



## 2020 Data Updates

On July 1, 2020, we began a new six-month compliance sampling monitoring period in University Park. Compliance samples allow us to measure lead levels in water that has sat stagnant in customers' pipes for six or more hours.

In July 2020, we collected 66 compliance samples from University Park homes and businesses so we could better understand the chemistry in customers' pipes and track our treatment's progress.

Moving forward, on an ongoing monthly basis, we will collect additional compliance samples from homes within our existing sampling pool. To keep the public and other stakeholders informed of our progress, all results will be shared on this page by the 10<sup>th</sup> of each month.

Customers can call 877.987.2782 at any time to request water sampling.



## November 2020 Data Update

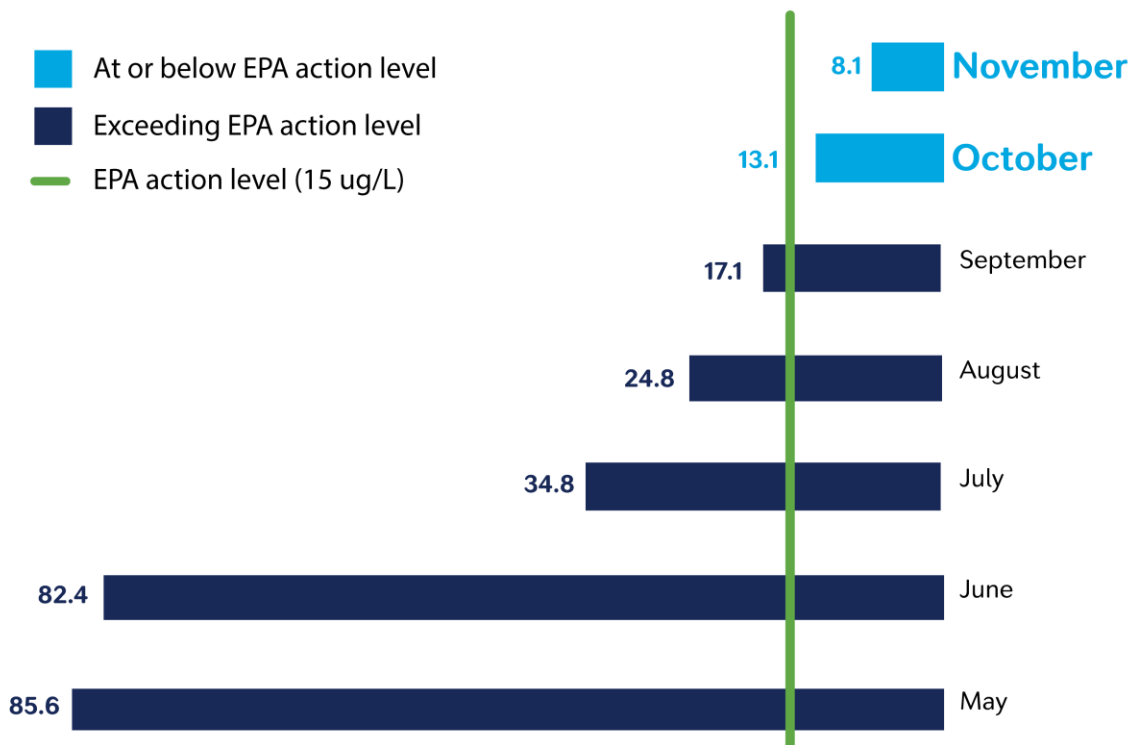
12/10/2020

Overall water quality in University Park has significantly improved and has **met the government benchmark for two consecutive months.**

In November 2020 alone, **95 percent** of all compliance-sampled homes were at or below the Environmental Protection Agency’s threshold for lead, 15 micrograms per liter (ug/L), which means that **for the second month in a row, we achieved the government benchmark for water quality in University Park.**

### University Park’s Water Met the Government Benchmark in October and November 2020

Measuring 90th percentile values by ug/L compared to government benchmark (EPA action level requires that 90th percentile value equal 15 ug/L or less)



