WUTC DOCKET: UW-170924 EXHIBIT: SH-36X ADMIT ☑ W/D ☐ REJECT ☐

> SH-Exh-X-38 Docket UW 170924 Sarah Hand

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

SARAH HAND AND GRETCHEN HAND, a married couple

DOCKET UW 170924

a married couple

Complainant,

SARAH HAND'S EXHIBIT 38 TO CROSS EXAMINATION

V.

RAINIER VIEW WATER COMPANY, INC.,

Respondent.

14

11

12

13

1

2

3

4

5

6

7

8

15

16 17

18

19

20

21

2223

24

25

26

27 28

SARAH HAND'S EXHIBIT 38 TO CROSS EXAMINATION - DOCKET UW 170924

EXHIBIT 38

TO CROSS EXAMINATION OF BOB BLACKMAN AND RACHEL STARK

July 25, 2018

Blackman Deposition dated 08-28-2017

NIGEL S. MALDEN LAW, PLLC 711 Court A, Suite 200 Tacoma, Wa. 98402 253-627-0393 p 844-273-6067 f 30(b)(6) Deposition of

Robert L. Blackman

August 28, 2017

Hand & Smith v. Rainier View Water Company, Inc.

No. 17-2-05538-2



Byers and Anderson, Inc.

Court Reporters/Video/Videoconferencing Seattle/Tacoma, Washington

scheduling@byersanderson.com www.byersanderson.com

One Union Square: 600 University Street, Suite 2300 Seattle, WA 98101-4128

Seattle: 206 340-1316 Toll Free: 800 649-2034

Old Town District: 2208 North 30th Street, Suite 202 Taccoma, WA 98403-3360

Tacoma: 253 627-6401 Fax: 253 383-4884

	F THE STATE OF WASHINGTON COUNTY OF PIERCE	
SARAH HAND AND GRETCHEN SMITH,)	
married couple,)	
Plaintiff	,) No. 17-2-05538-2	
vs.)	
RAINIER VIEW WATER COMPANY, INC	C.,)	
Defendant	.)	
CR 30(b)(6) DEPOSITION OF ROBERT L. BLACKMAN		
August	28, 2017	
Seattle, N	Washington	
Byers & And	derson, Inc.	
Court Reporters/Video/Videoconferencing		
One Union Square 600 University St. Suite 2300 Seattle, WA 98101 (206) 340-1316 (800) 649-2034	2208 North 30th Street, Suite 202 Tacoma, WA 98403 (253) 627-6401 (253) 383-4884 Fax scheduling@byersanderson.com www.byersanderson.com	

Serving Washington's Legal Community Since 1980

```
1
      APPEARANCES
 2
    For the Plaintiff:
 3
    Nigel S. Malden
 4
    Nigel Malden Law
    711 Court A
 5
    Suite 200
    Tacoma, Washington 98402-5228
 6
    253.627.0393
    844.273.6067 Fax
 7
   nm@nigelmaldenlaw.com
 8
    For the Defendant:
 9
    Daniel W. Rankin
10
    Preg O'Donnell & Gillett
    901 Fifth Avenue
    Suite 3400
11
    Seattle, Washington 98164-2026
12
    206.287.1775
    206.287.9113 Fax
13
    drankin@pregodonnell.com
14
    Also present: Anna Lee
15
16
17
18
19
20
21
22
23
2.4
25
```

1		EXAMINATION INDEX	
2	EVAMINATION DV.	-	DACE NO
	EXAMINATION BY:		PAGE NO.
3	Mr. Malden		5
4	Mr. Rankin		119
5			
6		EXHIBIT INDEX	
7	EXHIBIT NO.	DESCRIPTION	PAGE NO.
8	Exhibit No. 1	4-page Amended Notice of Deposition to Rainier View Water Company, Inc.	5
10	Exhibit No. 2	9-page Declaration of Robert Blackman in Support of	7
11		Defendant Rainier View Water Company, Inc.'s Motion for	
12		Summary Judgment.	
13 14	Exhibit No. 3	7-page Rainier View Water Company Annual Water Quality Report: 2016.	5
15 16 17	Exhibit No. 4	5 pages consisting of: Consumer Confidence Report Certification Form; "The Pipe Line" Southwood Water System Water Quality Report.	76
18 19	Exhibit No. 5	2 pages of Water Management Laboratories, Inc., Inorganic Chemicals (IOCS) Reports.	78
20	Exhibit No. 6	2-page e-mail from Bob Blackman to Rachel Stark	81
21		dated 12/8/16, with attached	
22		Summary of Pilot Test Results, Rainier View, Fir Meadows Well, dated 8/9/16.	
23		Labeled RVWC000040 - RVWC000041.	
24			
25			

			\neg
	EXHIBIT INDEX (Continuing)		
EXHIBIT NO.	DESCRIPTION	PAGE NO.	
Exhibit No. 7	9-page ATEC Systems	84	
	and Maintenance Manual for		
	Fir Meadows Iron and		
Evhibit No. 9		0.2	
EXHIBIT NO. 6	Rule 20 - Limitations on	93	
Erbibit No. 0		0.5	
EXHIBIT NO. 9	Treatment Requirements and	95	
	Department of Health.		
	·	EXHIBIT NO. DESCRIPTION Exhibit No. 7 9-page ATEC Systems Associates, Inc., Operation and Maintenance Manual for Rainier View Water Company Fir Meadows Iron and Manganese Removal System. Exhibit No. 8 1-page tariff exemption: Rule 20 - Limitations on Liability. Exhibit No. 9 6-page Secondary Contaminant Treatment Requirements and Options, Washington State	EXHIBIT NO. DESCRIPTION PAGE NO. Exhibit No. 7 9-page ATEC Systems 84 Associates, Inc., Operation and Maintenance Manual for Rainier View Water Company Fir Meadows Iron and Manganese Removal System. Exhibit No. 8 1-page tariff exemption: 93 Rule 20 - Limitations on Liability. Exhibit No. 9 6-page Secondary Contaminant 75 Treatment Requirements and Options, Washington State

1		BE IT REMEMBERED that on Monday,
2		August 28, 2017, at 901 Fifth Avenue, Suite 3400,
3		Seattle, Washington, at 11:35 a.m., before JOHN M.S.
4		BOTELHO, Certified Court Reporter, appeared ROBERT L.
5		BLACKMAN, the witness herein;
6		WHEREUPON, the following
7		proceedings were had, to wit:
8		
9		<<<<< >>>>>
10		
11		(Exhibit Nos. 1, 2, and 3
12		marked for identification.)
13		
14		ROBERT L. BLACKMAN, having been first duly sworn
15		by the Certified Court
16		Reporter, deposed and
17		testified as follows:
18		
19		EXAMINATION
20		BY MR. MALDEN:
21	Q	Could you please state your complete name?
22	A	Robert Blackman.
23	Q	Mr. Blackman, my name is Nigel Malden, and I am an
24		attorney that represents Sarah and Gretchen Hand in
25		this case against Rainier View Water.

Have you ever had your deposition taken before? 1 2 Yes, I have. Α 3 How many times? 4 Once, I believe. Α 5 Do you remember how long ago that was? 0 6 25, 30 years ago. Α 7 I'd like to take a minute, then, and review with you 8 the rules of the deposition. You are testifying 9 under penalty of perjury just as you would be if you were in court. It's very important that only one of 10 us speak at a time, as the reporter is taking down 11 12 everything that's said. 13 If I ask you a question that you don't hear or 14 you don't understand, please tell me and I'll be 15 happy to repeat or rephrase the question. Okay? 16 Okay. Α 17 I'd like to start by asking you a few background 18 questions. 19 Can you summarize for us your educational 20 background? 21 I've got two years community college in engineering Α 22 assistance at Schoolcraft Community College. 23 When did you go there? 2.4 1976, '77. Α 25 Did you say it's Schoolcraft Community College?

1	A	Correct.
2	Q	Where is that located?
3	A	It's in Livonia, Michigan.
4	Q	And what was your program of study there or course of
5		study there?
6	A	Engineering.
7	Q	What kind of engineering?
8	A	Civil.
9	Q	Did you obtain a degree from that institution?
10	A	I did not.
11	Q	Do you have any other formal education?
12	A	No.
13	Q	I'm looking at a document that's marked as Exhibit 2.
14		Actually, I'm going to hand this Exhibit 2 to you.
15		Do you recognize this document?
16	A	Yes.
17	Q	I just realized that your copy that's marked may have
18		some highlighting on it.
19	A	Mm-hmm.
20	Q	Can I take a look at that?
21		What I'm going to do is ask the reporter to mark
22		a different Exhibit 2 since this one has highlighted
23		in it. In other words, change the document.
24		(Exhibit No. 2 re-marked for
25		identification.)

1 Q (By Mr. Malden) I've handed you back the document marked as Exhibit 2. This document is entitled 2 3 "Declaration of Robert Blackman in Support of 4 Defendant Rainier View Water Company, Inc.'s Motion 5 for Summary Judgment"; is that right? 6 Correct. Α 7 And is this your statement? 8 Α It is my statement. But without reading the whole 9 thing, I -- I mean -- yes, I mean, I signed it. 10 Okay. I'd like to just ask you a couple of questions about some of the items mentioned in the declaration, 11 12 starting at Paragraph 2. 13 Paragraph 2 indicates that you're the general 14 manager of Rainier View Water Company; is that right? 15 Α Correct. What are your duties as general manager at Rainier 16 17 View Water? 18 Oversee the daily operations and make sure we're in 19 compliance with Department of Health regulations. 20 Why do you ensure that you're in compliance with Q 21 Department of Health regulations? 22 Α I don't under -- not sure of the question. 23 Okay. Is part of your job ensuring that your 2.4 operation complies with Washington Department of 25 Health regulations?

1 Α Yes. Do you know specifically what regulations you're 2 3 supposed to ensure are followed? 4 There's a whole WAC on different regulations, from 5 water quality to pressure. It's not one item. 6 just, we do overall compliance to maintain a green 7 operating permit. 8 Q What's a green operating permit? 9 The State issues a permit depending on the water Α 10 system, whether it's in compliance or noncompliance. 11 Green, blue, yellow, and red. And green is in full 12 compliance, and works down from there. Red is out of 13 compliance. 14 Is this a permit system? 15 Α Yes. And how often is the permit reviewed? 16 17 It's annually. 18 0 And who issues the permit? 19 Α Department of Health. Washington State Department of 20 Health. 21 Do you know which division within the Department of 22 Health? 23 Drinking Water. 24 Do you have to submit an application every year in order to get this permit? 25

1 They send us a renewal, and we fill it out and return 2 it. 3 Do you know what questions are asked on the renewal 4 form? 5 Α Some basic system, number of connections, and that's 6 about it. 7 Does the form ask you the number of connections 8 within the water system? 9 Yes, it does. Α And that's all that it asks? 10 11 I'm sure it must ask something else, but that's the 12 main -- main objective, because they base their fees 13 on that. 14 The Department of Health bases its fees on that? 15 Α Yes. And based on your response to that questionnaire, you 16 obtain a permit; is that right? 17 18 I'm not sure it's a questionnaire, but it's a renewal 19 form. Okay. And what were the different codes again that 20 Q 21 you could get? Did you say green? 22 Green, yellow, blue, and red. 23 Is this a code system that's set forth in a 24 Washington Administrative Code regulation? 25 I cannot answer that. Α

- 1 Do you know how long the DOH has been using this Q 2 particular color-coded system? 3 Many years. 4 Can you tell us what each one means? What does green 5 mean? 6 Means you're in full compliance. Α 7 What does yellow mean? Q 8 Α It means, I think it's substantial compliance. 9 And what does blue mean? Q 10 Substantial compliance but un -- without a water 11 system plan to allow you to grow. Something along 12 those lines. Do you know what that means? 13 14 Yeah, if I tried to add additional connections onto 15 the system, it would be denied. 16 What does red mean? 17 That's you're out of compliance. 18 Does that mean out of compliance of any regulation or 19 a specific regulation? 20 Α They don't say what. They just say out of
- 24 A Yes.

