

Seattle Public Schools
Drinking Water Quality Program

Results of Water Quality Testing
for
THURGOOD MARSHALL ELEMENTARY SCHOOL

Updated February 7, 2019

General Information:

Plumbing piping materials: galvanized steel and copper.

Remediation plan:

This remediation plan is based on a Water Quality policy approved by the School Board. The policy includes standards for the presence of lead, cadmium, copper, iron and other substances in drinking water.

Sinks (S in the report) are not considered drinking water sources. We recognize that there is the potential for students to want to drink from classroom hand-washing sinks, so we test all of those. Where a student's choice to drink from a sink could be a problem, we post a reminder sign, as we do at all restroom sinks.

Status:

Policy Criteria:

All source doesn't meet policy criteria.

Follow-up monitoring: Will be performed in 2020-2021.

Service: The school will be flushed after any breaks longer than five days.

Water Quality Testing Results:

Legend

Symbol	Definition
SE	service entry (main)
B	bubbler
S	sink (faucet)
B/S	sink/bubbler combination
S/B	sink/bubbler combination
ppb	parts per billion
ppm	parts per million
NA	not applicable
None	no action required
Unk	unknown status or action
Sample	sample needs to be taken
Re-test	fixture needs to be resampled
Conf	resample to confirm measurement
No flush	not flushed before sampling
Sink	sampled faucet of S/B combo
Used	recently used; no 1st draw sample possible
PS	post sign
Disable(d)	fixture disabled in response to water quality testing
BDSS	Bubbler disabled, sign on sink
IF	install filter
RB	replace bubbler
RB/IF	replace bubbler and/or install filter
RF	replace faucet
RF/IF	replace faucet and/or install filter
BW	disable fixture and provide bottled water until remediated
Leaks	leaking fixture
NW	not working properly (sample S when B of S/B NW)
OS	out of service - disabled until fixed
RS	return to service - now passes testing
Rem	Removed from system - no longer exists

Table 1. Summary of Results

CURRENT STATUS											
FIXTURE INFORMATION			LEAD		CADMIUM		COPPER		IRON		OK?
Fixture ID	Type	Location	Pass/Fail	Status	Pass/Fail	Status	Pass/Fail	Status	Pass/Fail	Status	Yes/No/Status
01	B	outside gym hallway	P	None	P	None	P	None	P	None	Yes
02	B/S	room 116	P	None	P	None	P	None			Yes
03	B/S	room 115	P	None	P	None	P	None			Yes
04	S	teachers lounge	P	None	P	None	P	None	P	None	Yes
05	B	hallway	P	None	P	None	P	None			Yes
06	B/S	room 113	P	None	P	None	P	None	P	None	Yes
07	B/S	room 112	P	None	P	None	P	None	P	None	Yes
08	S	nurse's office	P	None	P	None	P	None	P	None	Yes
09	B/S	room 111	P	None	P	None	P	None			Yes
10	B/S	room 110	P	None	P	None	P	None			Yes
11	B	hallway (central)	P	None	P	None	P	None			Yes
12	B/S	room 101	P	None	P	None	P	None			Yes
13	S	storage room, 142A	P	None	P	None	P	None			Yes
14	S	room 104, south wall	P	None	P	None	P	None			Yes
15	S	room 105, east wall	P	None	P	None	P	None	P	None	Yes
16	B/S	room 106	P	None	P	None	P	None	P	None	Yes
16A	S	Room 106	P	None	P	None	P	None			Yes
17	B/S	room 107	P	None	P	None	P	None			Yes
17A	S	Room 107	P	None	P	None	P	None			Yes
18	B/S	room 108	P	None	P	None	P	None			Yes
19	B/S	room 109	P	None	P	None	P	None			Yes
20	B/S	room 201	P	None	P	None	P	None	P	None	Yes
21	B/S	room 202	P	None	P	None	P	None	P	None	Yes
22	B/S	room 205	P	None	P	None	P	None	P	None	Yes
23	B/S	room 206	P	None	P	None	P	None			Yes
24	B/S	room 209	P	None	P	None	P	None	P	None	Yes
25	B/S	room 210	P	None	P	None	P	None	P	None	Yes
26	S	room 208	P	None	P	None	P	None	P	None	Yes
27	B/S	room 204	P	None	P	None	P	None	P	None	Yes
28	B/S	room 203	P	None	P	None	P	None	P	None	Yes
29	S/B	room 207 - filtered	P	None	P	None	P	None			Yes
30	B	2nd floor west hall	P	None	P	None	P	None			Yes
41	S	kitchen sink	P	None	P	None	P	None	P	None	Yes
42	S	Kitchen, sprayer	P	None	P	None	P	None	P	None	Yes
44	S	room 105 South wall	P	None	P	None	P	None	P	None	Yes
45	S	room 114, family room	P	None	P	None	P	None			Yes
46	S	conselor room, rm 120	P	None	P	None	P	None			Yes
48	S	room 103	P	None	P	None	P	None			Yes
49	S	room 104, west wall	P	None	P	None	P	None			Yes
50	S	library office	P	None	P	None	P	None	P	None	Yes
51	S	office work room	P	None	P	None	P	None			Yes

