-	-
Lower	N/A	Kitchen - Dish Wash	5	S	7.6	-	-
Lower	N/A	Kitchen - Dish Wash	6	S	10.7	-	-
Lower	N/A	Kitchen	7	WC	ND	-	-
Lower	N/A	Kitchen - Center	8	S	9.1	-	-
Lower	N/A	Kitchen - East by Dish Wash	9	S	8.1	-	-
Lower	N/A	Kitchen - East by Dish Wash	10	S	49.7	0.79	0.42
Lower	N/A	Kitchen - Southeast	11	S	15.6	-	-
Lower	N/A	Kitchen	12	Misc - Steamer	25.7	6	0.9
Lower	N/A	Kitchen	13	Misc - Kettle	12.6	-	-
Lower	N/A	Kitchen - South by Cooler	14	S	9.5	-	-
Lower	N/A	Kitchen - South by Cooler	15	S	11.5	-	-
Lower	N/A	Kitchen - South	16	Spray	2.3	-	-
Lower	N/A	Kitchen - South	17	S	1.6	-	-
Lower	N/A	Band Room	18	WC	1.5	-	-
Lower	N/A	Vocal Room	19	WC	0.18	-	-
Lower	N/A	LL Hall	20	BF	ND	-	-
Lower	N/A	LL Hall	21	WC	ND	-	-
Lower	N/A	Girls Locker Room	22	WC	1.3	-	-
Lower	N/A	Boys Locker Room	23	WC	0.72	-	-
Lower	M006	Industrial Tech	24	S	0.42	-	-
Main	N/A	Main Hall	25	BF	ND	-	-
Main	N/A	Main Hall	26	WC	0.11	-	-
Main	N/A	Nurse Bath	27	S	2	-	-
Main	N/A	Nurse	28	S	6.4	-	-
Main	N/A	Work Room	29	S	1.7	-	-
Main	N/A	Upper Level Café Hall	30	WC	0.27	-	-
Main	N/A	Upper Level Café Hall	31	BF	0.18	-	-
Main	N/A	Upper Level Café Hall	32	WC	0.2	-	-
Main	N/A	East Hall	33	BF	ND	-	-
Main	N/A	East Hall	34	WC	0.16	-	-
Upper	N/A	Foods/FACS - Southwest	35	S	0.47	-	-
Upper	N/A	Foods/FACS - West	36	S	0.67	-	-
Upper	N/A	Foods/FACS - Northwest	37	S	0.85	-	-
Upper	N/A	Foods/FACS - North	38	S	0.67	-	-
Upper	N/A	Foods/FACS - Northeast	39	S	0.54	-	-
Upper	N/A	Foods/FACS - East	40	S	0.34	-	-
Upper	N/A	Foods/FACS - Southeast	41	S	0.9	-	-
Upper	N/A	220 Hall	42	BF	ND	-	-
Upper	N/A	220 Hall	43	WC	ND	-	-
Upper	N/A	210 Hall	44	BF	ND	-	-
Upper	N/A	210 Hall	45	WC	0.13	-	-
Main	N/A	Pool Balcony	46	WC	0.17	-	-