O

21

22

23

25 | Q At least five years?

compliance.

And have these documents or this particular method

been used for a number of years?

1 At least five years. 2 At least 10 years? 0 3 Α Yes. 4 Are you the one that fills out the documentation for 5 this? 6 Yes. Α 7 And what ratings or what color codings have you 8 gotten back over the years? 9 A lot were -- had some blue, but majority of them 10 were green. The blue, we got resolved into -- by 11 submitting water system plans to the State and 12 getting the approvals. They're -- they're all now 13 green operating permits except for one. 14 Which is the one that isn't? 15 Α Nisqually Park water system. Where is that located? 16 17 It's out at the entrance to Mount Rainier. Nisqually 18 entrance. 19 What community does that serve? 20 Α The Nisqually Park. It's its own little recreational 21 properties. 22 And how is it out of compliance? 23 We cannot obtain a water system plan due to the water 2.4 rights that the State issues, Department of Ecology. 25 Do you maintain copies of these permit documents?

1 Α Yes. 2 Dating back how far? 3 I'm going to guess 10 years. 4 And this, did you say it's called an operating 5 permit? 6 Yes. Α 7 And the operating permit, what does that allow you to 8 do? 9 It's more a designation for the County for building 10 permits. If a water system is out of compliance, the 11 County will not issue building permits. Getting back to your declaration marked as Exhibit 2, 12 13 it states that before you were general manager, you 14 were operations manager for 22 years; is that right? 15 Α Yes. What were your job duties as operations manager at 16 17 Rainier? 18 The -- overseeing the operations of the system. Make 19 sure that -- there again that we're in compliance, 20 water quality complaints. 21 Who do you report to at Rainier View? O 22 I report to the board of directors. 23 Who's on the board of directors? 24 Neil Richardson, Rick Richardson, Doug Fisher, Chuck 25 Warner, and myself.

1 Is your -- or strike that. Q 2 Do you have an immediate supervisor? 3 I guess Neil Richardson would be my -- as the Α 4 president. 5 Do your other board members -- or strike that. 6 Let me ask an additional question here about your 7 declaration. 8 Your declaration, Paragraph 2, also says that you 9 received a water distribution manager 3 certification 10 in 2002 along with a cross control specialist certification; is that right? 11 12 Correct. 13 What is a water distribution manager 3 certification? 14 To operate a water system in the state, you have 15 to -- depending on the size of the system, you have 16 to have a certain certification. Rainier View is at 17 a size that a distribution 3 is required. 18 O What is the size that requires the certificate 3? 19 I don't remember the numbers. 20 What do you have to do to obtain a manager 3 21 certification? 22 Combination of experience allows you to even take the 23 test, and then the exam. 24 Is this an exam that's administered by the State? 25 Α Yes.

Do you know what agency within the State? 1 2 The Department of Health Office of Drinking Water. Α 3 Is it the DOH that issued the certification 3? 4 Correct. Α 5 Do you have to do anything to maintain that 6 certification? 7 Α Yes. 8 What do you have to do? 9 Have to obtain 30 hours of continuing education every Α 10 three years. What is the cross control specialist certification? 11 12 State requires utilities to have a cross-connection 13 program. Cross-connection, which basically says you 14 have to have someone on staff to operate the program. 15 What did you have to do to get a cross control specialist certification? 16 17 I had to take an exam. 18 0 When did you take that exam? 19 Α 2002. 20 Was that exam administered by the DOH? 21 Α Yes. 22 Do you have to do anything further to maintain that 23 cross control specialist certification? 24 It's same 30 hours, I believe can all be compiled 25 into the one -- one -- basically all the credits can

1 be used for both, the water distribution and cross-2 connection. Your declaration marked as Exhibit 2 indicates that 3 4 you have Washington State Department of Health Certification No. 3535; is that right? 5 6 Correct. Α 7 What is that? Q 8 That's the number they issued when I got my WDM 1. 9 And that was in 1985? 10 That was in 19 -- '85? Yes. Yeah. 11 Okay. Does your State Department -- excuse me. 12 Does your Washington State Department of Health 13 certification remain the same when you go from water distribution specialist to water distribution manager 14 15 3? 16 It stays the same. Α As general manager, do you typically work a full-time 17 40-hour week, workweek? 18 19 Α Or more. 20 And can you describe for us what kinds of things you 21 do typically during the week? 22 Α I work with new customers, developers that want to 23 develop a new piece of property. Work with 24 Department of Health. Answer -- get a lot of phone 25 calls just inquiring about the water systems.

1 You're familiar with the Springwood Estates 2 subdivision? 3 Α Yes. And that's serviced by Rainier View Southwood Water 4 System; is that right? 5 6 Correct. Α 7 And what is the groundwater source that the Southwood 8 Water System draws from? 9 There's multiple sources. But the main source is Α 10 most likely the Fir Meadows water system, or wells. Can you draw upon several different wells to service 11 12 the Southwood Water System customers? 13 Α Yes. 14 How many different wells can you draw on? 15 It's made up of five different pressure zones. 16 the zone that the Springwood Estates is in, we could 17 pull off of, I think it's probably eight different 18 wells. 19 What factors into your decision as to what well or 20 wells to draw upon when you're supplying water to a 21 particular community? 22 Α They are run by our SCADA system that just, as the 23 pressure in the tank goes down, the wells will turn 2.4 on by pressure. It determines which -- so one area, 25 if they're having a fire event, the wells in other

1 areas will turn on. If the tank gets low, certain 2 wells will turn on. 3 Did you say a SCADA? 4 Yes. Α What does that -- what does that mean? 5 6 SCADA's a supervisory control and data acquisition. Α 7 Basically it allows us to monitor the wells and tanks 8 remotely. 9 And when you say "monitor," you're specifically Q 10 referring to pressure? 11 Pressure. We can look at certain items as in chlor --12 what our chlorine residuals are, pH, temperature. 13 You do that with sensors located in the wells? 14 On the well site. 15 So when you say "remotely," where can you look at this from? From headquarters at Rainier View? 16 17 From our office or from phones. iPhones, iPads. 18 Can you remotely monitor water quality in these 19 wells? 20 Α Quality's a pretty vague term. So I say the pH, 21 chlorine residuals. That's -- far as quality, yeah, 22 that's about it. 23 If the Springwood Estates people can be 2.4 serviced by up to eight different wells, what would 25 factor into the decision which water they're going to

be given? 1 2 Well, it -- like I said, the system really determines 3 which wells turn on. We count on the SCADA system to 4 determine which -- which wells needed to keep the 5 pressures up and provide the water in the system. 6 And this SCADA, is this a computer software program? 7 It's -- yes. Α 8 If you want to, are you able to override SCADA? 9 Yes. Α 10 How do you do that? 11 The operator will just turn it -- just -- we can run 12 it in hand -- handoff operations or SCADA. You can 13 go in and turn it off and just start running it 14 manually if need be. Has this Fir Meadows -- or strike that. 15 Let me ask a question about the Fir Meadows well. 16 17 Where is it exactly? 18 You want a physical address? It's --Α 19 If you know. Q 20 It's 6600 block of 204th Street. Α 21 And is this a holding tank? 22 Α There is a reservoir. There are three wells on-site 23 that we can use. 24 When were those wells duq? 25 Two of the wells were drilled back in the '70s when

1 Fir Meadows was its own water system. That was prior 2 to us acquiring it. A third well is -- was drilled 3 probably eight, nine years ago. 4 Are you --5 THE REPORTER: What was that? 6 THE WITNESS: I was trying to 7 remember the timelines, and it's just -- eight, 8 nine -- it was probably -- it may have been 12 years 9 ago. 10 (By Mr. Malden) Are you aware of any of the residents in Springwood Estates complaining about the 11 color or quality of the water supplied to them? 12 13 Α Yes. 14 In your opinion, do these complaints generally arise from the water supplied by the Fir Meadows wells? 15 16 It has come to our attention that one well at Fir 17 Meadows does have excessive manganese. 18 Is it one of the three wells at Fir Meadows that has 19 excessive levels of manganese? 20 Α Yes. 21 Do you know, how is that well referred to? 22 Α Well, it's Well 4 or Well D. 23 Is there a significant difference in the relative 2.4 levels of manganese between that well and the other 25 wells that form the Fir Meadows system?

1 Α Yes. 2 How big is the difference? 3 Wells 1 and 2 are virtually non-detect. And this well is -- Well 4 is, I think it's .12, .13 4 5 milligrams per liter. 6 Do you have a theory or an opinion as to why that one 7 well has a higher level of manganese than the others? 8 Α It's deeper than the others. It's 120 foot deeper 9 into a -- into a different aguifer. 10 Why does that make a difference? 11 Different aquifers have different mineral contents in 12 Just different -- yeah, different areas have 13 different levels of iron or manganese or other types 14 of minerals. 15 Could Rainier stop using this Well 4 or Well D to service Springwood Estates customers? 16 17 Yes. And we turned it offline once it became 18 apparent last year that -- met with Department of 19 Health out on the site, did our tests of all three 20 wells, and we decided to shut that well off until we 21 could implement our treatment. 22 And when was it shut off? O 23 November of 2016. 2.4 Has it been used since? 25 Α We recently got approval to turn the well back on

1 with the treatment passing all its required testing. 2 Did you say that it still has to be tested to get 3 approval or you had approval? 4 No, we have approval. Α 5 Okay. And what did you do to reduce the amount of 6 manganese in that particular well water? 7 We're using a system that's called ATEC Water Α 8 Systems. It's an iron/manganese removal system. 9 We -- we've used it on a couple other well sites that 10 had good results at a fairly reasonable expense. 11 we put that online, I believe it was June. 12 July. 13 Of this year? 14 Yes. 15 What is the ATEC system? 16 It's -- it's a treatment where the -- the media will 17 attract the manganese once it's precipitated out into a -- and then oxidized. The -- and it just traps the 18 19 manganese in there and then backwash it out of the 20 system so that the water going through is reduced 21 down to acceptable levels. Is this similar to a filter? 22 0 23 It is a filter. I guess I could have shortened that 2.4 up quite a bit. 25 Okay. Okay. And how big is this filter?