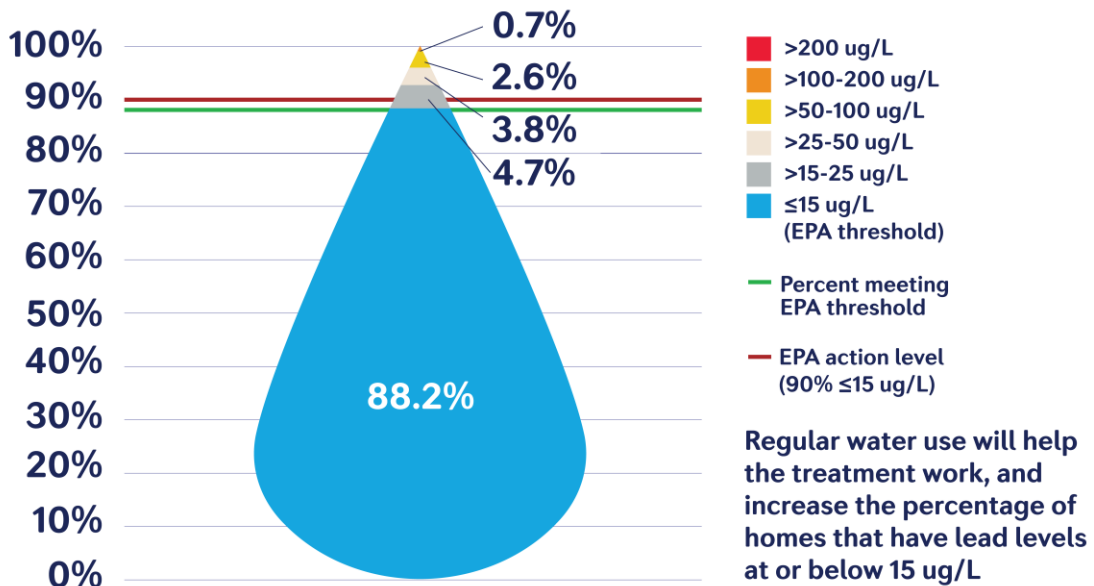
The government benchmark requires that 90 percent of regularly sampled homes have lead levels of 15 ug/L or less, and in October and November, the sampling data meet that water quality objective.



For the six-month compliance sampling period so far, as of November 2020, 88 percent are at or below that threshold.

**About 88 percent of compliance samples this monitoring period are at or below the EPA threshold for lead**

Compliance samples, by ug/L, collected from University Park homes and businesses, July-November 2020



To view a table listing all compliance sample results for each sampled home from the July-November 2020 sampling events, please see Appendix A at the end of this document.

Achieving the government benchmark for water quality for two consecutive months is a significant step, and we will continue to work closely with state regulators who measure water quality over a six-month period consistent with state regulations.

To help resolve this situation, customers under the advisory should continue to regularly use their tap water and regularly use cold tap water at their kitchen sinks. This will allow us to work together toward the solution.

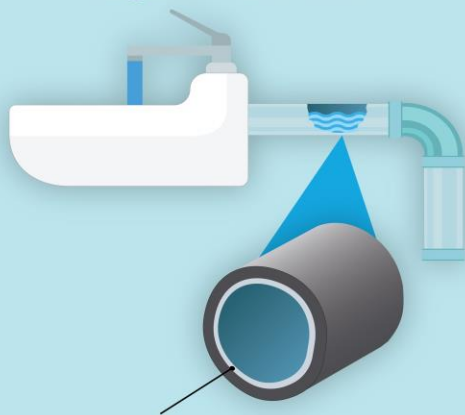
## Water Use is Critical for the Treatment to Work

Regular water use is critical to resolving this situation in University Park. Water use moves our treatment through customers' plumbing systems so it can build a protective coating. Once formed, this protective coating prevents lead inside customers' pipes from interacting with fresh water flowing into their homes.