Table 2. Lead Test Results

Test Results (Lead/Pb, ppb)																
FIXTURE INFORMATION			9/26/2008			11/2/2011			11/25/2014			8/9/2018			Summary Status	
Fixture ID	Type	Location	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	Pass/Fail	Status
01	B	outside gym hallway	<1	<1	P	<1	<1	P	<1	<1	P				P	None
02	B/S	room 116	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
03	B/S	room 115	1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
04	S	teachers lounge	2	<1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
05	B	hallway	<1	<1	P	<1	<1	P	<1	<1	P	1	<1	P	P	None
06	B/S	room 113	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
07	B/S	room 112	<1	<1	P	<1	<1	P	<1	<1	P	2	<1	P	P	None
08	S	nurse's office	1	<1	P				5	<1	P	4	<1	P	P	None
09	B/S	room 111	<1	<1	P	<1	<1	P	<1	<1	P	1	<1	P	P	None
10	B/S	room 110	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
11	B	hallway (central)	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
12	B/S	room 101	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
13	S	storage room, 142A	<1	9	P	6	1	P	3	<1	P	2	<1	P	P	None
14	S	room 104, south wall	<1	<1	P	4	<1	P	2	<1	P	<1	<1	P	P	None
15	S	room 105, east wall	3	<1	P	5	<1	P	<1	<1	P	<1	<1	P	P	None
16	B/S	room 106										<1	<1	P	P	None
16A	S	Room 106	2	<1	P	3	<1	P	<1	<1	P				P	None
17	B/S	room 107	<1	<1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
17A	S	Room 107	<1	<1	P	2	<1	P	<1	<1	P				P	None
18	B/S	room 108	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
19	B/S	room 109	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
20	B/S	room 201	2	1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
21	B/S	room 202	1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
22	B/S	room 205	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
23	B/S	room 206	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
24	B/S	room 209	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
25	B/S	room 210	<1	<1	P	<1	<1	P	1	<1	P	1	<1	P	P	None
26	S	room 208	1	<1	P	3	<1	P	<1	<1	P	<1	<1	P	P	None
27	B/S	room 204	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
28	B/S	room 203	1	<1	P	1	<1	P	<1	<1	P	<1	<1	P	P	None
29	S/B	room 207 - filtered	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
30	B	2nd floor west hall	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
41	S	kitchen sink	2	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
42	S	Kitchen, sprayer	<1	<1	P	1	<1	P	<1	<1	P	<1	<1	P	P	None
44	S	room 105 South wall	2	<1	P	3	<1	P	1	<1	P				P	None
45	S	room 114, family room	4	1	P	5	<1	P	<1	<1	P	<1	<1	P	P	None
46	S	conselor room, rm 120	15	1		10	2	P	19	2		3	1	P	P	None
48	S	room 103	3	<1	P	1	<1	P							P	None
49	S	room 104, west wall	2	1	P	3	<1	P	<1	<1	P	<1	<1	P	P	None
50	S	library office	3	<1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
51	S	office work room							8	<1	P	<1	2	P	P	None