1 This one, there's a series. I believe there's six 2 filters, four foot diameter each, and probably eight 3 foot tall. And does the water run through each of the six in the 4 5 series? 6 Α Yes. 7 I'm sorry. They run through -- in series, No. 8 do you mean, like, start -- one tank to the next, 9 to...? 10 O Right. 11 No. They're just six tanks. They run concurrently 12 through all of them. 13 And have you been testing how these filters work? 14 Α Yes. 15 How well have they been working? 16 We're getting almost non-detect on the posttreatment. Α 17 Do you know how much it costs to equip the Firwood --Fir Meadows Well 4 or D with this ATEC filter? 18 It was close to 275 to 300,000. 19 Was the sole purpose of the ATEC filter to reduce or 20 Q 21 eliminate the excessive levels of manganese? 22 Α Yes. 23 At this point in time, do you believe that that ATEC 2.4 filtration system will likely eliminate the 25 complaints regarding the quality of the water that

have come from people at Springwood Estates? 1 2 In time, it should eliminate those complaints. 3 Why wouldn't it eliminate the complaints right away? 4 There have been 25 years of buildup of manganese Α 5 maybe in the syst -- or as long as that -- that 6 well's been online, been pumping some manganese into 7 the system. It gets -- gets onto the bottom of the 8 water lines and it once in a while will break loose. 9 So it takes a while for it to get flushed out of the 10 system. When you say "flushed out of the system," are you 11 including the plumbing in the residents' houses? 12 13 We don't do that flushing. But in time, it will work 14 its way through their services. 15 Is what you meant, though, that the 25 years of the high-manganese-level water, that that has put the 16 17 manganese into the system, embedded it in the system, 18 if you will? 19 Α Mm-hmm. 20 The pipes, themselves; is that right? 21 Right. Correct. Α 22 Do you recommend that the homeowners do anything with 23 the plumbing inside their home to expedite the 2.4 process? 25 Α We'll probably send out some notices. Because it's

1 not just to the Springwood. Because this affects 2 probably seven or eight thousand homes. So we're 3 looking to put a flushing program together once we're -- once we're all assured that this is working 4 5 properly, we'll put that together, start flushing the 6 mains, and make -- make it known to the residents 7 that they should probably be flushing their lines. 8 What is the process for flushing the mains? 9 Either through fire hydrants or what's called a 10 blow-off assembly at the end of the lines, where you move a large enough volume of water to create a 11 12 velocity through those pipes to pick up as much of 13 the minerals as you can. A lot of the minerals, it's 14 not just manganese. There are other minerals in the 15 water. There is iron that -- naturally occurring. 16 It's -- like I say, it's not always just manganese. 17 This cost of 275 to \$300,000, was that the cost that 18 was the driving force behind Rainier's request to the State to increase rates? 19 20 MR. RANKIN: Objection. Can you be 21 more specific? 22 (By Mr. Malden) Let me phrase it this way. The 275 to \$300,000 cost of the ATEC system, will that be 23 2.4 passed along to the customers? 25 Α Yes.

How will it be passed along to the customers? 1 2 In a surcharge. Treatment surcharge. Α 3 And when does that surcharge go into effect? It's in effect right now. 4 Α 5 Was this the surcharge that was the subject of a 0 6 December 2016 hearing? 7 Yes, it was. Along with two other treatment centers. Α 8 I want to ask you a couple questions about manganese. 9 Have you undertaken any research or study to determine what health effect or risk, if any, having 10 manganese in the water has on a person? 11 12 No. Α 13 Have you communicated with any State government official to discuss the issue of what effect 14 15 manganese has if it's consumed by people in drinking water? 16 17 No. We take our lead from the Department of Health, 18 so I would assume that they've done the -- if 19 they're -- if they have a concern, that they would 20 have let us know. 21 You're referring to the Washington State Department O 22 of Health? 23 Correct. Α 24 That your expectation would be that if there was any 25 element in the water that might be a risk to human

health, you would expect the DOH to bring it to your 1 2 attention; is that right? 3 Α Yes. Does Rainier, in your view, have any obligation to do 4 5 any research of its own to determine whether there's 6 anything in the water that may be a risk to human 7 health? 8 We don't do any type of outside risk reduction like 9 that. 10 You don't do any outside research either, do you? 11 Α No. 12 Who have you -- or strike that. 13 Do you recall the names of any of the people at 14 the Washington State Department of Health that you 15 have talked to about manganese? 16 Yes. Bob James, John Ryding, Derek Pell, Chris Α 17 McMeen. 18 Do you know how to spell that last name? 19 Α M-c-M-e-e-n. He was a regional engineer at 20 Department of Health. 21 Jolyn Leslie, reg -- excuse me -- regional 22 engineer, Department of Health. And Virpi 23 Salo-Zieman. She's our current regional engineer. 24 Have you read any report or document published by the 25 Washington State Department of Health that discusses

manganese in drinking water? 1 2 Just the limits that are allowable. 3 Do you know what the allowable limit is for 4 manganese? 5 Α .05 milligrams per liter. 6 Do you know how that figure was set? 7 I do not. Α 8 Do you know who set the figure? 9 I do not. Α Do you know what scientific studies, if any, went 10 into setting that figure? 11 12 I do not. 13 Have you ever asked anyone at DOH what risk, if any, 14 there is to human health in exceeding that level of .05? 15 16 I'm always told it's a secondary contaminant. And... 17 What does that mean to you? 18 It means it's more of aesthetics, the color, and that 19 there's no health risk involved. 20 And that's what DOH told you? Q 21 That's what -- yes. Α 22 So DOH has assured you that manganese poses no risk O 23 to human health; is that right? 24 By categorizing it as a secondary contaminant, I'm --25 I might be assuming that. I don't know if I've ever

had them come out and say that, that there's no risk. 1 2 But in our -- in our testing procedures and staying 3 in compliance with DOH, we've -- we just count on 4 them to be the regulatory agency to let us know 5 what's -- what we should be looking for. 6 On this one, I want to just ask the question to be a 0 7 little bit more careful. Because if -- I would want 8 to know if you're assuming or if you know. 9 Mm-hmm. Α There is a difference in this --10 11 Sure. 12 -- particular question. And I appreciate you gave 13 your best to give your answer, but let me just try to 14 rephrase it. 15 Do you have any recollection of having a particular conversation with anyone from the State of 16 17 Washington Department of Health on the issue of the 18 risk posed to human health of manganese levels in excess of .05 in drinking water? 19 20 I don't recall any particular time I actually sat Α 21 with anybody and talked about it. 22 Do you know how the State of Washington DOH went about setting that standard for manganese of .05? 23 24 Α No. 25 Have you ever asked anyone at DOH how they came up

with that standard of .05? 1 2 Α No. 3 Did you have to have discussions with the DOH to 4 obtain their approval to install this ATEC filtration 5 system? 6 Α Yes. 7 Did you have to explain to them what the plan was and 8 then they have to give you approval to go through 9 with it? 10 Α Correct. 11 Did you submit documentation to the DOH explaining 12 the goal of this ATEC system? 13 Α Yes. 14 Did they make any suggestion as to doing anything different or did they just accept what you had 15 16 suggested? 17 I'm sure there were some comments back from the 18 engineering. I don't recall what they were, but I 19 know there was some communication between our 20 engineer and theirs. 21 This word "ATEC," is that the name of the O manufacturer? 22 23 Yes, it is. 24 And is it A, hyphen, TECH, T-E-C-H? 25 Α It's A-T-A-C or E-C.

1 ATAC? Q 2 I guess it's E-C. ATEC. 3 And where are they located? 4 I think they've manufactured out of -- in Hollister, 5 California. 6 Is this a new product that they just came out with? 7 Been out for maybe 10, 12 years. Α 8 What was the rationale for installing the ATEC 9 filters just this last summer? 10 Well, because of the complaints we were getting and 11 the knowledge that we had at the level of manganese, 12 we decided that was one of the sites -- one of the 13 three sites that we'd pick this year. 14 Did Rainier ever consider purchasing and installing the ATEC filters before? 15 16 No. Α Whose idea was it to install ATEC filters? 17 18 yours or someone else working at Rainier? 19 It was a board decision. With regard to the board, let me ask you a few 20 21 questions about the board members. Do they have your 22 kind of technical expertise in water management 23 systems? 2.4 There's -- one of the board members is a WDM 3. 25 Which one is that?

Doug Fisher. Chuck Warner has a WDM 2. And that's 1 Α 2 probably the most qualified. 3 Do you have regular board meetings? 4 Yes. Α 5 How often? 0 6 Monthly. Α 7 And are minutes kept of those meetings? 8 Α Yes. Our legal counsel comes to all of our meetings, 9 and he keeps the minutes. 10 Is that Mr. Finnigan? Q 11 Α Yes, it is. 12 Did you discuss this ATEC filtration system at one of 13 these monthly meetings? 14 I'm assuming we did. Α Can you estimate -- can you estimate approximately 15 when you recall first discussing the possible use of 16 the ATEC filtration system for the Fir Meadows wells? 17 18 Probably spring of '16. Α 19 And I think you indicated that -- or strike that. 20 Let me ask it this way: 21 Was one of the driving forces of getting the ATEC 22 filtration system the fact that you were getting 23 complaints from your customers? 24 Α Yes. 25 Can you describe for us approximately how many

complaints you'd gotten in 2015 and 2016? 1 2 By certain areas or by certain -- just all our 3 systems? Let's start with and focus on Springwood Estates. 4 5 Α Okay. I don't have a number for Spring -- we don't 6 track by just one reg -- or one subdivision. We can 7 look at it by pressure zone. Like I said, the 8 Southwood System was made up of five different 9 pressure zones. And we can look at it by 10 system-wide, but it's really difficult to narrow it 11 down to -- by subdivisions. 12 Okay. Was there anything unusual about the number of 13 complaints that were coming from the -- let me 14 rephrase that question. Was there anything unusual about the number of 15 complaints regarding the water coming from Springwood 16 Estates versus other subdivisions in that same 17 18 pressure zone? 19 Yes. We did notice an increase. Personnel --20 employees that actually go out and do the flushing 21 were saying that we're getting a lot of -- doing a 22 lot of work out in that area. 23 Specifically Springwood Estates? 24 They don't say Springwood. We don't look at it as 25 subdivisions. We look at it as areas of the system.

1 Okay. Q 2 But Springwood is in that subdivision. Or Springwood 3 is in that -- was is in that region. 4 Okay. The region we're talking about, then, it's a 5 group of approximately how many residential 6 customers? 7 Probably four to five hundred. Α 8 So is what you're saying, it's better to refer to the 9 group of the four to five hundred customers than just focusing on Springwood Estates? 10 11 Α Yes. 12 It's more accurate? 13 Α Yes. 14 Okay. Back in 2000 -- or strike that. Does Rainier View have a policy for recording or 15 documenting complaints that come in from customers 16 regarding water quality? 17 18 Α Yes. 19 What system do you have? 20 The billing system has a comments comment. When --Α 21 if the call comes in, they look up the account and 22 will forward it on to whether it's a billing or water 23 quality issue. And then notes are made and a service 2.4 order is created out to the employees out in the field, and they go do the flushing in this case. 25

1 If any customer complained of a brownish appearance 2 of the water, would that necessarily result in a 3 customer ticket being created? 4 It should. Α 5 So in every instance where there's a complaint of 6 brownish-looking water, there actually should be 7 documentation of that? 8 Α There are incidents where, in a case of a water line 9 break, where you have a mass area experiencing 10 discoloration because of the water line break, those 11 might not get created every time because of the --12 just the sheer number. And it could be lumped into 13 one incident. But if an individual calls on a normal 14 day, that should get logged in and a service order 15 created. Now, did you personally communicate either by phone 16 17 or in person or by e-mail with Sarah or Gretchen 18 Hand? 19 Yes. I -- I have talked to her. 20 In person or by phone? 21 Both. Α 22 Can you estimate about how many times? 23 Are we talking about regarding this complaint or any 2.4 one particular complaint? 25 I think --Q

1 Trying to think. I've probably talked to her a half 2 dozen times on the phone and three or four times in 3 the office. 4 You're referring to Sarah Hand? 5 Α Yes. 6 Okay. And what did you understand to be her 7 complaints about the water? 8 Α The -- my initial contact with her wasn't regarding 9 the -- it was -- regarding the dirty water. It was 10 really regarding her pressure-reducing valve, which 11 she claims was caused by the dirty water, by the 12 discoloration and the manganese. 13 Did you feel differently? 14 I never saw the valve. And we typically don't -- and 15 I explained to her, we don't typically pay for 16 anything beyond the meter. We would -- I'd bring it 17 up before a couple different groups or customer care 18 group and ask them about it, and they said, no, we 19 typically don't. And I brought it before the board 20 even, and they said, no, we can't handle -- we can't 21 pay for customers' facilities. 22 The construction -- or excuse me. The addition of 23 the ATEC filters this last summer, at a cost of 275 2.4 to \$300,000, how many different customers is that 25 supposed to benefit?