### University Park homes with regular water use tend to have lower lead levels

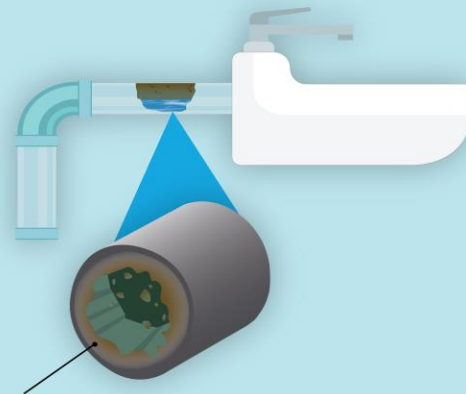
Data from regularly sampled University Park homes indicate water use significantly impacts lead levels

#### Regular water use



Regular water use has established this pipe's protective coating, which prevents pipe corrosion and potential lead exposure.

#### Low water use



The protective coating is not established in this pipe with low water use, which means lead from the internal plumbing can interact with fresh water flowing into the home.

### Run tap water throughout your home

We encourage all University Park customers who are under the advisory to continue tap water use and regularly use cold tap water at their kitchen sinks to support the treatment.

As illustrated above, using tap water moves the treatment through the system so it can establish a protective layer inside customers' home plumbing. The protective layer will stop lead inside customers' internal plumbing from interacting with water flowing into their homes.

In the same way that painting a room at home sometimes requires several coats of paint, the treatment requires regular water flow to fully coat the home's pipes.



By the end of 2019, 100 percent of samples that were collected from University Park homes after running the tap water for two to three minutes had nearly non-detectable lead levels. This validates that, in addition to helping the treatment work, regular tap water use is highly effective at reducing potential lead exposure.

We thank our customers for their continued patience and cooperation.

See below for more information about compliance sampling and our process or click [here](#) to view previous 2020 data updates or [here](#) to view 2019 data updates.



## **More Information About Compliance Sampling**

### **The Lead and Copper Rule and Compliance Sampling Requirements**

The EPA, through its Lead and Copper Rule, requires water utilities to work with their customers to collect regularly scheduled stagnation samples, or compliance samples. These samples must be taken after water has remained in customers' pipes unused for six or more hours, therein providing high-case scenario data for lead exposure. Under the rule, utilities must choose sample locations that represent properties with the highest inventory of lead. For example, so-called "Tier 1" locations include those with lead service lines or lead solder on copper pipes within homes constructed after 1982.

The Lead and Copper Rule does not set a health-based lead limit; it is a treatment-based rule, which means if 90 percent of compliance samples test below 15 ug/L, treatment is deemed effective, and any samples with lead levels above 15 ug/L are analyzed on an individual basis.

### **Compliance Sampling in University Park**

IEPA regulations require us to work with at least 40 homes and businesses in the University Park service area to conduct compliance sampling. Regulations require us to conduct sampling twice annually. Sample locations must be submitted to the IEPA before compliance sampling can begin.

We collected regularly scheduled samples in May 2019 as part of our biannual compliance testing schedule. On June 13, 2019, we began receiving those sampling results, some of which showed elevated lead levels. As a result, we began working with the IEPA on a treatment plan and voluntarily increased the sampling frequency, which now includes conducting monthly sampling, to help us understand and monitor progress as we resolve this issue.

All sample locations in the sampling pool were built before 1990, which means they likely have lead in their internal plumbing and represent "high-case" scenarios.

To complete compliance sampling, we schedule appointments with participating customers and a member of our team collects the samples after customers' water has been unused for six or more hours. We then send the samples to an independent lab for testing.



## **What we Believe Happened and how we are Working to Fix it**

We immediately issued a voluntary do-not-consume advisory on June 14, 2019 for all customers in the service area **to be as protective as possible** after receiving compliance samples that showed elevated lead levels in 14 homes on June 13, 2019. Thereafter, we investigated and gathered information about this situation. It is important to note that no state or federal regulation required us to issue the do-not-consume advisory and that we issued it as a precaution to protect the public until we learned more about the extent, cause and level of the issue AND until we could implement alternative protective health measures. We have since transitioned to a lead advisory to provide more useful guidance to customers. We are continuing our public education efforts, so impacted customers know the protective steps to take to consume their water.