Table 3. Cadmium Test Results

Test Results (Cadmium/Cd, ppb)																
FIXTURE INFORMATION			9/26/2008			11/2/2011			11/25/2014			8/9/2018			Summary Status	
Fixture ID	Type	Location	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	Pass/Fail	Status
01	B	outside gym hallway	<1	<1	P	<1	<1	P	<1	<1	P				P	None
02	B/S	room 116	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
03	B/S	room 115	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
04	S	teachers lounge	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
05	B	hallway	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
06	B/S	room 113	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
07	B/S	room 112	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
08	S	nurse's office	<1	<1	P				<1	<1	P	<1	<1	P	P	None
09	B/S	room 111	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
10	B/S	room 110	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
11	B	hallway (central)	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
12	B/S	room 101	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
13	S	storage room, 142A	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
14	S	room 104, south wall	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
15	S	room 105, east wall	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
16	B/S	room 106										<1	<1	P	P	None
16A	S	Room 106	<1	<1	P	<1	<1	P	<1	<1	P				P	None
17	B/S	room 107	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
17A	S	Room 107	<1	<1	P	<1	<1	P	<1	<1	P				P	None
18	B/S	room 108	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
19	B/S	room 109	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
20	B/S	room 201	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
21	B/S	room 202	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
22	B/S	room 205	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
23	B/S	room 206	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
24	B/S	room 209	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
25	B/S	room 210	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
26	S	room 208	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
27	B/S	room 204	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
28	B/S	room 203	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
29	S/B	room 207 - filtered	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
30	B	2nd floor west hall	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
41	S	kitchen sink	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
42	S	Kitchen, sprayer	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
44	S	room 105 South wall	<1	<1	P	<1	<1	P	<1	<1	P				P	None
45	S	room 114, family room	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
46	S	conselor room, rm 120	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
48	S	room 103	<1	<1	P	<1	<1	P							P	None
49	S	room 104, west wall	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
50	S	library office	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
51	S	office work room							<1	<1	P	<1	<1	P	P	None