1 It'll benefit everybody within that pressure zone. 2 And how many people are in that pressure zone? 3 There are about 8,000 connections. But that water can make its way down to a different pressure zone, 4 5 which would bring it up to probably 12 to -- 12 to 6 14,000. 7 Did Ms. Hand explain to you her complaint with the Q 8 appearance of the water? 9 Yes. Α How did she explain that complaint to you? 10 11 She -- I believe she brought a bottle of water in 12 from -- that she says she got out of her kitchen. 13 And it was discolored. 14 Did you have reason to disbelieve that that water came from the faucet in her house? 15 16 I had no idea where that water came from. I mean, 17 it's -- I have seen manganese in water, and it did 18 look like manganese. 19 Can you estimate approximately how many people in the 20 pressure zone that includes Fir Meadows voiced a 21 complaint about the appearance of the water to 22 Rainier View over the last five years? 23 It'd be in the hundreds. 24 And what typically have been the gist of these 25 complaints?

1 That there's discolor -- it's discolored, looks 2 dirty. 3 Does Rainier View take an official position as to whether the customers have a legitimate complaint 4 about the coloration or discoloration of the water? 5 6 Oh, it's a -- we feel it's a legitimate complaint. Α 7 They shouldn't -- you know, we're doing everything we 8 can to eliminate that. We have employees and 9 families and friends that live on that system, so 10 we're trying to provide the best water we can. What type of factors went into consideration to 11 determine whether -- or strike that. 12 13 Do you believe that, before the installation of 14 this ATEC filter system, that Rainier was providing 15 the best water they could, the best-quality water 16 they could? 17 We were providing the water that we could due to 18 the -- what was naturally coming out of the ground. 19 I previously asked you about approximately how many 20 complaints you had been aware of. I think I said 21 over the last five years. 22 Α Mm-hmm. 23 What if we were to expand that time frame? 2.4 complaints about the water coming out of the Firwood 25 Meadows wells, when did those start?

1 I can't say. Because it's not always -- I mean, they 2 were complain -- there could have been complaints 3 there prior to those -- to that third well being 4 online. There's natural minerals in the -- the water 5 that can discolor it other than manganese. So, yes, 6 you're always going to have -- on groundwater 7 systems, you'll always have some level of 8 discoloration. 9 Is there a guideline or a legal standard that you 10 would refer to, to determine what amount of effort or what amount of cost your company was supposed to make 11 12 in order to improve the water quality? 13 I'm not sure there's a guideline. It does come down 14 to -- the cost of the filtration is obviously the 15 biggest item. These new systems are quite a bit less 16 money, so, you know, we're starting to use them. 17 We've got I believe 10 online now. So we got to look 18 at, there's a balancing act of how much is a customer 19 going to pay for, you know, for what we have to spend 20 for the treatment. 21 Did you make an effort to determine what your customers would be willing to spend to make the 22 23 treatment? 24 I'm not sure I understand the question. 25 MR. MALDEN: Can I have you read

```
back his last answer, please?
 1
 2
                                  (Answer on Page 39, Lines 13
 3
                                   through 20, read by the
 4
                                   reporter.)
 5
 6
        (By Mr. Malden) Let me rephrase my question.
 7
   Α
        Okay.
        When did Rainier View start considering purchasing
8
9
        these filters, these ATEC filters, in order to try
        and minimize the problem at Fir Meadows?
10
        We looked in -- in April, or spring of 2016, we
11
12
        started looking into it.
13
        Did you say -- you started looking into it in the
14
        spring of 2016.
15
   Α
        Correct.
        Okay. Before spring of 2016, did Rainier make any
16
        effort to look into what it would cost to mitigate or
17
        reduce the level of manganese in the wells?
18
19
   Α
        No.
20
        I'd like to go back to your declaration, which we've
21
        marked as Exhibit 2. And I'd like to draw your
22
        attention to Paragraph 6 at Page 2. In the second
23
        sentence of Paragraph 6 -- well, let me rephrase
2.4
        that.
25
        Mm-hmm.
   Α
```

1 The second sentence of Paragraph 6 reads, "Secondary Q 2 contaminants are deemed not to be health hazards, and 3 maximum contaminate level quidelines are not enforceable, but rather act as a guide to protect 4 5 consumer confidence." 6 Do you see that? 7 Yes. Α 8 Did you actually write this particular Paragraph 6? 9 No. Α Even though you didn't personally write Paragraph 6, 10 do you agree with the accuracy of what it says? 11 12 The enforceable -- it could be enforceable by DOH if 13 they deem it's a big enough issue. Other than that, 14 I don't have a problem with it. 15 What do you mean when you say that they could be enforceable by DOH? 16 17 If DOH gets enough complaints, they can require us to 18 put filtration on. 19 Did that happen in this particular case, that DOH 20 required you to put filtration on, or was that your 21 idea that you took to DOH? 22 It was our idea and took it to DOH. 23 Did DOH ever pressure you to try and solve this 2.4 manganese problem? 25 Α No.

1	Q	Did DOH exhibit any concern to Rainier View about any
2		of the complaints about manganese in the water in
3		2015 and 2016?
4	A	I'm not aware of DOH having any complaints.
5	Q	I think that probably answers my question, but I'm
6		going to ask him to read back that question just to
7		be sure.
8		MR. MALDEN: If you could read back
9		my last question.
10		(Question on Page 42, Lines
11		1 through 3, read by the
12		reporter.)
13		
14	Q	(By Mr. Malden) Okay. So I think I want to re-ask
15		that question.
16		Did anyone at DOH ever contact you and express
17		concern about either customer complaints or its own
18		determination that there were excessive levels of
19		manganese in one or more of the wells?
20	A	It wasn't until November of '16 when I met with Bob
21		James out at Fir Meadows 3 and we did our we did
22		testing on all three wells to determine exactly what
23		the levels of manganese are there. But as far as I
24		know, he did not or was not aware of any complaints
25		from the customers.

Do you know Bob James' job title? 1 2 He might be the regional engin -- or regional manager 3 now for Northwest -- Northwest regional manager of 4 the drinking water. And he met with you personally? 5 6 Yes. Α 7 In November of 2016? 0 8 Α Correct. 9 And he met with you out at the Fir Meadows well? Q 10 Α Yes. And water samples were taken then? 11 Q 12 Correct. 13 Do you know why Mr. James took it upon himself to go 14 out there personally to meet with you? 15 Α He was contacted by KIRO TV and thought he better 16 find out what's going on. Who conducted the testing of the water samples that 17 18 day in November when you met with Bob James? 19 We had our water quality personnel there. We did 20 some on-site testing, and we submitted samples to 21 Water Management Laboratories for -- to confirm our 22 results. 23 Do you recall basically what the results were? 24 Wells A and -- excuse me. Wells 1 and 2, virtually 25 non-detect. And Well 3 had limits of approximately

1 .13 milligrams per liter. 2 Did you get the test results back the same day? 3 The ones that we took and ran through our own testing equipment, we did, immediate results. And they 4 5 did -- the laboratory did confirm that our results 6 were the same. 7 Did you discuss with Bob James the significance of Q 8 this finding of .13 concentration of manganese? 9 Yes. Α Did you discuss it with him that day in November? 10 11 Α Yes. 12 What was the gist of the discussion? 13 That we take that well offline until we get some 14 treatment. 15 Is that what Bob James told you? 16 He recommended it. He also realized that, in an 17 emergency, in a fire event or something, we might 18 need to turn that well on. But we didn't have to. 19 Did Bob James indicate that the only reason he wanted 20 that Well No. 3 shut down was because of the level of 21 manganese? 22 Α Yes. 23 Did you ask him why he was so concerned, since this 2.4 was just a secondary contaminant? 25 Α No.

1	Q	Did you take issue or question the necessity of
2		shutting the well down?
3	A	No. No. We we had already done a pilot study to
4		show how we were going to treat the system, or treat
5		that well. And, you know, so everything it was in
6		the works already to get to so so we were
7		pretty confident that, you know, we were going to get
8		this treatment online by summer of '17.
9	Q	And you didn't have any argument with the position
10		that a manganese level of .13 in the drinking water
11		was too much? Well, let me rephrase the question.
12		Would it be fair to say that Bob James and the
13		Washington State Department of Health told Rainier
14		View in November of 2016 that supplying water that
15		had a manganese concentration of .13 was not
16		acceptable?
17		MR. RANKIN: Objection.
18		You can answer it if you can.
19		THE WITNESS: Well, I can't answer
20		what Bob James is thinking. I can only answer what
21		he told me, and that was the if we can shut it
22		down. If you can maintain pressure on the rest of
23		the system without it, shut it down.
24	Q	(By Mr. Malden) You didn't have any argument with
25		that?

1 No. Α 2 Did it cost Rainier any money to do that? 3 Α No. 4 Did it cost Rainier any -- or strike that. 5 Was it inconvenient in some way for Rainier View 6 to do that? 7 No. Α 8 Did it have any effect on any -- or strike that. 9 Did it have any negative effect on anybody, on any of your customers, taking Well 3 offline in 10 November of 2016? 11 12 No. We were able to maintain pressures without it, 13 so didn't affect anybody. 14 Is it something that you could have done the year 15 before? 16 Had we known the issue, we -- we could have. 17 would have needed it in the summertime. But during 18 the winter, we could have shut it down maybe. 19 What do you mean by "had we known of the issue"? 20 Well, the prior summer, summer of '15, we weren't Α 21 aware that that well was causing the problem that it 22 was. 23 The problem being what? 24 The discoloration of water. The manganese. Did you, yourself, ever go out to any of the homes in 25

this pressure zone, whether Springwood Estates or 1 2 some other --3 Α Mm-hmm. -- subdivision, and yourself physically inspect the 4 5 water coming out of the tap? 6 No. Α 7 Did anyone employed by Rainier View that -- or excuse 8 me. 9 Did anyone employed by Rainier View, to your knowledge, ever go out to one of these homes in the 10 pressure zone, including Springwood Estates, to look 11 12 at the water coming out of the tap? 13 Α Yes. 14 Who did that? Q 15 Field personnel. Operations manager and field 16 superintendent both go out and do the same function. 17 Flush lines. 18 O Do they work under you? 19 Α Yes. Maybe I should get the work hierarchy here straight. 20 21 Okay. Α 22 So you report directly to the board; is that right? Q 23 Α Correct. 24 And then who reports to you? O 25 Bob -- excuse me. Bob Bell. And Chuck Warner. Α

1		Chuck Warner is the operations manager. Bob Bell is
2		the field superintendent.
3	Q	And as far as you know, they did personally go out
4		and look at the water coming out of the tap of some
5		of these people that had complaints?
6	A	Sure. Yes.
7	Q	And to your knowledge, did they confirm the gist of
8		the complaint through their observation?
9	A	On some of the homes, yes. On some of the homes, the
10		water was clear when they got there.
11	Q	Did you hear anyone ever complain that using this
12		water made it difficult to wash clothing?
13	A	Yes.
14	Q	Is that a legitimate complaint in your opinion?
15	A	Yes.
16	Q	You told us earlier that Ms. Hand told you that she
17		thought her pressure valve had been damaged by the
18		water. You never got a chance to expect it, though;
19		is that right?
20	A	Correct.
21	Q	Would it be fair to state, though, that having high
22		levels of manganese in the water can damage pressure
23		release valves for these water heaters?
24		MR. RANKIN: Objection.
25		You can answer it, if you can.