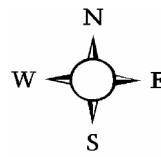


'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

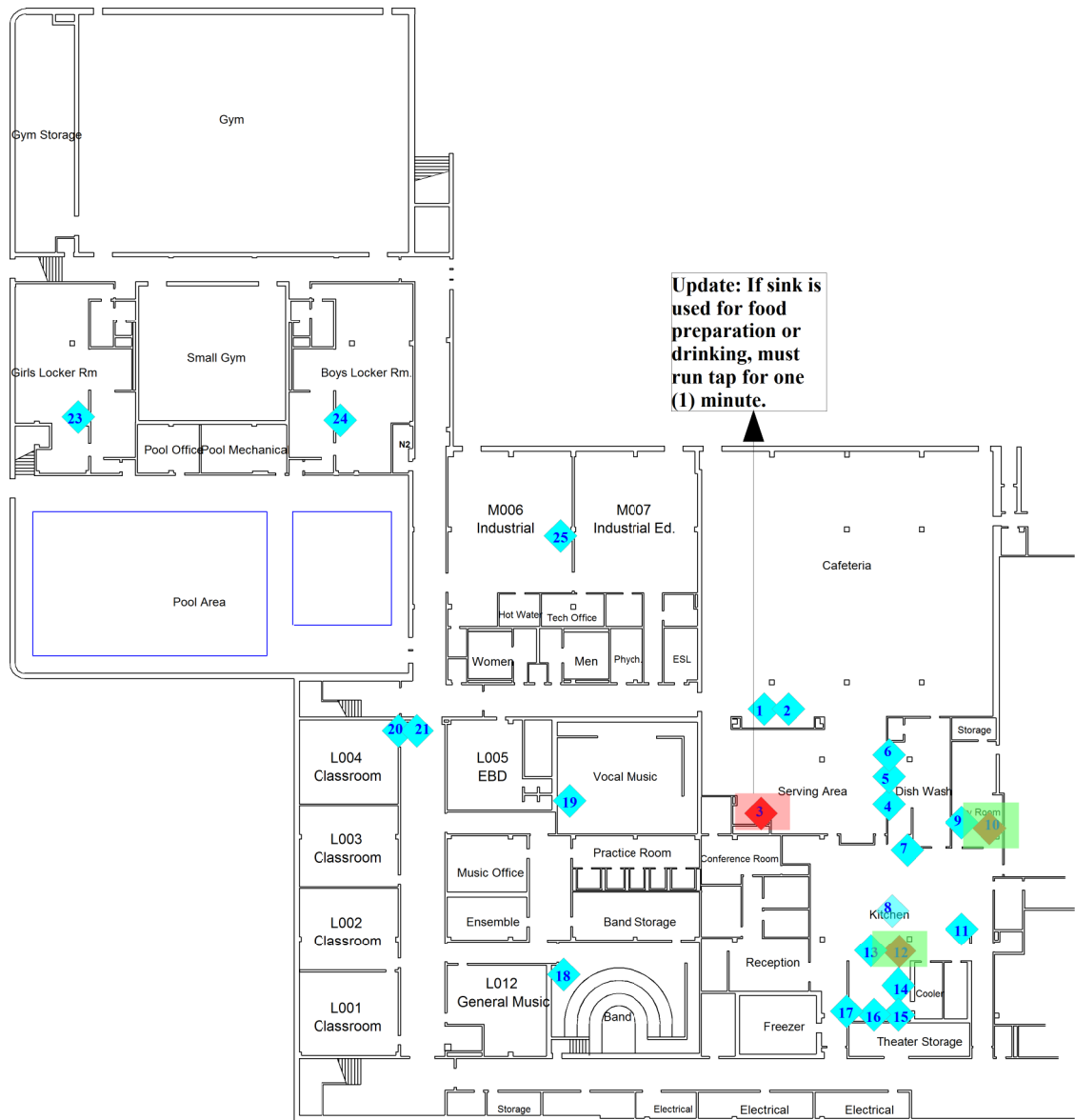
- ◆ Lead ≤ 20 ppb
- ◆ Lead > 20 ppb

'First Draw' Lead in Drinking Water  
Resampling Post-Replacement  
(May 2020)

- Lead ≤ 20 ppb
- Lead > 20 ppb

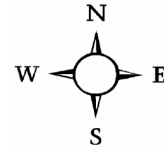


Dakota Hills Middle School  
Lower Level  
Lead in Drinking Water  
Project # 19179



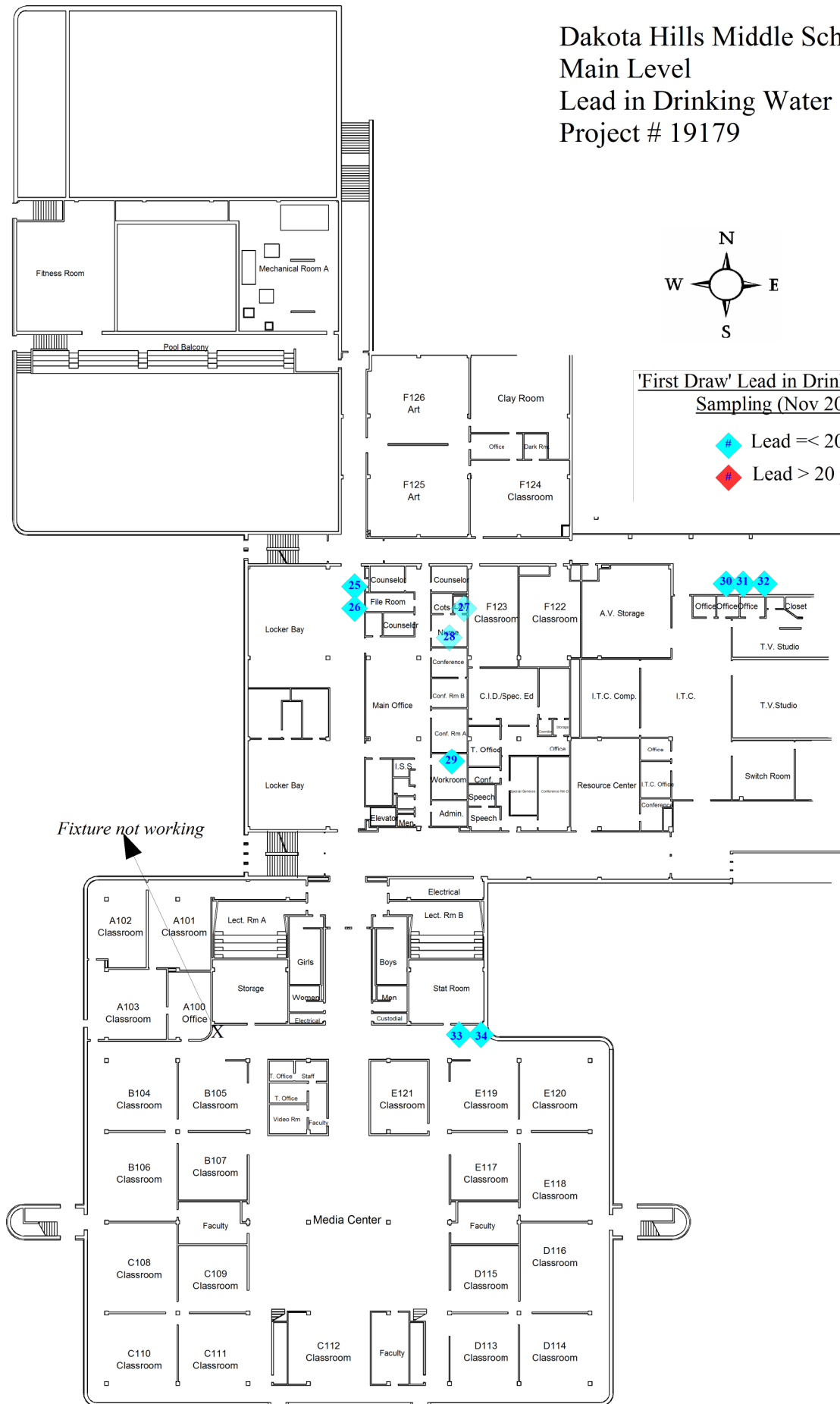


# Dakota Hills Middle School Main Level Lead in Drinking Water Project # 19179



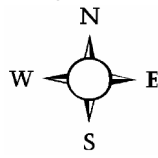
'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