We have identified that the likely cause of elevated lead levels is due to water chemistry interacting with lead solder in customers' internal plumbing. Our information shows that the water in our distribution system and the University Park infrastructure do not have elevated levels of lead.

The EPA banned lead solder in 1986, and compliance testing results in post-1990 University Park homes have shown lead levels meet the EPA action level. We have since removed some areas from the advisory based on property age and water sample results. While not *required*, we still recommend customers whose properties have been lifted from the advisory run their tap water for two to three minutes and until they notice a temperature change before consumption. This ensures they receive fresh water from the mains in the street rather than water that has been sitting stagnant in their internal plumbing.

On June 15, 2019, we introduced a new treatment, orthophosphate (or, more specifically, a 90/10 phosphate blend), into the water system in the entire service area. This treatment is known for its ability to create a protective coating where lead is present, keeping the lead out of the water we consume. The treatment can take months to become effective. It is important to note that this treatment is not harmful to humans or pets.



## **A Message from the IEPA**

The Centers for Disease Control and Prevention indicates there is no safe blood lead level in children. Lead exposures come from a combination of environmental sources, which may include lead in water. U.S. EPA estimates that water can make up 20 percent or more of a person's total exposure to lead, and infants who consume mostly mixed formula can receive 40-60 percent of their exposure to lead from drinking water. The source of lead in water is most often from a building's plumbing system.

The IEPA and Illinois Department of Public Health support point-of-use (POU) filters as a short-term strategy for reducing lead in drinking water. *(Please note: Aqua Illinois is providing free faucet filters and pitcher filters to customers in University Park).* A POU system filters water at the point where water is being used and is installed at the water connection, typically under the sink in the kitchen or bathroom. Water pitchers with POU filters may also be used. POU filters are commercially available and can be effective at removing most lead. There are several POU cartridge filter units on the market. They can vary in price and effectiveness. Filters should routinely be replaced or maintained in accordance with manufacturers guidelines and recommendations to remain effective.

To select a lead-reducing POU filter, check with the manufacturer or a third-party website (such as [www.nsf.org](http://www.nsf.org)) to verify the product was tested and certified for lead removal (NSF/ANSI Standard 53). For additional protection for particulate lead, look for a POU filter that is also certified against NSF/ANSI Standard 42 (for class I particulate reduction, 0.5 micrometers to less than 1 micrometers). To be effective, the POU filters should be installed at locations used for drinking water or for food preparation according to the manufacturer's instructions. This includes kitchen water faucets and refrigerators with water dispensers and ice makers or in water pitchers.

POU filters should be considered an interim measure until [effective treatment is restored, or] the sources of lead have been removed and replaced with lead free plumbing materials. After replacement of lead plumbing materials or disturbance of a plumbing system, the plumbing system should be flushed for 30 minutes with aerators and screens removed from all faucets. Because you cannot see, smell, or taste lead in water, testing the water is the only way to determine if lead is present in drinking water.

To access additional information about lead in drinking water and a consumer tool for identifying POU filters certified to reduce lead, please visit U.S. EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water> and <https://www.epa.gov/water-research/consumer-tool-identifying-pou-drinking-water-filters-certified-reduce-lead>.





Lead in homes can also come from sources other than water. To access more information about other sources of lead, please visit IDPH's website at: <http://www.dph.illinois.gov/illinoislead>. Consider contacting your doctor to have your children tested if you are concerned about lead exposure.



**Appendix A:**  
**Compliance sample results, in ug/L, July-November 2020**

Samples	Home ID	ug/L
1	3	25
2	4	<1.0
3	5	<1.0
4	6	<1.0
5	7	1.6
6	8	<1.0
7	9	<1.0
8	10	<1.0
9	11	<1.0
10	12	<1.0
11	13	<1.0
12	14	<1.0
13	16	30
14	17	<1.0
15	20	15
16	21	1.7
17	23	2.8
18	27	6.6
19	28	110
20	29	21
21	30	<1.0
22	31	<1.0
23	32	<1.0
24	33	21
25	34	<1.0
26	43	<1.0
27	44	100
28	45	<1.0