1		THE WITNESS: Well, number one,
2		it's a pressure-reducing valve, not a pressure relief
3		valve.
4		Can the manganese get into it? Yes. Can it
5		cause it to fail? That you know, they can be
6		cleaned. They can it's depending depending
7		on how old they are. I mean, if it's been in the
8		house since it was built, yeah, they're gonna fail
9		eventually.
10	Q	(By Mr. Malden) Do you know how often these
11		pressure-reducing valves on home heaters should be
12		replaced?
13	A	It's not on the heater. It's on it's an incoming
14		line so that it reduces the pressure to the whole
15		house. So it's totally different item.
16		But there's I'm sure there's a life expectancy
17		of, you know, something that they've come up with. I
18		don't know what it is.
19		MR. RANKIN: If we're at a good
20		stopping point, I'm going to suggest that we go for
21		lunch, when you get a chance. We've been in here for
22		about an hour and a half already.
23		MR. MALDEN: You know, I think I'm
24		fine with that, if you want to do that.
25		MR. RANKIN: Or if you're near the

1		end of a line of questions.
2		(Pause in proceedings from
3		12:51 p.m. to 1:32 p.m.)
4		
5	Q	(By Mr. Malden) We're back on the record.
6	A	Okay.
7	Q	I'd like to just remind you you're still testifying
8		under oath.
9		I'd like to follow up on a question about
10		filters. As I understand your testimony before the
11		break, Rainier has spent 275 to \$300,000 to obtain a
12		set of six filters from ATEC; is that right?
13	A	The dollar amount includes all the construction, the
14		backwash facilities, the treatment the ATEC
15		filtration itself is probably somewhere, 75 to a
16		hundred thousand dollars.
17	Q	Are there third parties that Rainier has to pay to
18		get this work done or is it just paying ATEC?
19	A	We pay ATEC. We pay the electrician. And the
20		balance, the plumbing and construction, we do it
21		internally.
22	Q	And did you sign a contract with ATEC in 2017?
23	A	I think we signed a contract and PO in '16.
24	Q	To do this work?
25	A	To start the construction of the filtration.

Had you conducted any business with this company, 1 Q 2 ATEC, before 2016? 3 Yes. On multiple wells. Other -- other water 4 systems and other wells within the Southwood System. What had you had them do before? 5 6 The same thing. Manganese removal, filtration. Α 7 Which wells had you done that for? Q 8 Α There's Country Park 2. There's -- on the printout 9 of posttreat -- our treatment monitoring, it's got 10 all the wells, if you have that there. Instead of 11 trying to -- should just be a spreadsheet or a --12 yeah. 13 Yeah. Do you want me to just read off the list 14 to you? 15 If you could tell me what the list is. 16 This is the iron manganese treatment monitoring. 17 These are the systems that we have implemented ATEC 18 systems on. 19 Q Oh, okay. 20 And then it's the -- they're in alphabetical order. 21 But it's Artondale, Behm, which is spelled B-e-h-m. 22 Cascade Highlands, Country Park 2, Emerald Terrace. 23 Then the Fir Meadows is the current one. Lauradel, 24 spelled L-a-u-r-a-d-e-l. Madrona, Muck Creek, just 25 like it sounds, Shining Mountain, Silver Creek,

1 Southwood 1, and Swanson well. 2 Is this a spreadsheet that you've prepared? 3 Yeah, it's one that we have our water quality -- they 4 monitor the iron/manganese removal, how well it's 5 working. 6 Okay. And these various wells that you've listed Q 7 off, these are all wells that are now equipped with 8 the ATEC filtration system? 9 Correct. Α 10 And what years were these wells outfitted with the ATEC filtration system? 11 12 I can't tell you which each one is. But over the 13 last 12 years, they've all come online. 14 Has the cost of each filter system for each well been 15 about the same? 16 They vary by the amount of water that they'll treat. 17 So the smaller wells are cheaper, and larger-18 producing wells, a little more expensive. 19 In addition to this filtration system that ATEC sells, would another possible solution be to add some 20 21 kind of filter just before the water goes into the 22 customer's house? 23 It would -- at the customer's expense or are you 2.4 talking for us to install? 25 I'm talking about, if the customer wanted to install

a filter, is that a viable option? 1 2 Α Yes. Do you know what kind of filter a homeowner would 3 4 like to -- would have to get? 5 Α It would -- I don't. I mean, I'm not a filter 6 expert. But it would probably be some sort of a 7 sediment filter that collects -- you're not really treating the water. You're just collecting the 8 9 particulates coming through. Do you have any particular background or experience 10 with that type of filter system? 11 12 No. Α 13 Has Rainier View ever suggested to any of its 14 customers that have complaints of brown water that one option is for them to install a filter at their 15 16 expense? 17 I'm sure we have, yes. Α 18 0 Have you personally done that? 19 Α No. And you're not personally aware of a particular 20 21 filter that you could recommend to a customer; is 22 that right? 23 That's right. 24 Do you think it would be cheaper or better -- or 25 strike that.

Is treating the well water using the ATEC system, 1 2 in your opinion is that better in some way -- cheaper 3 or more efficient or something else -- something better than having the individual customers treat the 4 water just before it comes into their home? 5 6 I would -- I feel that it's more effective to treat Α 7 the well. You're not solving the problem by putting 8 the filters at the homes. You're not removing 9 them -- you're not -- you're not -- the solution is 10 really to treat the water as it's coming out of the 11 well. Because it affects -- that way it affects 12 everybody. You can -- you can help -- help all 13 customers, not pick and choose with filtration at a 14 home. 15 With regard to the various wells that you listed off for us from the spreadsheet, those were all -- or 16 17 excuse me. They all had the filtration systems 18 installed over the course of the last 12 years. 19 Mm-hmm. Α 20 Is that right? 21 Α Correct. And out of that list, Fir Meadows is the last one to 22 have that filter system installed; is that right? 23 24 Actually, we got approvals for the Fir Meadows, 25 Southwood 1, and Lauradel. Fir Meadows -- of those

1		
1		three that we got approved, Fir Meadows was the first
2		one we installed, then Southwood 1, and then
3		Lauradel.
4	Q	Was the motivation for installing these ATEC
5		filtration systems on these other wells, was it also
6		to eliminate complaints of brown water?
7	A	Yes.
8	Q	And before you outfitted these well systems with the
9		ATEC filters, did you always wait or strike that.
10		Did you have a record of complaints that was used
11		to justify purchasing the ATEC filtration system?
12	A	I think just the number of complaints. I'm not sure
13		a recordkeeping of it or just some of these are
14		fairly small systems, so it only took a handful of
15		calls to realize there's a problem.
16	Q	Was the cost of these ATEC systems all passed on to
17		the customer via the rate increase as what happened
18		in the case of Ms. Hand?
19	A	It's
20		MR. RANKIN: Objection. Do you
21		mean surcharge?
22		THE WITNESS: Surcharge.
23		MR. MALDEN: Surcharge. Excuse me.
24		Yes.
25		THE WITNESS: Yes. They're all

handled through the surcharge. 1 2 (By Mr. Malden) And is it your testimony that you --3 when I say "you," Rainier -- Rainier decided to equip the Firwood Meadows wells with the ATEC filtration 4 system once you realized there were a significant 5 6 number of complaints? 7 Significant complaints as well as the determination Α 8 that the one well was producing a higher level of 9 manganese than the rest. 10 And how did you make that determination? 11 By testing it. 12 But it's also your testimony that the decision to 13 install the ATEC filter was not made until November 14 16 when the DOH came out to observe the testing; is that right? 15 That's not correct. We -- we -- in, I believe, 16 Α 17 January or -- not January. June or July of '16, we 18 contracted with ATEC to come out and do their pilot 19 study to determine what they could do, how much they 20 could remove, how much of the manganese they could 21 remove, and if they could do it efficiently. 22 So, and then in August, they came out and did 23 their pilot study. And then I believe we ordered the 2.4 tank in October or something, the construction. 25 that was actually -- we implemented that before the

1 Hand complaint. 2 You implemented what? 3 The treatment program. The process of, you know, doing the pilot study, getting -- hire an engineer to 4 5 do the design for it, then ordering the tank, 6 constructing. 7 I'd like to direct your attention back to Exhibit 2, 0 8 which is your declaration. 9 I notice that there is a document attached as Exhibit 1. This looks like it's a four-page 10 11 document. 12 Have you ever seen this document before? 13 This is the consumer confidence report. 14 And did Rainier View draft this consumer confidence 15 report? 16 Yes. Α This particular report is called "The Pipe Line"; is 17 18 that right? 19 Α Yes. And underneath, or in the title, it says "Spanaway 20 21 Ranch Water System Water Quality Report." 22 What does that mean, "Spanaway Ranch Water 23 System"? 24 Well, this is for the Spanaway Ran -- this is one of 25 our systems that we own and operate. This is -- it's

1 out towards Roy. Does this involve Springwood Estates? 2 3 No, it doesn't. Southwood Water System. Which, Springwood has its own confidence report. 4 5 How do you decide which customers get which customer 6 confidence report? 7 By their account number. Their account number is Α 8 attached to the water system. 9 Do you recall why this particular document, marked as Exhibit 1, was attached to your declaration? 10 11 I do not. 12 MR. RANKIN: That very well may 13 have been my goof in attaching the wrong --14 MS. LEE: CCR. 15 MR. RANKIN: Yeah. MR. MALDEN: Okay. 16 17 (By Mr. Malden) Okay. I'd like to now direct your 18 attention to Exhibit 3. Do you recognize Exhibit 3? 19 Yes. This is our consumer confidence report. That's actually a question that I wanted to ask you. 20 21 Mm-hmm. Α 22 The title of this document says "Annual Water Quality 23 2016." I was trying to figure out whether Report: 2.4 this is the same thing as the confidence report. 25 Yes. It's the same -- it was -- 2016. This is Α

1 the -- this is for last year. Yes, this is our most 2 up -- our most current for the Southwood System. 3 Did you, yourself, participate in drafting this 4 report? 5 No, I wasn't. Α 6 Who drafted this report, if you know? 7 It's a combination of Jim -- Jim Jensen, who's the Α 8 water quality manager, and he ran it by a couple 9 people for editing. 10 Did you ever hold that position of water quality 11 manager? 12 No, I didn't. 13 What are Mr. Jensen's job duties as water quality 14 manager? 15 Oversee the water quality. Make sure that the 16 chlorination levels are where they're supposed to be, 17 pH adjustments. 18 O Does he have a science background? 19 Α No. How old is he about? 20 21 28. Α 22 Do you know what his education is? 23 I don't. Α 24 Does he work under you? O 25 Α I mean, eventually under me.