- ◆ # Lead  $\leq$  20 ppb
- ◆ # Lead  $>$  20 ppb



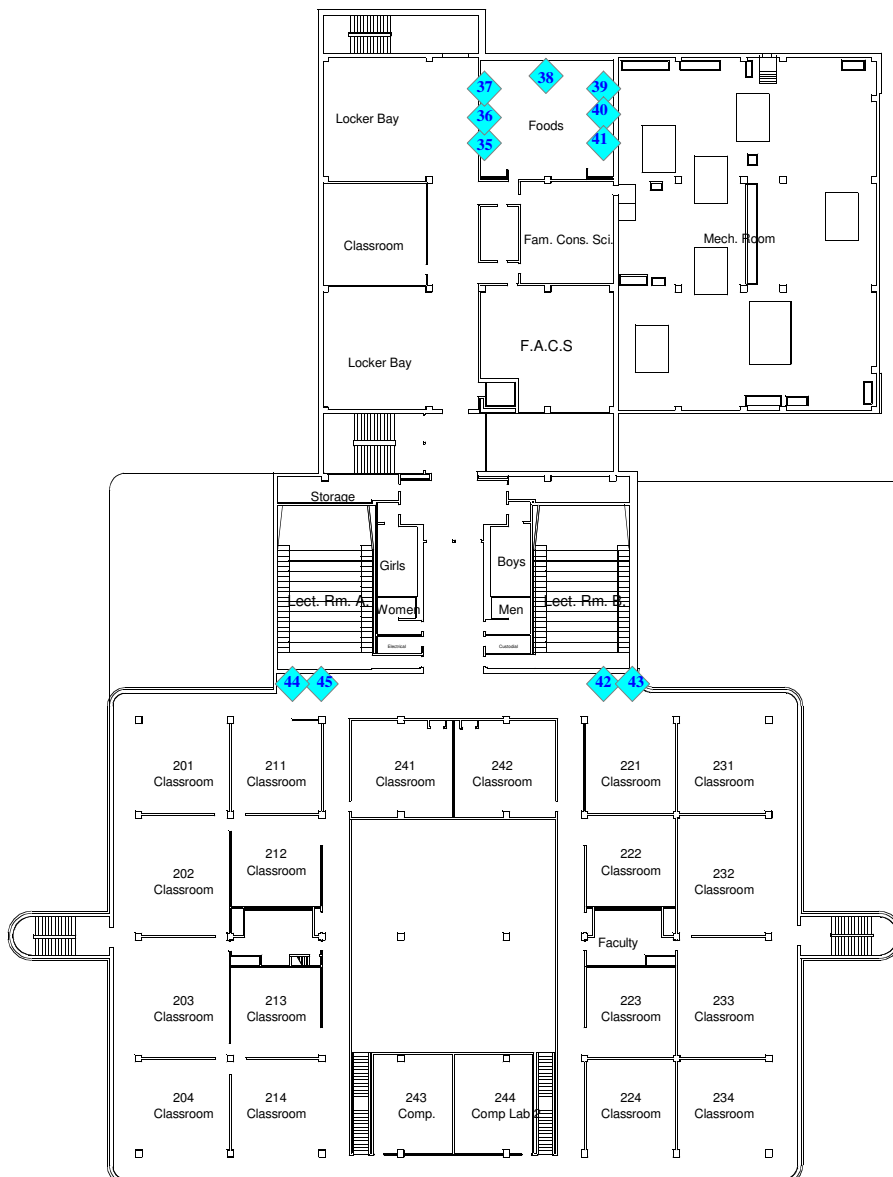


Dakota Hills Middle School  
Upper Level  
Lead in Drinking Water  
Project # 19179