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29	47	<1.0
30	48	<1.0
31	50	36
32	51	<1.0
33	53	16
34	54	53
35	55	50
36	56	7.4
37	57	34
38	58	28
39	60	<1.0
40	61	5.8
41	62	<1.0
42	63	15
43	64	13
44	66	<1.0
45	67	<1.0
46	68	15
47	69	1.3
48	70	<1.0
49	71	65
50	72	18
51	73	21
52	74	<1.0
53	75	8.6
54	76	19
55	77	3.3
56	78	<1.0
57	79	<1.0
58	80	3.9
59	81	2.9
60	82	<1.0
61	84	1.2
62	85	21



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63	86	<1.0
64	87	9.7
65	89	88
66	90	12
67	4	<1.0
68	5	<1.0
69	6	<1.0
70	7	1
71	8	<1.0
72	9	<1.0
73	10	1.6
74	11	<1.0
75	12	<1.0
76	13	1.3
77	14	<1.0
78	16	5
79	17	<1.0
80	20	26
81	21	1.9
82	23	1.2
83	27	7.7
84	28	78
85	29	2.1
86	30	<1.0
87	31	<1.0
88	32	<1.0
89	43	<1.0
90	44	86
91	45	<1.0
92	47	<1.0
93	48	<1.0
94	50	7.6
95	51	<1.0
96	53	5.4



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97	54	77
98	55	32
99	56	<1.0
100	58	26
101	60	<1.0
102	61	14
103	62	<1.0
104	63	1.9
105	64	14
106	66	<1.0
107	67	<1.0
108	68	<1.0
109	69	4.7
110	70	<1.0
111	72	71
112	74	<1.0
113	75	<1.0
114	76	1.4
115	77	3.1
116	78	<1.0
117	79	<1.0
118	80	6.4
119	81	2.3
120	82	<1.0
121	84	<1.0
122	85	7.3
123	86	<1.0
124	87	7.9
125	90	<1.0
126	91	<1.0
127	94	<1.0
128	4	<1.0
129	5	<1.0
130	6	<1.0



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131	7	1.2
132	8	<1.0
133	9	<1.0
134	10	1.3
135	11	1
136	12	<1.0
137	13	2.6
138	14	<1.0
139	16	3.2
140	17	<1.0
141	20	8.5
142	21	<1.0
143	23	3.5
144	27	1.9
145	28	21
146	29	7.5
147	30	<1.0
148	31	<1.0
149	32	<1.0
150	33	23
151	34	<1.0
152	43	<1.0
153	47	<1.0
154	48	<1.0
155	50	190
156	51	<1.0
157	53	<1.0
158	54	45
159	56	6.2
160	57	4.5
161	58	<1.0
162	60	<1.0
163	61	4.9
164	62	<1.0



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165	63	<1.0
166	64	8.6
167	66	<1.0
168	67	1
169	68	<1.0
170	69	<1.0
171	70	4.8
172	72	55
173	73	1.2
174	74	<1.0
175	75	18
176	76	1.6
177	77	18
178	78	<1.0
179	79	<1.0
180	80	7.1
181	81	1.9
182	82	<1.0
183	84	<1.0
184	85	4.1
185	86	<1.0
186	87	<1.0
187	91	<1.0
188	94	<1.0
189	4	<1.0
190	5	<1.0
191	6	<1.0
192	7	<1.0
193	8	<1.0
194	9	<1.0
195	10	6.8
196	11	4.1
197	12	<1.0
198	13	<1.0



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199	14	<1.0
200	16	1.3
201	17	<1.0
202	20	7.2
203	21	<1.0
204	23	<1.0
205	27	1.3
206	28	26
207	29	2.8
208	30	<1.0
209	31	<1.0
210	32	<1.0
211	33	140
212	34	<1.0
213	42	2.1
214	43	<1.0
215	45	<1.0
216	47	<1.0
217	48	<1.0
218	50	2.0
219	51	<1.0
220	53	8.9
221	54	4.0
222	56	8.1
223	57	51
224	58	5.6
225	60	<1.0
226	61	18.0
227	62	<1.0
228	63	<1.0
229	64	2.3
230	66	<1.0
231	67	<1.0
232	68	<1.0