Who does he report to directly? 1 2 Chuck Warner. Α 3 What is Chuck Warner's job title? 4 He's the operations manager. Α 5 Do you know who James Jensen would have had help him 6 draft this particular annual report? 7 Probably Martin Colette. Α 8 What is Martin Colette's job title? 9 He was office -- he works more in the accounting than 10 he does with the quality, but he has a pretty --11 pretty good knowledge of editing. 12 Do you know his educational background? 13 I don't. I know he -- he went to and I believe he 14 graduated from U-Dub Tacoma in -- with some kind of --15 sort of business. About how old is he? 16 17 Late 40s. 18 Do you have someone that works for Rainier that you 19 consider to be an expert in biochemistry or chemistry 20 or water chemistry? 21 Α No. 22 I'd like to direct your attention to the second page 23 of this report. And by the way, I just want to make 2.4 sure that my terms are correct. This says "Annual 25 Water Quality Report: 2016," but this is actually

the same as a confidence report. 1 2 Correct. Α 3 Is there something unique about Southwood that causes you to call this a water quality report? 4 5 Α I think the State will accept either term. 6 think -- I know they wanted to revamp the old, 7 instead of calling it "The Pipe Line," and I think 8 the Southwood was the, being the largest of the 9 systems, the first one to get done. 10 Going to Page 2, there's a paragraph that reads, "A Message from our Water Quality Control Manager." 11 12 And that is James Jensen; is that right? 13 Correct. I'm not sure on -- wrong page. Α 14 How long has Mr. Jensen worked for Rainier View? 15 He's been with us for 10 years. 10 or 11 years. 16 Has he always been the water quality control manager? 17 No. It's been about three years he's been the water 18 quality control manager. 19 There's a couple of statements that he makes in here 20 that I wanted to run by you. One of the statements that he makes is, "Rainier View Water Company has 21 22 always, and will continue to provide the safest 23 possible water to every last free flowing tap that we 2.4 serve." 25 Do you see that? I'm looking at the second

paragraph. 1 2 Second paragraph? Okay. Yes. That's pretty poetic. 3 Do you know if he came up with that or is that some official, you know, byline for Rainier View? 4 5 Α I guess he came up with that himself. 6 Okay. In that same paragraph, there's another 7 sentence that says, "It is of the utmost importance 8 to us to remain in compliance with all State and Federal guidelines regarding water quality." 9 10 Do you believe that's a true statement? 11 Α I do. 12 Whose responsibility is it at Rainier to ensure that 13 Rainier remains in compliance with all state and 14 federal guidelines regarding water quality? 15 Well, Jimmy is the one that does all -- makes sure 16 the testing is done, but I am the ultimate person 17 responsible. 18 When you say that James is responsible for the 19 testing, you're referring to the regular water sampling and testing that's required? 20 21 Yes. Α 22 Do you know specifically what the rules are for that, 23 how much testing is required? 24 We receive a -- the QMR water quality testing -- no. 25 What do they call it? Monitoring report. Water

1 quality monitoring report from the State for every 2 water system that we operate. And they tell us 3 what -- what tests to run on which wells. 4 The DOH tells you which tests to run on which wells? 5 Α Correct. 6 Isn't there a standard set of tests to be run on 7 every well? 8 There is a frequency that certain wells, you can get 9 exemptions if the quality's a certain point where it 10 doesn't concern the State. Do you know the rules for how frequently water 11 12 samples should be taken and tested? 13 I can't recall every one. I know we do 50 Α 14 bacteriologicals a month. Inorganics typically were 15 every three years, but you can do -- like I said, I 16 think you can get exemptions from -- to get it less 17 frequently. They allow you to do blending. there's the SOCs and VOCs, different types of 18 19 testings that I -- I can't recall. And would it be James Jensen's responsibility at 20 Q 21 Rainier to make sure that the correct tests are being 22 done at the correct time? 23 Correct. 24 That's one of his primary --25 Α That's one of his primary...

-- responsibilities? 1 2 Α Correct. 3 Do you know how he goes about doing that? 4 Well, once he gets the report, he'll schedule it out 5 on a calendar on -- to make sure that the wells --6 because not just for this system. It's on all wells 7 that we operate. Make sure that he's doing what is 8 required. 9 Getting back to one of the sentences in Paragraph 2 Q 10 of the annual report. The sentence, this is about halfway through the paragraph. Quote, "There have 11 12 been times throughout the year that the product 13 delivered to you has been aesthetically displeasing, 14 but I guarantee it has been safe to drink or cook 15 with, " close quote. 16 Do you see that? 17 Mm-hmm. Α 18 Q Is that a "yes"? 19 Α Yes, I do. Have you, yourself, ever issued that kind of personal 20 21 guarantee on water supplied by Rainier? 22 That we've -- with chlorination, we feel -- I Α 23 guarantee that the water is safe to drink. 24 And that's regardless of the, to use the word here of 25 Mr. Jensen, aesthetically displeasing appearance?

1 Α Yes. 2 Would you agree with me, though, that a consumer that 3 buys water from Rainier is entitled to have an aesthetically pleasing product? 4 5 Α I agree. Yeah, that's -- we would -- we'll do 6 everything we can to make it aesthetically pleasing. 7 If it requires flushing, whatever. Whatever it 8 takes. We will do our best. 9 If someone does have a level of manganese that, 10 you know, if it's discolored, you know, then we 11 can -- well, we've never not been able to solve it by 12 flushing. Yeah, I mean, our recommendation would be 13 to let it run until it does come clear. You know, we're not going to ask you to drink a glass of 14 15 discolored water. But it will be safe. 16 Do you agree it would be unreasonable to expect your 17 consumer to drink a glass of discolored water even 18 with your assurance that it was not damaging to their 19 health? 20 Α I'm not sure how to answer that one. I would -- no, 21 I would not expect them to drink a glass of water if it's totally discolored. I don't think it's going to 22 23 harm them, in that there's no bacteriological issues, 2.4 but it's not something aesthetically pleasing that

you'd want to take a big drink out of.

25

1 You did have some interactions and communications 2 with Sarah Hand. I want to ask you, therefore: Did 3 she say or do anything -- let me break it down this 4 way. 5 Did Ms. Hand say anything to you that you felt 6 was irrational or unreasonable? 7 The way she approached some of the issues, I thought, Α 8 were irrational. She was -- you know, her opinion 9 was one thing. Mine was something different. Most 10 of my -- like I said, most of my communication with 11 her really was regarding the valve and wanting it to 12 get paid for. But I haven't -- I haven't had that 13 much interaction with her to say it was irrational. 14 Okay. I believe you have taken the position that it 15 was not reasonable for her to ask Rainier to pay for that valve; is that right? 16 17 That's right. Α 18 Aside from that, though, was there anything she said to you or some aspect of her complaint or complaints 19 that you thought was irrational or unreasonable? 20 21 I don't recall. Α At the beginning of the deposition, I asked you about 22 23 your knowledge of manganese. And would it be fair 2.4 for me to summarize your testimony by saying that 25 whatever you know about the health risk posed by

1		manganese, you got from the DOH?
2	A	That is correct.
3	Q	You've not done any independent research regarding
4		manganese, have you?
5	A	I have not.
6	Q	You've not had any discussions or strike that.
7		You're not really in a position, are you, to
8		personally guarantee that it's safe to drink or cook
9		with this water that has excessive levels of
10		manganese, are you?
11	A	I know with the levels of chlorine we have in the
12		water, that it's considered safe.
13	Q	You're referring to safe from some kind of bacterial
14		infection, right?
15	A	Correct.
16	Q	I'm referring to consumption of manganese in water
17		that has levels in excess of the maximum secondary
18		maximum contaminant level.
19		Would it be fair to state that you really don't
20		know, because you don't have the experience or the
21		training, whether that is potentially damaging to
22		human health?
23		MR. RANKIN: Objection.
24		You can answer it if you can.
25		THE WITNESS: I can't answer it.

1		Rephrase it or maybe I shouldn't say that, but
2		MR. MALDEN: Actually, you're
3		welcome to ask me to rephrase a question if you don't
4		understand it correctly. I'm happy to repeat or
5		rephrase.
6		On this one, let me ask the reporter to read that
7		back slowly.
8		(Question on Page 67, Lines
9		16 through 22, read by the
10		reporter.)
11		
12		THE WITNESS: I go back to what
13		Department of Health tells me, that they tell us it's
14		a secondary contaminant, there's no health risks. So
15		as long as I'm I have to put my trust in them,
16		that they know what they're talking about.
17	Q	(By Mr. Malden) Is it your understanding that
18		there's no health risk regardless of the level or
19		concentration of manganese in the water?
20	A	I'm not aware of any health risks.
21	Q	You're not aware of any health risks, no matter how
22		much manganese is in the water; is that right?
23	A	That's correct.
24	Q	Do you have an understanding as to why the State of
25		Washington set a maximum secondary contaminant level

of .05 milligram per liter for manganese in the 1 2 drinking water? 3 I don't know why they came up with that number. 4 Have you ever asked anyone at DOH why they came up 5 with that number? 6 I have not. Α 7 In your mind, is there any significance to the fact 8 that the State of Washington has put a maximum level for manganese in the water? 9 10 I don't know why. Have you done any research, perhaps reviewing any 11 medical or scientific articles published in the last 12 13 two or three years that talk about the potential risk 14 of manganese in drinking water? 15 I haven't seen any articles. I haven't researched 16 it, but I haven't seen any come through any of the 17 waterworks journals. 18 This particular exhibit that we've been looking at, 19 the annual report marked as Exhibit, I think it's 4? 20 Α 3. 21 Exhibit 3. Excuse me. Okay. 22 Did you read this before today? 23 I'm sure I glanced through it when they -- when they 2.4 brought it out. 25 Did you ever have any discussion with anybody at

1 Rainier about use of words and phrases like 2 "quarantee," "I quarantee it has been safe to drink 3 or cook with"? Did you have any discussion with 4 anyone at Rainier about whether or not that type of 5 language is appropriate? 6 I haven't. Α 7 To your knowledge, this language that Mr. Jensen is 8 using -- and specifically I'm talking about his 9 personal guarantee that the water's been safe to drink or cook with -- is that something that has been 10 typically published in other confidence reports and 11 12 annual reports that Rainier has sent out? 13 I'm not aware of it. 14 Mr. Jensen: What is his role in connection with the 15 publication of this document? 16 He's in charge of producing it and making sure that 17 it gets distributed in accordance with the DOH 18 regulations. 19 Do you know who it's distributed to? 20 Α All our customers, by system. Made available through 21 the Internet. It's on our website. 22 If you could go to the, I think it's about the fifth 23 page. It has a water quality table. 2.4 Α Mm-hmm. 25 Now, this is a document that summarizes water quality

testing; is that right? 1 2 Α Yes. And do you know when this testing was done? 3 4 In 2015. Α 5 The second column down, under the Southwood Water 6 Quality Table, it has manganese? 7 Mm-hmm. Α 8 And it indicates last tested 2016. And it indicates 9 the manganese level is .23; is that right? 10 That's what it says. Now, that's more than four times the maximum level 11 12 specified by the State of Washington Department of 13 Health; is that right? 14 Α Yes. 15 Do you know how many different test samples were used to get this result? 16 17 I don't. Α I notice that also on the water quality table there's 18 19 reference to nitrate. Do you see that? 20 Α Yes. 21 Are you familiar with nitrate? 22 Α Yes. 23 That's a chemical? 24 I don't believe it's a chemical. It's a natural 25 reaction from -- between nitrates and nitrites.

a -- I'm not a chemist. I don't know of all how it's 1 2 created, but it's part of a whole cycle that they 3 talk about, but... 4 Is nitrate something that poses a potential health 5 risk to humans in drinking water? 6 Yes. Α 7 Do you know what that risk is? 8 Α Can be -- for pregnancies. It can create some issues 9 with pregnancies. And it's just something you don't 10 want in your water. 11 O How do you know that? 12 I've read enough on that to be considered a health 13 risk. 14 Just out of curiosity, just to pick another one of 15 these items, like -- let's see if I can pronounce it -- trihalomethane? 16 17 Mm-hmm. Α 18 0 Are you familiar with that? 19 Α Yes. 20 Is there a danger to that? 21 From what I understand, there can be. I'm not sure Α 22 what the effects are. It's just, it would be 23 considered a hazardous -- hazardous to your health. What about compounds like lead and copper? 24 25 potentially dangerous to human health?