'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

- ◆ Lead  $\leq$  20 ppb
- ◆ Lead  $>$  20 ppb





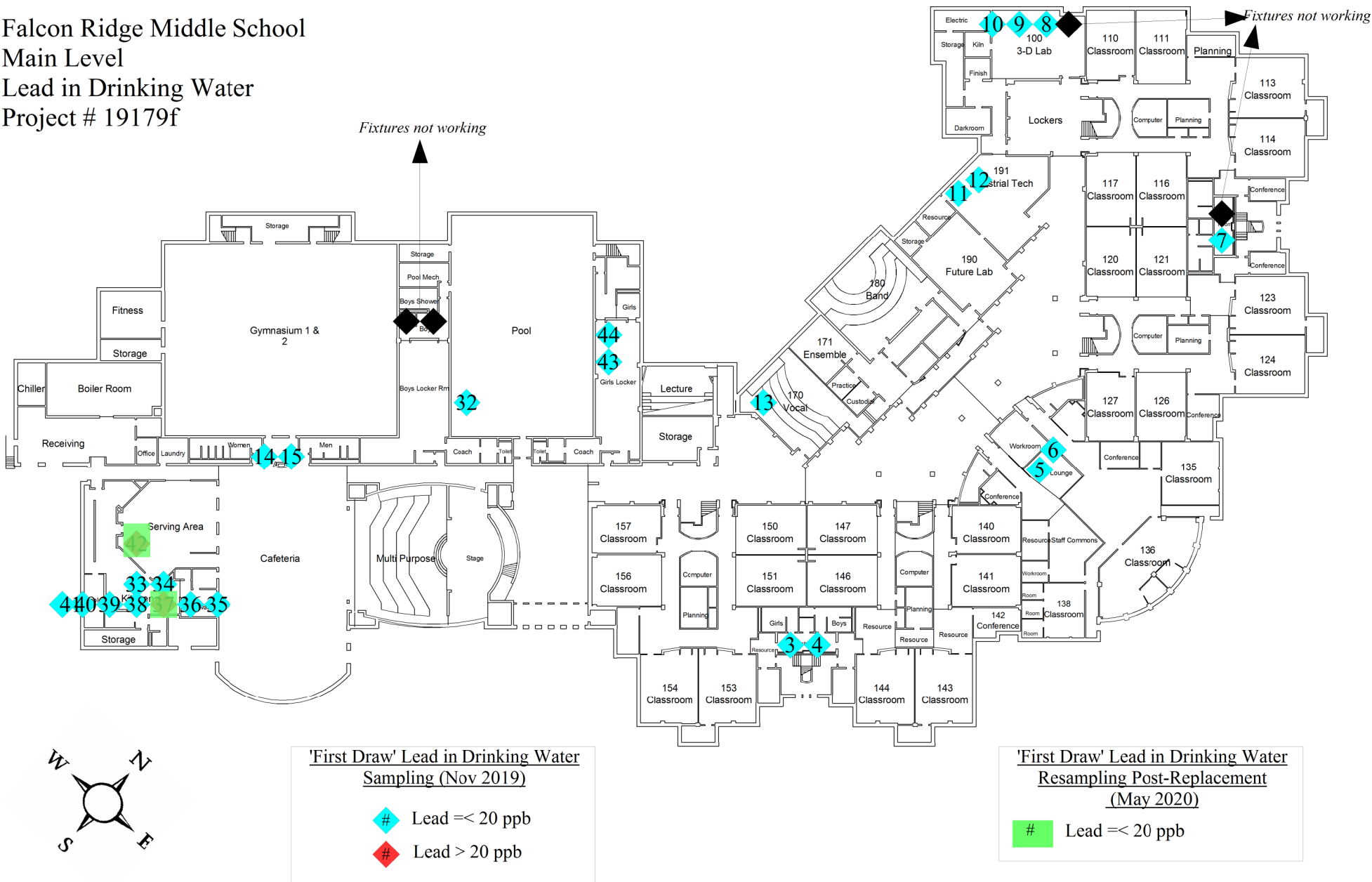
School Name: Falcon Ridge Middle School (FRMS)

Date: 11/7/2019 &amp; 5/15/2020

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
Lower	N/A	NO SAMPLE COLLECTED - ART ROOM - SINK MARKED WATER NOT FOR CONSUMPTION	1	S	N/A	-	-
Lower	N/A	NO SAMPLE COLLECTED - ART ROOM - SINK MARKED WATER NOT FOR CONSUMPTION	2	S	N/A	-	-
Lower	N/A	Hall/Bathroom	3	WC	0.62	-	-
Lower	N/A	Hall/Bathroom	4	WC	0.68	-	-
Lower	N/A	Staff	5	S	8.2	-	-
Lower	N/A	Staff	6	MISC	1.1	-	-
Lower	N/A	Hall/Bathroom	7	WC	1.6	-	-
Lower	100	3D Lab	8	S	4	-	-
Lower	100	3D Lab	9	S	7.4	-	-
Lower	100	3D Lab	10	S	8	-	-
Lower	191	Industrial Tech	11	DF	3.3	-	-
Lower	191	Industrial Tech	12	S	3.4	-	-
Lower	170	Vocal	13	DF	0.38	-	-
Lower	N/A	Hall	14	WC	0.17	-	-
Lower	N/A	Hall	15	WC	0.4	-	-
Upper	N/A	Hall/Bathroom	16	WC	0.78	-	-
Upper	N/A	Hall/Bathroom	17	WC	0.68	-	-
Upper	N/A	Hall	18	WC	0.44	-	-
Upper	N/A	Hall	19	WC	0.46	-	-
Upper	N/A	Nurse	20	MISC	ND	-	-
Upper	N/A	Nurse	21	S	9.1	-	-
Upper	N/A	Staff	22	S	6.1	-	-
Upper	N/A	Hall/Bathroom	23	WC	1.6	-	-
Upper	N/A	Hall/Bathroom	24	WC	1.4	-	-
Upper	200	Foods Lab	25	S	4.1	-	-
Upper	200	Foods Lab	26	S	3.2	-	-
Upper	200	Foods Lab	27	S	0.94	-	-
Upper	200	Foods Lab	28	S	4	-	-
Upper	200	Foods Lab	29	S	7.3	-	-
Upper	200	Foods Lab	30	S	3.2	-	-
Upper	200	Foods Lab	31	S	1.6	-	-
Lower	N/A	Pool	32	BF	0.22	-	-
Lower	N/A	Kitchen	33	S	10.8	-	-
Lower	N/A	Kitchen	34	SPRAY	7.4	-	-
Lower	N/A	Kitchen- Dish Room	35	SPRAY	4.2	-	-
Lower	N/A	Kitchen- Dish Room	36	SPRAY	2.3	-	-
Lower	N/A	Kitchen	37	S	34.5	18.8	1.5
Lower	N/A	Kitchen	38	SPRAY	12.2	-	-
Lower	N/A	Kitchen	39	S	7.4	-	-
Lower	N/A	Kitchen	40	SPRAY	5.5	-	-
Lower	N/A	Kitchen	41	S	8.7	-	-
Lower	N/A	Serving Area	42	S	27.2	3.4	0.13
Lower	N/A	Girl's Locker Room	43	WC	0.11	-	-
Lower	N/A	Girl's Locker Room	44	WC	0.13	-	-
Upper	271	Classroom	45	S	5.5	-	-
Upper	272	Classroom	46	S	9.5	-	-

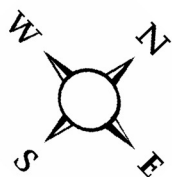


Falcon Ridge Middle School  
Main Level  
Lead in Drinking Water  
Project # 19179f





Falcon Ridge Middle School  
Upper Level  
Lead in Drinking Water  
Project # 19179