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233	69	<1.0
234	70	1.2
235	72	40
236	73	2.0
237	74	<1.0
238	76	<1.0
239	77	9.2
240	78	<1.0
241	79	<1.0
242	80	84
243	81	1.9
244	82	<1.0
245	84	<1.0
246	85	45
247	86	<1.0
248	87	3.4
249	88	<1.0
250	90	7.3
251	91	<1.0
252	4	1.6
253	5	<1.0
254	6	<1.0
255	7	<1.0
256	8	<1.0
257	9	<1.0
258	10	3.7
259	11	4.7
260	12	<1.0
261	13	<1.0
262	14	<1.0
263	16	2.2
264	17	<1.0
265	20	7.4
266	21	<1.0



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267	23	<1.0
268	27	<1.0
269	28	16
270	29	3.0
271	30	<1.0
272	31	<1.0
273	32	<1.0
274	33	48
275	34	<1.0
276	43	<1.0
277	45	<1.0
278	47	<1.0
279	48	<1.0
280	50	17
281	53	3.3
282	54	3.8
283	56	9.3
284	57	5.8
285	58	32
286	60	<1.0
287	61	4.6
288	62	<1.0
289	63	<1.0
290	64	4.8
291	66	<1.0
292	67	3.1
293	68	<1.0
294	69	<1.0
295	70	<1.0
296	72	14
297	73	2.5
298	74	1.2
299	77	3.5
300	78	<1.0



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301	79	<1.0
302	80	5.9
303	81	1.4
304	82	2.0
305	84	<1.0
306	85	29
307	86	<1.0
308	87	1.4
309	90	4.2
310	94	<1.0
311	4	<1.0
312	5	<1.0
313	6	<1.0
314	7	<1.0
315	8	<1.0
316	9	<1.0
317	10	2.2
318	11	<1.0
319	12	<1.0
320	14	<1.0
321	16	3.0
322	20	11
323	21	<1.0
324	23	<1.0
325	27	4.6
326	28	12
327	29	<1.0
328	30	<1.0
329	31	<1.0
330	32	<1.0
331	34	<1.0
332	42	2.4
333	43	<1.0
334	45	<1.0



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335	47	<1.0
336	48	<1.0
337	50	22
338	51	<1.0
339	53	2.4
340	56	19
341	57	18
342	60	2.2
343	61	5.2
344	62	<1.0
345	63	<1.0
346	64	6.5
347	66	<1.0
348	67	<1.0
349	68	<1.0
350	69	<1.0
351	70	<1.0
352	72	7.4
353	73	<1.0
354	74	<1.0
355	77	3.2
356	78	<1.0
357	79	<1.0
358	80	6.3
359	81	2.3
360	82	<1.0
361	84	<1.0
362	85	10
363	86	<1.0
364	87	1.3
365	90	16
366	91	<1.0
367	94	<1.0
368	4	<1.0



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369	5	<1.0
370	6	<1.0
371	7	<1.0
372	8	<1.0
373	9	<1.0
374	10	4
375	11	1.2
376	12	<1.0
377	13	3.8
378	14	<1.0
379	16	<1.0
380	20	5.8
381	21	<1.0
382	23	<1.0
383	27	2.3
384	29	<1.0
385	30	<1.0
386	34	<1.0
387	43	<1.0
388	45	<1.0
389	47	<1.0
390	48	<1.0
391	51	<1.0
392	53	3.2
393	54	1.4
394	56	18
395	57	6.2
396	58	11
397	60	<1.0
398	61	8.3
399	62	<1.0
400	63	<1.0
401	64	7.4
402	66	<1.0



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403	67	<1.0
404	68	<1.0
405	69	<1.0
406	70	<1.0
407	72	10
408	73	<1.0
409	74	<1.0
410	75	<1.0
411	76	<1.0
412	77	4.2
413	78	<1.0
414	79	<1.0
415	80	39
416	81	6.4
417	82	<1.0
418	84	<1.0
419	86	<1.0
420	87	2.4
421	90	<1.0
422	91	<1.0