1 Lead is more so than copper. I think -- like I say, 2 I'm not an expert on it, but I do know the difference 3 between health hazards and aesthetics. 4 If you did have a water sample test that came back 5 with nitrate in excess of the maximum level --6 Mm-hmm. Α 7 -- what would be the responsive action? 8 Α The responsive action would be shut the well off 9 immediately. There'd be notification to the 10 customers, and try to figure out how to get rid of 11 it. 12 Is there a law that requires Rainier View to notify 13 customers of certain events involving the water? 14 Α Yes. 15 Do you know what the specific requirement is? 16 Depends on the event that we're addressing. Anything 17 from, what they call an acute violation would be 18 within, I think, 48 hours. Then there's non-acutes that you have up to 30 days. And then there's other 19 20 violations that you have to the next year. 21 Is it all set forth somewhere in a Washington 0 Administrative Code regulation, which one is which? 22 I can't recall which one, where it's at, but 23 2.4 it's a -- it's in the WACs. 25 Do you know how notices are given to your customers?

```
MR. RANKIN: Objection. Can you be
 1
 2
        more specific about the notice?
 3
        (By Mr. Malden) Well, okay. Let's just say
        hypothetically that there was a situation where you
 4
 5
        did a test sample and it came back with an excessive
 6
        level of something that requires reporting to the
 7
        consumer or --
8
   Α
       Mm-hmm.
9
        -- to the customer.
           How, logistically, does Rainier View do that?
10
11
        Well, if it's a non-acute, we can mail it, send out a
12
        notice by mail. You can do hangers, depending on the
13
        size of the system.
14
       What's a hanger?
15
       Basically staple the notice to a door hanger.
16
        Deliver it that way. There's electronic. I guess
17
       media would be one of the ways also.
18
        The reason that I'm asking is I'm just assuming that
19
        if you have thousands of customers that you have to
        give written notice of something, how do you delegate
20
21
        that? Is there someone within Rainier View that is
22
        responsible for checking mailing lists and so forth,
23
        making sure --
24
   Α
       Mm-hmm.
25
        -- that that notice is given?
```

1 The notice would go to the -- the board would Α 2 typically create the notice, or someone on the board. 3 There again, depends on what the notice is regarding. 4 Whether it's, you know -- depending. It could be a 5 UTC, you know, notice of a rate increase. It could 6 be -- you know, that's created through the chief 7 financial officer and then given to the billing 8 department, who has records of all the accounts and 9 where to mail them to. 10 We use a third-party mailing. They send out the 11 And they know who to send -- by the account 12 number, they can tell, you know, which system they're 13 on and who gets the notice and who doesn't. 14 Does Rainier View, to your knowledge, have a record showing any incidents that resulted in notices being 15 sent to consumers over a period of time? 16 17 Other than notices for rate increases and UTC issues, 18 I don't think we've had -- had to send any notices 19 out. 20 The whole time you've been there? 21 No, we've sent out notices -- I'm trying to -- on 22 some of the smaller systems, we've sent out notices 23 for if a sample wasn't taken when it was supposed to. 24 That was years ago. There again, I say on the 25 smaller systems, sometimes just easier to go out and

1		drop off 20 notices than it is to create a mailing.
2	Q	Have you also in addition to the DOH, have you had
3		communications with the WUTC, the Washington
4		Utilities Transportation Commission?
5	A	Mm-hmm.
6	Q	Is that a "yes"?
7	A	Yes.
8	Q	What kinds of communications have you had with the
9		WUTC?
10	A	Every time we submit a request for rate increase or
11		surcharge increase or any type of change to our
12		tariff, we have to send out notices to all our
13		customers.
14	Q	Has the WUTC, to your knowledge, ever required that
14 15	Q	Has the WUTC, to your knowledge, ever required that you send copies of test reports or other
	Q	
15	Q A	you send copies of test reports or other
15 16		you send copies of test reports or other documentation to them regarding the quality of water?
15 16 17		you send copies of test reports or other documentation to them regarding the quality of water?
15 16 17 18		you send copies of test reports or other documentation to them regarding the quality of water? No. (Exhibit No. 4 marked for
15 16 17 18 19		you send copies of test reports or other documentation to them regarding the quality of water? No. (Exhibit No. 4 marked for
15 16 17 18 19 20	A	you send copies of test reports or other documentation to them regarding the quality of water? No. (Exhibit No. 4 marked for identification.)
15 16 17 18 19 20 21	A	you send copies of test reports or other documentation to them regarding the quality of water? No. (Exhibit No. 4 marked for identification.) (By Mr. Malden) You've just been handed a document
15 16 17 18 19 20 21 22	A	you send copies of test reports or other documentation to them regarding the quality of water? No. (Exhibit No. 4 marked for identification.) (By Mr. Malden) You've just been handed a document that's marked as Exhibit No. 4. Have you ever seen
15 16 17 18 19 20 21 22 23	A	you send copies of test reports or other documentation to them regarding the quality of water? No. (Exhibit No. 4 marked for identification.) (By Mr. Malden) You've just been handed a document that's marked as Exhibit No. 4. Have you ever seen this document before?

Department of Health that's entitled "Consumer 1 2 Confidence Report Certification Form." 3 Mm-hmm. 4 Down at the bottom, it looks like there's a name, 5 Tony Peredo? 6 Peredo. Α 7 Do you know who that is? 8 Α Yes. 9 Who is he? Q 10 He is an employee of Rainier View. He is in charge 11 of -- he is our cross connection specialist. And he 12 used to do all the consumer confidence reports. 13 Over what period of time did he do all the confidence 14 reports? Oh, probably last 15 years, up until -- actually, I 15 16 thought Jimmy had been doing them, so looks like -- I 17 don't know why Tony signed this one. 18 It looks like the purpose of this document is just to 19 certify that the accompanying report was sent out to 20 the customers. 21 Mm-hmm. Α 22 Is that right? O 23 Α Yes. 24 Do you know if -- getting back to the document marked 25 as Exhibit 3, do you know why this doesn't have the

1		same form on the first page, the Consumer Confidence
2		Report Certification Form?
3	A	I don't.
4	Q	Do you remember when you first started discussing the
5		Firwood Meadows system with this filter company,
6		ATEC?
7	A	Mm-hmm. Like I say, in I believe it was July of '16,
8		we requested them to come out and do a pilot study to
9		make sure that they could remove the manganese.
10	Q	And that was for Southwood?
11	A	For the Fir Meadows system as well as the Southwood 1
12		well and the Lauradel well.
13		(Exhibit No. 5 marked for
14		identification.)
15		
16	Q	(By Mr. Malden) You've just been handed a document
17		marked as Exhibit 5. I'd like to ask you some
18		questions about this.
19		Have you seen this before?
20	A	Yes.
21	Q	It's entitled an Inorganic Chemicals Report; is that
22		right?
23	A	Correct.
24	Q	Is this something that Rainier prepares or is it
25		something that's prepared for you by Water Management

Laboratories, Inc.? 1 2 Water Managements did the -- did the report. 3 So is the way this works, that Rainier collects the samples and then delivers them to Water Management 4 5 Laboratories? 6 Correct. Α 7 Is it always Rainier that takes the samples? 8 Α Yes. 9 How long has Rainier been using Water Management 10 Laboratories to do its sample testing? Oh, probably 30-plus years. 11 12 And does Water Management Laboratories, Inc., do all 13 the testing for all of Rainier View's wells? 14 On the inorganics, yes. Α 15 Does someone else do testing on organics? 16 Some of the testing that we had to do last year, or 17 the year before, QMR, yeah, they're not equipped to 18 do all tests that are required through the EPA Safe 19 Drinking Water Act. But as far as inorganics and I 20 believe the SOCs and VOCs, they -- they can. 21 Down at the bottom, under "comments." 0 22 Α Mm-hmm. 23 It says "full chem 28." Do you know what that means? 2.4 I don't. 25 Down at the bottom right corner, you can see --

Mm-hmm. 1 Α 2 -- it looks like it says scanned date, April 16, '14. 3 Mm-hmm. 4 Do you know what that is? 5 Α That's when, looks like Ken -- one of our employees 6 scanned -- had them scan all of our sampling into the 7 computer. 8 What is the normal lag time between the date the 9 sample is drawn and the date that you get the test 10 report back? It's usually about a week or so. Like on this 11 12 example, collected on the 7th and report was back on 13 the 12th. So five days. 14 I'm looking down at the first page on Exhibit 5. 15 Α Mm-hmm. You know, this particular test report, have you seen 16 this before, this particular one? 17 18 I probably have. Α 19 Under the manganese column, can you read what the test sample was for manganese? 20 21 It's .12. Α This document then indicates -- or strike that. 22 23 Would it be fair to state this document shows 2.4 that as of March 7, 2013, Rainier was aware that the 25 level of manganese in the water in these particular

1		wells was twice the maximum level set by the
2		Department of Health for the State of Washington?
3		MR. RANKIN: Objection.
4		You can answer.
5		THE WITNESS: The test results are
6		what they are. I can't say what they did with them.
7		(Exhibit No. 6 marked for
8		identification.)
9		
10	Q	(By Mr. Malden) Have you seen Exhibit 6 before?
11	A	Yes.
12	Q	This is an e-mail that you sent to Rachel Stark at
13		the WUTC; is that right?
14	A	Yes.
15	Q	Have you communicated with Rachel Stark before?
16	A	Yes.
17	Q	Do you know what her job title is?
18	A	She works with the utilities commission, in the
19		consumer protection division.
20	Q	Why were you sending this e-mail to her?
21	A	She was handling the Hand complaint. And this is
22		just a follow-up on another e-mail.
23	Q	When you say that Ms. Stark was handling the Hand
24		complaint, what do you mean by that?
25	A	Well, Sarah Hand filed a complaint with the utilities

1		commission in I'm not sure when, and she asked
2		them you know, asked us to resolve it.
3	Q	Rachel Stark asked you to resolve it?
4	A	To address it and yeah. Their job is to close the
5		complaint too.
6	Q	What is one of your customers supposed to do, what is
7		the process by which one of your customers should
8		register a complaint regarding the quality of the
9		water?
10	A	Well, I think they have a couple options. If it's
11		you know, they have the Utilities/Transportation
12		Commission. They're there to handle those
13		complaints. They have the right to call the
14		Washington State Department of Health. And that's
15		you know, go that route.
16	Q	Is it your understanding that the WUTC has the
17		authority to respond to a consumer complaint?
18		MR. RANKIN: Objection. It's a
19		legal conclusion.
20		THE WITNESS: Rephrase. I watch
21		too much TV.
22		MR. RANKIN: I mean, you can answer
23		if you can.
24		THE WITNESS: I better re-ask
25		the question, please.