'First Draw' Lead in Drinking Water  
Sampling (Nov 2019)

◆ Lead ≤ 20 ppb

◆ Lead > 20 ppb



School Name: Valley Middle School (VMS)

Date: 11/7/2019 &amp; 5/15/2020

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)	Lead Result - Post Replacement (ppb)	Lead Result - Post Replacement - 1 Minute Flush (ppb)
First	N/A	Kitchen	1	S	12	-	-
First	N/A	Kitchen	2	S	43.7	7.4	1.8
First	N/A	Kitchen	3	S	8	12	1.9
First	N/A	Kitchen	4	S	11.7	-	-
First	N/A	Kitchen	5	SPRAY	9.5	-	-
First	N/A	Dishwasher	6	SPRAY	0.84	-	-
First	N/A	Cafeteria	7	WC	0.39	-	-
First	N/A	C107	8	S	12.8	-	-
First	N/A	Cafeteria	9	WC	ND	-	-
First	N/A	Cafeteria	10	BF	ND	-	-
First	N/A	Cafeteria	11	WC	ND	-	-
First	N/A	Cafeteria	12	BF	ND	-	-
First	N/A	Pool	13	DF	2.4	-	-
First	N/A	118	14	S	1.3	-	-
First	118	Common Area	15	WC	ND	-	-
First	118	Common Area	16	BF	ND	-	-
First	118	Common Area	17	WC	ND	-	-
First	105	Copy Room	18	S	0.48	-	-
First	106	Nurse	19	S	0.84	-	-
First	507	Classroom	20	WC	0.99	-	-
First	504	Classroom	21	WC	3.5	-	-
First	N/A	Common Area - Left	22	WC	ND	-	-
First	N/A	Common Area - Left	23	BF	ND	-	-
First	N/A	Common Area - right	24	WC	ND	-	-
First	511	South Wall	25	S	0.7	-	-
First	511	West Wall Far Left	26	S	0.6	-	-
First	511	West Wall	27	S	0.55	-	-
First	511	West Wall - Middle Left	28	S	1	-	-
First	511	West Wall - Middle Right	29	S	0.56	-	-
First	511	West Wall	30	S	0.71	-	-
First	511	West Wall - Far Right	31	S	0.43	-	-
First	N/A	NO SAMPLE COLLECTED - ART ROOM - SINK MARKED WATER NOT FOR CONSUMPTION	32	S	N/A	-	-
First	513	Right Sink	33	S	2.7	-	-
First	513	Left Sink	34	S	2.3	-	-
First	513	Corner Sink	35	S	3.4	-	-
First	N/A	NO SAMPLE COLLECTED - STEM ROOM - SINK MARKED WATER NOT FOR CONSUMPTION	36	S	N/A	-	-
First	516	Left Sink	37*	S	23.8	-	-
First	516	Middle Sink	38*	S	24.5	-	-
First	516	Right Sink	39*	S	21.2	-	-
First	N/A	Common Area - Left	40	WC	ND	-	-
First	N/A	Common Area - Left	41	BF	ND	-	-
First	N/A	Common Area - Right	42	WC	ND	-	-
First	416	Hallway	43	WC	ND	-	-
First	416	Hallway	44	BF	ND	-	-
First	416	Hallway	45	WC	ND	-	-

\*UPDATE: Sinks in Room 516 Labeled "Water Not for Drinking" in Accordance with MDH Guidelines.



# Valley Middle School

## Lead in Drinking Water

### Project # 19179





School Name: **District Service Center (DSC)**



Date: **11/8/2019**

Floor	Room Number	Location	Sample ID	Type DF = Drinking Fountain S = Sink WC = Water Cooler BF = Bottle Filler K=Kettle Misc=Miscellaneous	Lead Result (ppb)
First	N/A	Kitchen	1	S	2.3
First	N/A	Kitchen	2	Misc - Culligan	ND
First	N/A	Tech Hall	3	WC	1.2
First	N/A	Conf Hall	4*	S	<b>26.3</b>

*\*UPDATE: Sink in Conference Hall was Permanently Removed.*





 Lead  $\leq 20$  ppb  
 Lead  $> 20$  ppb



June 03, 2020

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

RE: Project: 19179 ISD 196 Lead in Drinking  
Pace Project No.: 10518161

Dear Amy Weinzierl:

Enclosed are the analytical results for sample(s) received by the laboratory on May 15, 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



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## CERTIFICATIONS

Project: 19179 ISD 196 Lead in Drinking  
Pace Project No.: 10518161

### Pace Analytical Services Minneapolis

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  
CNMI Saipan Certification #: MP0003  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605  
Georgia Certification #: 959  
Guam EPA Certification #: MN00064  
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 #: 03086  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064  
Maryland Certification #: 322  
Massachusetts Certification #: M-MN064  
Massachusetts DWP Certification #: via MN 027-053-137  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: 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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## SAMPLE SUMMARY

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10518161001	02R-VMS-Kitchen-S	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161002	02R-VMS-Kitchen-S-1MIN	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161003	37R-FRMS-Kitchen-S	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161004	37R-FRMS-Kitchen-S-1MIN	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161005	42R-FRMS-Serving-S	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161006	42R-FRMS-Serving-S-1MIN	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161007	04R-SHMS-Kitchen-Spray	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161008	04R-SHMS-Kitchen-Spray-1MIN	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161009	03R-DHMS-Serving-S	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161010	03R-DHMS-Serving-S-1MIN	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161011	10R-DHMS-Kitchen-S	Drinking Water	05/15/20 06:30	05/15/20 11:50
10518161012	10R-DHMS-Kitchen-S-1MIN	Drinking Water	05/15/20 07:15	05/15/20 11:50
10518161013	12R-DHMS-Kitchen-Misc	Drinking Water	05/15/20 07:15	05/15/20 11:50
10518161014	12R-DHMS-Kitchen-Misc-1MIN	Drinking Water	05/15/20 07:15	05/15/20 11:50
10518161015	03R-VMS-Kitchen-S	Drinking Water	05/15/20 07:15	05/15/20 11:50
10518161016	03R-VMS-Kitchen-S-1MIN	Drinking Water	05/15/20 07:15	05/15/20 11:50