Table 4. Copper Test Results

Test Results (Copper/Cu, ppm)																
FIXTURE INFORMATION			9/26/2008			11/2/2011			11/25/2014			8/9/2018			Summary Status	
Fixture ID	Type	Location	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	Pass/Fail	Status
01	B	outside gym hallway	0.002	0.004	P	<0.002	<0.002	P	0.003	0.003	P				P	None
02	B/S	room 116	0.005	0.002	P	0.003	<0.002	P	<0.002	<0.002	P	<0.002	<0.002	P	P	None
03	B/S	room 115	0.19	0.068	P	0.134	0.111	P	0.173	0.179	P	0.216	0.103	P	P	None
04	S	teachers lounge	0.142	0.115	P	0.094	0.094	P	0.11	0.118	P	0.122	0.105	P	P	None
05	B	hallway	0.014	0.02	P	0.007	0.008	P	0.003	0.008	P	0.012	0.008	P	P	None
06	B/S	room 113	0.002	0.002	P	<0.002	<0.002	P	0.002	<0.002	P	0.003	<0.002	P	P	None
07	B/S	room 112	0.006	0.004	P	0.003	<0.002	P	<0.002	<0.002	P	0.011	0.003	P	P	None
08	S	nurse's office	0.06	0.032	P				0.113	0.169	P	0.125	0.076	P	P	None
09	B/S	room 111	0.174	0.062	P	0.124	0.102	P	0.045	0.062	P	0.368	0.134	P	P	None
10	B/S	room 110	0.21	0.095	P	0.12	0.13	P	0.139	0.17	P	0.157	0.178	P	P	None
11	B	hallway (central)	0.18	0.109	P	0.081	0.061	P	0.124	0.097	P	0.147	0.1	P	P	None
12	B/S	room 101	0.067	0.067	P	0.076	0.068	P	0.16	0.166	P	0.169	0.127	P	P	None
13	S	storage room, 142A	0.034	0.083	P	0.12	0.269	P	0.296	0.424	P	0.326	0.354	P	P	None
14	S	room 104, south wall	0.196	0.046	P	0.07	0.062	P	0.087	0.133	P	0.161	0.126	P	P	None
15	S	room 105, east wall	0.145	0.079	P	0.079	0.061	P	0.152	0.154	P	0.193	0.218	P	P	None
16	B/S	room 106										0.268	0.276	P	P	None
16A	S	Room 106	0.215	0.158	P	0.103	0.173	P	0.175	0.044	P				P	None
17	B/S	room 107	0.26	0.209	P	0.213	0.217	P	0.238	0.155	P	0.345	0.382	P	P	None
17A	S	Room 107	0.287	0.205	P	0.16	0.21	P	0.058	0.049	P				P	None
18	B/S	room 108	0.185	0.153	P	0.123	0.104	P	0.14	0.138	P	0.226	0.205	P	P	None
19	B/S	room 109	0.007	0.004	P	0.002	<0.002	P	0.005	<0.002	P	0.005	<0.002	P	P	None
20	B/S	room 201	0.004	0.004	P	0.008	0.003	P	0.048	<0.002	P	0.006	<0.002	P	P	None
21	B/S	room 202	0.209	0.204	P	0.122	0.131	P	0.134	0.161	P	0.19	0.155	P	P	None
22	B/S	room 205	0.011	0.004	P	0.068	0.003	P	0.003	<0.002	P	0.006	<0.002	P	P	None
23	B/S	room 206	0.19	0.183	P	0.123	0.094	P	0.155	0.152	P	0.17	0.146	P	P	None
24	B/S	room 209	<0.002	<0.002	P	<0.002	<0.002	P	0.003	<0.002	P	0.008	<0.002	P	P	None
25	B/S	room 210	0.167	0.034	P	0.113	0.086	P	0.109	0.122	P	0.152	0.146	P	P	None
26	S	room 208	0.267	0.059	P	0.081	0.086	P	0.103	0.175	P	0.144	0.184	P	P	None
27	B/S	room 204	<0.002	0.003	P	<0.002	<0.002	P	0.002	0.002	P	0.007	<0.002	P	P	None
28	B/S	room 203	0.01	0.003	P	0.006	<0.002	P	0.003	<0.002	P	0.007	<0.002	P	P	None
29	S/B	room 207 - filtered	0.002	0.002	P	0.002	<0.002	P	0.004	<0.002	P	0.003	<0.002	P	P	None
30	B	2nd floor west hall	0.22	0.193	P	0.122	0.126	P	0.17	0.154	P	0.15	0.141	P	P	None
41	S	kitchen sink	0.125	0.118	P	0.057	0.088	P	0.048	0.059	P	0.032	0.03	P	P	None
42	S	Kitchen, sprayer	0.053	0.034	P	0.093	0.086	P	0.059	0.055	P	0.051	0.062	P	P	None
44	S	room 105 South wall	0.218	0.056	P	0.134	0.075	P	0.114	0.079	P				P	None
45	S	room 114, family room	0.101	0.072	P	0.115	0.135	P	0.188	0.213	P	0.168	0.145	P	P	None
46	S	conselor room, rm 120	0.092	0.032	P	0.087	0.225	P	0.12	0.063	P	0.156	0.095	P	P	None
48	S	room 103	0.216	0.161	P	0.093	0.162	P							P	None
49	S	room 104, west wall	0.265	0.052	P	0.084	0.063	P	0.109	0.192	P	0.137	0.135	P	P	None
50	S	library office	0.266	0.181	P	0.07	0.144	P	0.154	0.225	P	0.241	0.258	P	P	None
51	S	office work room							0.128	0.221	P	0.134	0.084	P	P	None