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## SAMPLE ANALYTE COUNT

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10518161001	02R-VMS-Kitchen-S	EPA 200.8	BWB	1
10518161002	02R-VMS-Kitchen-S-1MIN	EPA 200.8	BWB	1
10518161003	37R-FRMS-Kitchen-S	EPA 200.8	BWB	1
10518161004	37R-FRMS-Kitchen-S-1MIN	EPA 200.8	BWB	1
10518161005	42R-FRMS-Serving-S	EPA 200.8	BWB	1
10518161006	42R-FRMS-Serving-S-1MIN	EPA 200.8	BWB	1
10518161007	04R-SHMS-Kitchen-Spray	EPA 200.8	BWB	1
10518161008	04R-SHMS-Kitchen-Spray-1MIN	EPA 200.8	BWB	1
10518161009	03R-DHMS-Serving-S	EPA 200.8	BWB	1
10518161010	03R-DHMS-Serving-S-1MIN	EPA 200.8	BWB	1
10518161011	10R-DHMS-Kitchen-S	EPA 200.8	BWB	1
10518161012	10R-DHMS-Kitchen-S-1MIN	EPA 200.8	BWB	1
10518161013	12R-DHMS-Kitchen-Misc	EPA 200.8	BWB	1
10518161014	12R-DHMS-Kitchen-Misc-1MIN	EPA 200.8	BWB	1
10518161015	03R-VMS-Kitchen-S	EPA 200.8	BWB	1
10518161016	03R-VMS-Kitchen-S-1MIN	EPA 200.8	BWB	1

PASI-M = Pace Analytical Services - Minneapolis

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

<b>Sample: 02R-VMS-Kitchen-S</b>		<b>Lab ID: 10518161001</b>	Collected: 05/15/20 06:30	Received: 05/15/20 11:50	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	<b>7.4</b>	ug/L	0.10	1		06/02/20 15:54	7439-92-1	
------	------------	------	------	---	--	----------------	-----------	--

<b>Sample: 02R-VMS-Kitchen-S-1MIN</b>		<b>Lab ID: 10518161002</b>	Collected: 05/15/20 06:30	Received: 05/15/20 11:50	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	<b>1.8</b>	ug/L	0.10	1		06/02/20 16:02	7439-92-1	
------	------------	------	------	---	--	----------------	-----------	--

<b>Sample: 37R-FRMS-Kitchen-S</b>		<b>Lab ID: 10518161003</b>	Collected: 05/15/20 06:30	Received: 05/15/20 11:50	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	<b>18.8</b>	ug/L	0.10	1		06/02/20 16:05	7439-92-1	
------	-------------	------	------	---	--	----------------	-----------	--

<b>Sample: 37R-FRMS-Kitchen-S-1MIN</b>		<b>Lab ID: 10518161004</b>	Collected: 05/15/20 06:30	Received: 05/15/20 11:50	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	<b>1.5</b>	ug/L	0.10	1		06/02/20 16:16	7439-92-1	
------	------------	------	------	---	--	----------------	-----------	--

<b>Sample: 42R-FRMS-Serving-S</b>		<b>Lab ID: 10518161005</b>	Collected: 05/15/20 06:30	Received: 05/15/20 11:50	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	<b>3.4</b>	ug/L	0.10	1		06/02/20 16:14	7439-92-1	
------	------------	------	------	---	--	----------------	-----------	--

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

**Sample: 42R-FRMS-Serving-S-1MIN**    **Lab ID: 10518161006**    Collected: 05/15/20 06:30    Received: 05/15/20 11:50    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	0.13	ug/L	0.10	1		06/02/20 16:26	7439-92-1	
------	------	------	------	---	--	----------------	-----------	--

**Sample: 04R-SHMS-Kitchen-Spray**    **Lab ID: 10518161007**    Collected: 05/15/20 06:30    Received: 05/15/20 11:50    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	81.4	ug/L	0.10	1		06/02/20 16:28	7439-92-1	
------	------	------	------	---	--	----------------	-----------	--

**Sample: 04R-SHMS-Kitchen-Spray-1MIN**    **Lab ID: 10518161008**    Collected: 05/15/20 06:30    Received: 05/15/20 11:50    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	6.0	ug/L	0.10	1		06/02/20 16:29	7439-92-1	
------	-----	------	------	---	--	----------------	-----------	--

**Sample: 03R-DHMS-Serving-S**    **Lab ID: 10518161009**    Collected: 05/15/20 06:30    Received: 05/15/20 11:50    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	45.5	ug/L	0.10	1		06/02/20 16:31	7439-92-1	
------	------	------	------	---	--	----------------	-----------	--

**Sample: 03R-DHMS-Serving-S-1MIN**    **Lab ID: 10518161010**    Collected: 05/15/20 06:30    Received: 05/15/20 11:50    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		06/02/20 16:33	7439-92-1	
------	-----	------	------	---	--	----------------	-----------	--

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

<b>Sample: 10R-DHMS-Kitchen-S</b>		<b>Lab ID: 10518161011</b>	Collected: 05/15/20 06:30	Received: 05/15/20 11:50	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	<b>0.79</b>	ug/L	0.10	1		06/02/20 16:35	7439-92-1	
------	-------------	------	------	---	--	----------------	-----------	--

<b>Sample: 10R-DHMS-Kitchen-S-1MIN</b>		<b>Lab ID: 10518161012</b>	Collected: 05/15/20 07:15	Received: 05/15/20 11:50	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	<b>0.42</b>	ug/L	0.10	1		06/02/20 16:44	7439-92-1	
------	-------------	------	------	---	--	----------------	-----------	--

<b>Sample: 12R-DHMS-Kitchen-Misc</b>		<b>Lab ID: 10518161013</b>	Collected: 05/15/20 07:15	Received: 05/15/20 11:50	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	<b>6.0</b>	ug/L	0.10	1		06/02/20 16:46	7439-92-1	
------	------------	------	------	---	--	----------------	-----------	--

<b>Sample: 12R-DHMS-Kitchen-Misc-1MIN</b>		<b>Lab ID: 10518161014</b>	Collected: 05/15/20 07:15	Received: 05/15/20 11:50	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	<b>0.90</b>	ug/L	0.10	1		06/02/20 16:48	7439-92-1	
------	-------------	------	------	---	--	----------------	-----------	--

<b>Sample: 03R-VMS-Kitchen-S</b>		<b>Lab ID: 10518161015</b>	Collected: 05/15/20 07:15	Received: 05/15/20 11:50	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	<b>12.0</b>	ug/L	0.10	1		06/02/20 16:50	7439-92-1	
------	-------------	------	------	---	--	----------------	-----------	--

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

Sample: 03R-VMS-Kitchen-S-1MIN		Lab ID: 10518161016		Collected: 05/15/20 07:15		Received: 05/15/20 11:50		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	1.9	ug/L	0.10	1		06/02/20 16:52	7439-92-1		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALITY CONTROL DATA

Project: 19179 ISD 196 Lead in Drinking  
Pace Project No.: 10518161

QC Batch:	675857	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:	10518161001, 10518161002, 10518161003, 10518161004, 10518161005, 10518161006, 10518161007, 10518161008, 10518161009, 10518161010, 10518161011, 10518161012, 10518161013, 10518161014, 10518161015, 10518161016		

METHOD BLANK:	3618301	Matrix:	Water
Associated Lab Samples:	10518161001, 10518161002, 10518161003, 10518161004, 10518161005, 10518161006, 10518161007, 10518161008, 10518161009, 10518161010, 10518161011, 10518161012, 10518161013, 10518161014, 10518161015, 10518161016		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	06/02/20 15:52	

LABORATORY CONTROL SAMPLE: 3618302						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	109	109	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3632300 3632301												
Parameter	Units	10518161001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	7.4	100	100	117	107	109	100	70-130	8	20	

MATRIX SPIKE SAMPLE: 3632302							
Parameter	Units	10518161011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	0.79	100	104	103	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALIFIERS

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

---

### 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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 19179 ISD 196 Lead in Drinking

Pace Project No.: 10518161

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10518161001	02R-VMS-Kitchen-S	EPA 200.8	675857		
10518161002	02R-VMS-Kitchen-S-1MIN	EPA 200.8	675857		
10518161003	37R-FRMS-Kitchen-S	EPA 200.8	675857		
10518161004	37R-FRMS-Kitchen-S-1MIN	EPA 200.8	675857		
10518161005	42R-FRMS-Serving-S	EPA 200.8	675857		
10518161006	42R-FRMS-Serving-S-1MIN	EPA 200.8	675857		
10518161007	04R-SHMS-Kitchen-Spray	EPA 200.8	675857		
10518161008	04R-SHMS-Kitchen-Spray-1MIN	EPA 200.8	675857		
10518161009	03R-DHMS-Serving-S	EPA 200.8	675857		
10518161010	03R-DHMS-Serving-S-1MIN	EPA 200.8	675857		
10518161011	10R-DHMS-Kitchen-S	EPA 200.8	675857		
10518161012	10R-DHMS-Kitchen-S-1MIN	EPA 200.8	675857		
10518161013	12R-DHMS-Kitchen-Misc	EPA 200.8	675857		
10518161014	12R-DHMS-Kitchen-Misc-1MIN	EPA 200.8	675857		
10518161015	03R-VMS-Kitchen-S	EPA 200.8	675857		
10518161016	03R-VMS-Kitchen-S-1MIN	EPA 200.8	675857		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



# CHAIN-OF-CUSTODY / Analytical Request Document

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

**Field Environmental Consulting**  
8619 Eagle Creek Parkway  
Savage, MN 55378

Attn: Amy Weinzierl  
Mailbox@fieldconsultinginc.com  
952-746-5880  
Lead in Drinking Water  
Project # ~~19179~~ 19179

## Section C

Invoice Information:

Project Information:  
b: 19179 JSD Flt  
Attention: Jenny Field  
Company Name: Field Env. Consulting  
Address:  
Pace Quote Reference:  
Pace Project Manager:  
Pace Profile #:  
Order No.:  
Name:  
Number: 19179

Page: 1 of 2  
2266208  
REGULATORY AGENCY  
☒ NPDES ☐ GROUND WATER ☒ DRINKING WATER  
☐ UST ☐ RCRA ☐ OTHER  
Site Location: MN  
STATE: MN

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Y/N	Requested Analysis Filtered (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE END/GRAB						
1	02R-VMS-Kitchen-S	DW	5/15/2020	6:30							021
2	02R-VMS-Kitchen-S-1MM	WT									022
3	37R-FRMS-Kitchen-S	WW									023
4	37R-FRMS-Kitchen-S-1MM	P									024
5	42R-FRMS-Kitchen-S	SL									025
6	42R-FRMS-Serving-S	OL									026
7	04R-SHMS-Kitchen-Spray	WP									027
8	04R-SHMS-Kitchen-Spray-1MM	AR									028
9	03R-DHMS-Serving-S	TSS									029
10	03R-DHMS-Serving-S-1MM	OT									030
11	10R-DHMS-Kitchen-S										031
12	10R-DHMS-Kitchen-S-1MM										032

Analysis Test 1 Lead 200.8  
ACCEPTED BY / AFFILIATION: Amy Murrary  
DATE: 5/15/2020  
TIME: 11:48am  
RELINQUISHED BY / AFFILIATION: Amy Murrary  
DATE: 5/15/2020  
TIME: 7:15  
SAMPLE CONDITIONS: Ice (Y/N) Received on (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)  
Temp in °C: 24.8  
DATE Signed (MM/DD/YY): 5/15/2020  
PRINT Name of SAMPLER: Amy Murrary  
SIGNATURE of SAMPLER: Amy Murrary

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.