Table 5. Iron Test Results

Test Results (Iron/Fe, ppm)												
FIXTURE INFORMATION			9/26/2008		11/2/2011		11/25/2014		8/9/2018		Summary Status	
Fixture ID	Type	Location	Flush 2m	Pass/Fail	Flush 2m	Pass/Fail	Flush 2m	Pass/Fail	Flush 2m	Pass/Fail	Pass/Fail	Status
01	B	outside gym hallway									P	None
02	B/S	room 116										Sample
03	B/S	room 115										Sample
04	S	teachers lounge									P	None
05	B	hallway										Sample
06	B/S	room 113			<0.05	P					P	None
07	B/S	room 112	<0.05	P			<0.05	P			P	None
08	S	nurse's office							0.052	P	P	None
09	B/S	room 111										Sample
10	B/S	room 110										Sample
11	B	hallway (central)										Sample
12	B/S	room 101										Sample
13	S	storage room, 142A										Sample
14	S	room 104, south wall										Sample
15	S	room 105, east wall			<0.05	P					P	None
16	B/S	room 106									P	None
16A	S	Room 106										Sample
17	B/S	room 107										Sample
17A	S	Room 107										Sample
18	B/S	room 108										Sample
19	B/S	room 109										Sample
20	B/S	room 201			<0.05	P					P	None
21	B/S	room 202					<0.05	P			P	None
22	B/S	room 205							<0.05	P	P	None
23	B/S	room 206										Sample
24	B/S	room 209									P	None
25	B/S	room 210	<0.05	P							P	None
26	S	room 208			<0.05	P					P	None
27	B/S	room 204					<0.05	P			P	None
28	B/S	room 203							<0.05	P	P	None
29	S/B	room 207 - filtered										Sample
30	B	2nd floor west hall										Sample
41	S	kitchen sink	<0.05	P	<0.05	P					P	None
42	S	Kitchen, sprayer					0.07	P			P	None
44	S	room 105 South wall	0.09	P							P	None
45	S	room 114, family room										Sample
46	S	conselor room, rm 120										Sample
48	S	room 103										Sample
49	S	room 104, west wall										Sample
50	S	library office	<0.05	P							P	None
51	S	office work room										Sample

Table 6. Service Entry Test Results

Test Results (Service Entry/SE, Units as Shown)						
SOURCE INFORMATION			Most Recent Sampling			
Fixture ID	Type	Location	Item	Sampled	Max Value	Pass/Fail
00	SE	boiler room - north wall SE, up	Arsenic	09-Aug-18	2 ppb	P
00	SE	boiler room - north wall SE, up	Cadmium	09-Aug-18	1 ppb	P
00	SE	boiler room - north wall SE, up	Chlorine	29-Apr-04	0.1 ppm	P
00	SE	boiler room - north wall SE, up	Copper	09-Aug-18	0.154 ppm	P
00	SE	boiler room - north wall SE, up	E coli	29-Apr-04	<1 Colonies	P
00	SE	boiler room - north wall SE, up	Iron	09-Aug-18	0.208 ppm	P
00	SE	boiler room - north wall SE, up	Lead	09-Aug-18	1 ppb	P
00	SE	boiler room - north wall SE, up	Total Coliforms	02-Nov-11	<1 Colonies	P

"<" means: less than the value shown (below analytical detection limits).

"n/a" means: not applicable.

Table 7. Bacteriological Test Results

Bacteriological Characteristics

Bacteriological testing of selected samples indicated no (zero) coliform bacteria.