# CHAIN-OF-CUSTODY / Analytical Request Document

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

**Field Environmental Consulting**  
8612 Eagle Creek Parkway  
Savage, MN 55378

Attn: Amy Weirzierl  
Mailbox@fieldconsultinginc.com  
952-746-5880  
Lead in Drinking Water  
Project # 19179

## Section B

Invoice Information:

To: 19179 JSD 1910

To:

Base Order No.:

Contract Name:

Contract Number:

## Section C

Invoice Information:

Attention: Jenny Field

Company Name:

Address:

Pace Guide:

Pace Project Manager:

Pace Profile #:

Page:

2 of 2

2265978

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☒ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location

STATE: MN

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub> HCl NaOH Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Methanol Other	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE END/GRAB							
1	12R-DAMS-Kitchen-MISC	DW	G	DATE	TIME	5/15/20	7:55am					013
2	12R-DAMS-Kitchen-MISC-1MIN	WT	G	DATE	TIME	5/15/20	7:55am					014
3	03R-VMS-Kitchen-S	WW	G	DATE	TIME							015
4	03R-VMS-Kitchen-S-MIN	P	G	DATE	TIME							016
5		SL										
6		OL										
7		WP										
8		AR										
9		TS										
10		OT										
11												
12												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION		SAMPLE CONDITIONS		Temp in °C	Received on	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	DATE	TIME	DATE	TIME	DATE	TIME				
Amy Murray	5/15/20	11:48am	Amy Murray	5/15/20	11:50	24.8	N	N	N	N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:


ORIGINAL

DATE Signed (MM/DD/YYYY): 5/15/2020

\*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.

F-ALL-C-010-rev.00, 09Nov2017



	Document Name: <b>Sample Condition Upon Receipt (SCUR) - MN</b>	Document Revised: 27Mar2020 <b>Page 1 of 1</b>
	Document No.: <b>ENV-FRM-MIN4-0150 Rev.00</b>	Pace Analytical Services - <b>Minneapolis</b>

<b>Sample Condition Upon Receipt</b>	<b>Client Name:</b> <u>Field Environmental Consulting</u>	<b>Project #:</b> <b>WO# : 10518161</b>
	<b>Courier:</b> <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input checked="" type="checkbox"/> Client <input type="checkbox"/> Pace <input type="checkbox"/> SpeedDee <input type="checkbox"/> Commercial    See Exceptions	<b>PM:</b> JDD <b>Due Date:</b> 06/01/20 <b>CLIENT:</b> FIELD ENV

**Tracking Number:** \_\_\_\_\_  
**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

<b>Did Samples Originate in West Virginia?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Were All Container Temps Taken?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Temp should be above freezing to 6°C <b>Cooler Temp Read w/temp blank:</b> _____ °C	<b>Average Corrected Temp (no temp blank only):</b> <input checked="" type="checkbox"/> See Exceptions
<b>Correction Factor:</b> <u>+0.2</u> <b>Cooler Temp Corrected w/temp blank:</b> _____ °C	<u>24.8</u> °C <input type="checkbox"/> 1 Container

**USDA Regulated Soil:** ☒ N/A, water sample/Other: \_\_\_\_\_    **Date/Initials of Person Examining Contents:** RHL 5/15/2020  
 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and/or Signature on COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
<b>Short Hold Time Analysis (&lt;72 hr)?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> HPC <input type="checkbox"/> Total Coliform/E coli <input type="checkbox"/> BOD/cBOD <input type="checkbox"/> Hex Chrome <input type="checkbox"/> Turbidity <input type="checkbox"/> Nitrate <input type="checkbox"/> Nitrite <input type="checkbox"/> Orthophos <input type="checkbox"/> Other _____
<b>Rush Turn Around Time Requested?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
<b>Sufficient Volume?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7.
<b>Correct Containers Used?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
<b>-Pace Containers Used?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Containers Intact?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
<b>Field Filtered Volume Received for Dissolved Tests?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10. Is sediment visible in the dissolved container? <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Is sufficient information available to reconcile the samples to the COC?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. If no, write ID/ Date/Time on Container Below: <input type="checkbox"/> See Exception
<b>Matrix:</b> <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil <input type="checkbox"/> Oil <input type="checkbox"/> Other _____	
<b>All containers needing acid/base preservation have been checked?</b> <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. Sample # <u>H6: 1/2</u> <input type="checkbox"/> NaOH <input checked="" type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Zinc Acetate
<b>All containers needing preservation are found to be in compliance with EPA recommendation? (HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, &lt;2pH, NaOH &gt;9 Sulfide, NaOH &gt;12 Cyanide)</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<b>Positive for Res. Chlorine?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>pH Paper Lot#</b> <input checked="" type="checkbox"/> See Exception
<b>Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Res. Chlorine    0-6 Roll    0-6 Strip    0-14 Strip
<b>Extra labels present on soil VOA or WIDRO containers?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> See Exception
<b>Headspace in VOA Vials (greater than 6mm)?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>Trip Blank Present?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
<b>Trip Blank Custody Seals Present?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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:** 5/19/20

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).