1 Q (By Mr. Malden) Okay. In this particular case, are 2 you aware that Ms. Hand did, in fact, complain to the 3 WUTC? 4 Yes. Α 5 Were you at the hearing -- or strike that. 6 Did you know that the WUTC told Ms. Hand that 7 they don't have jurisdiction to hear or resolve her 8 complaint? 9 I have never heard that. Α And as far as you know, that would be inaccurate? 10 11 As far as I know, that would be inaccurate. 12 What does the WUTC have the authority to do, in your 13 opinion? 14 Well, pursue it as a formal complaint and go to the 15 next step of getting some kind of closure on it. Do you know what the procedure is for filing a formal 16 17 complaint with the WUTC? 18 Α I don't. 19 Do you know the difference between a formal and an informal complaint with the WUTC? 20 21 I know the formal complaint would end up before an Α 22 administrative law judge or something similar to that 23 and is looked at as a, as I says, a more formal 24 complaint. 25 Do you know what kind of remedy or relief, if any,

1		the WUTC is authorized to give a consumer?
2	A	I am not.
3		(Exhibit No. 7 marked for
4		identification.)
5		
6	Q	(By Mr. Malden) Have you ever seen Exhibit 7 before?
7	A	No.
8	Q	Did Rainier View discuss with ATEC systems means of
9		treating the water back in 2012?
10		MR. RANKIN: Objection. What
11		water?
12		MR. MALDEN: I'll withdraw that
13		question and try and rephrase it.
14	Q	(By Mr. Malden) You've never seen Exhibit 7 before;
15		is that right?
16	A	I'm not not aware of this document.
17	Q	Were you aware that anyone at Rainier had any
18		communication with ATEC about installing a treatment
19		system for iron and manganese removal back in 2012?
20	A	I'm not aware of it.
21	Q	Can you think or strike that.
22		Would there be anyone at Rainier other than
23		yourself that should have knowledge of communications
24		with ATEC
25	A	Mm-hmm.

-- if, in fact, they did take place in 2012? 1 2 I would have thought I would have been, as well as 3 Chuck Warner and Doug Fisher. The board would have 4 been brought up-to-date on it. Is it your testimony that in 2012 Rainier View was 5 6 not aware of the need for any manganese treatment 7 system on the Fir Meadows wells? 8 Α Yes, I'm not aware of it. I wasn't -- I have a 9 speculation what's going on, but... 10 What's your speculation? O 11 That ATEC, when we had to submit the operation -operation/maintenance -- operations and maintenance 12 13 manual, they just did a cut and paste off of their 14 manual, just their standard operations and 15 maintenance manual, and then this kind of left the 16 revised document October 12th. That's when the last 17 time this manual was revised. And one of the reasons 18 I'm saying that is, I don't see where they're system-19 specific. This is just -- they hand this out on 20 every system they build. 21 Okay. 0 22 But I'm just speculating. I don't know yet. 23 Q Okay. 2.4 I'm not aware of this. 25 Did ATEC provide you with an operation and

maintenance manual in conjunction with their 1 installation of the filters in 2017? 2 3 I would think so. Are you aware of there being an ATEC operation and 4 5 maintenance manual at Rainier View? 6 I'm sure, we should have one for each system. Α 7 I'd like to get back for a moment to Exhibit 6. 8 I'm looking at Page 2 of Exhibit 6, and there's a 9 It looks like there were 10 different tests table. 10 of water for manganese in this one year; is that 11 right? 12 This is the pilot study. These are all taken at the 13 same time -- or the same day. When they come out and 14 do the pilot study, they run multiple tests just to 15 make sure they have a consistent level. 16 Are they taking the sample from the same place? 17 Yes. Α 18 So they're taking 10 samples in a row from the same 19 place? 20 Α Yes. 21 Do you know why they took 10 samples? 22 To make sure they have a consistent number to work 23 off of. In case it fluctuated, they can average it 24 out and say this is what we have. You know, make 25 sure there's -- make sure there's consistency, I

1		guess.
2	Q	Normally when Rainier goes out and tests a water
3		sample, do they actually take 10 different samples
4		and ask the lab to run 10 different tests?
5	A	No. One.
6	Q	Did anyone at or strike that.
7		Is it ATEC that did this particular testing
8		that's shown on this table?
9	A	Yes.
10	Q	And is it your understanding that ATEC took 10
11		samples to ensure accuracy?
12	A	Correct.
13	Q	That apparently ATEC believes taking one sample and
14		acting on the basis of one sample isn't good enough?
15		MR. RANKIN: Objection;
16		speculation.
17		THE WITNESS: Yeah, I don't know
18		why they do it.
19	Q	(By Mr. Malden) Do you see any legitimate purpose in
20		taking multiple samples to ensure accuracy?
21	A	I think they're because they're running it through
22		their filter at different rates, they're trying to
23		determine what the finished product is. On the left
24		side, he has the product water, which the manganese
25		level, they look at what what it as it's

running through the filter, what your pretreatment 1 2 running through the filter at different rates and 3 your finish water is the .006 in the first -- first 4 start, first testing. 5 Can you run that by me again? 6 On the left -- okay. So you got on the left side you 7 have your source water, and they actually have their 8 start, which is .121. And then on the right side, 9 after running it through their filtration and 10 chlorination, your finish water -- no, I'm sorry. On 11 the first test is 1.18, and the finish water is .006. 12 And so then they -- they run the second test, get 13 their raw water, run it through their filtration at 14 different rates, until they're assured that -- you 15 know, then they find the most optimum rate to send it 16 through. 17 The optimum rate being, you mean, the --0 18 The flow. Α 19 The flow rate? 20 The flow to surface area of the media. Α 21 Okay. In your declaration, at Paragraph 5, you Q 22 indicate that tests of Southwood Water System source 23 indicate elevated levels of manganese and/or iron 2.4 from time to time, close quote. 25 Do you see that?

1 Α Mm-hmm. 2 Does that mean that -- well, let me rephrase it. 3 The complaint of the brownish appearance of the water, can that be caused by excessive levels of 4 either manganese or iron? 5 6 Yes. Α 7 Is there any way to determine the cause of the 8 discoloration in a specific case, whether it's 9 manganese or iron? 10 By the color or by -- I mean, without actually going out and doing a test, probably not. There are some 11 12 rule of thumbs in that iron is more of a yellow color 13 and manganese is a little darker. 14 Do you have a -- or have you made a conclusion in the 15 case of the Hands, if we assume that what they've reported is accurate, whether that discoloration is 16 17 likely caused by iron or manganese or some 18 combination of the two? 19 I think it's mostly manganese. If you -- well, on 20 the pilot study they showed -- they did tests for --21 they didn't show results on the -- the iron. 22 guess is they're so low that it didn't -- didn't even 23 register. So in the Hands' case, the iron is 2.4 probably not an issue. 25 I want to go back to a couple of general background

1 questions about Rainier View. 2 Rainier View is a privately owned company; is 3 that right? 4 Yes, it is. Α 5 And who owns the company? 6 Neil Richardson and his wife, Paula. 7 They own the company 100 percent? Q 8 I'm not aware of their financial. 9 Are you aware of anyone else, though, owning --10 excuse me. Are you aware of anyone else having an ownership 11 12 interest in the company other than those two? 13 I'm not aware of it. 14 Are you paid a wage or a salary or are you paid -- or 15 strike that. Let me just ask it that way. 16 Are you paid a wage or a salary? 17 Salary. Α 18 Are you paid a bonus of any type that's based on 19 company profits? 20 Α No. 21 Do you own any stock in the company? 22 Α No. 23 Do you know if -- the individual and his wife that 2.4 you mentioned a few moments ago, do you know if 25 they're the sole shareholders in the company?

1	A	They do have siblings, so or kids, I should say,
2		offspring that may have ownership in it.
3	Q	Do you know when they started Rainier View?
4	A	It started as Richardson Water Company back in '62.
5		And roughly in 1990 it was incorporated into Rainier
6		View.
7	Q	Does Neil Richardson maintain any active role in the
8		company?
9	A	He comes in when he can. He's in his mid 80s.
10		Having a hard time getting around, so but he comes
11		in whenever he can. Attends the board meetings as
12		much as he can.
13	Q	Are you familiar with the so-called tariff agreement
14		between the State of Washington and Rainier View?
15		MR. RANKIN: Object. It's not an
16		agreement.
17		THE WITNESS: It's a tariff. I've
18		never heard it called an agreement, but
19		MR. MALDEN: Okay. Well, I
20		probably misspoke then.
21		THE WITNESS: Okay. Okay.
22		MR. MALDEN: Let me just
23		THE WITNESS: Tariff.
24		MR. MALDEN: Let me correct the
25		question then.

(By Mr. Malden) Are you familiar with the terms of 1 Q 2 the tariff between the State and Rainier View? 3 Majority of them. 4 Were you personally involved in negotiating or 5 drafting the terms of the tariff? 6 No. Α 7 Is the tariff something that's renewed every year? 8 Α No. 9 Do you know when it was last renewed? Q 10 It changes on a regular basis, but not, you know, 11 renewed -- you don't renew the whole thing. You 12 know, if we have a rate change or a surcharge 13 addition, we may have to change that page if we're --14 you know, or schedule. 15 Could you explain to me, what is your understanding 16 of the purpose of that tariff? 17 It's to act as the, I don't want to say agreement, because that's just -- but it's basically the 18 19 guidelines that we use, you know, what we can do, 20 what we can charge, what our obligations are to our 21 customer, as well as our customer's obligation back 22 to us. 23 There's one paragraph in the tariff that refers to 2.4 limitation of damages and limitations of liability. 25 Are you familiar with that particular paragraph?

1	A	Not particularly. Our legal counsel drafted that up,
2	A	
3	\circ	Okay. So if I would you be able to even answer
	Q	
4		the question what the limitation of damages means?
5	A	I probably wouldn't be the one to ask.
6		MR. RANKIN: To the extent you're
7		asking for a legal conclusion, he wouldn't be. But I
8		believe he could answer, you know, basic questions
9		about this.
10		MS. LEE: Do you want just this?
11		MR. MALDEN: Yeah.
12		THE WITNESS: Do I have time for a
13		break? Just a quick?
14		MR. MALDEN: Sure.
15		(Pause in proceedings from
16		2:51 p.m. to 2:54 p.m.)
17		(Exhibit No. 8 marked for
18		identification.)
19		
20	Q	(By Mr. Malden) Okay. We're back on the record.
21		You've got Exhibit 8 there in front of you?
22	A	Yes.
23		MR. RANKIN: Can I have a copy of
24		that? Thank you.
25	Q	(By Mr. Malden) Okay. Do you recognize Exhibit 8 as

an excerpt from the tariff? 1 2 Α Yes. And we're looking specifically at Rule 20, 3 limitations on liability. 4 5 Now, did you participate in the drafting of this 6 paragraph? 7 I was not involved in it. Α Have you discussed the meaning of Rule 20 in the last 8 9 12 months with anyone other than your attorney? 10 Α I have not. One of the phrases that's used in this document is 11 12 "gross negligence." Do you, yourself, know what 13 gross negligence is? 14 MR. RANKIN: Objection. 15 legal conclusion. 16 THE WITNESS: No, I don't. (By Mr. Malden) Do you know if Rainier View has been 17 18 sued by any water customer other than Sarah and 19 Gretchen Hand in the last 10 years? 20 Α No. 21 Does that mean you don't know or that, no, it hasn't? 22 I'm not aware of any lawsuits in the last 10 years. 23 Okay. Do you know what the import is of this Rule 2.4 20, what effect it has on the relationship between 25 customer and Rainier View?

1	A	I do not know.
2	Q	Do you know if this Rule 20 has been changed or
3		modified in any way over the last several years?
4	A	It doesn't look like it's been changed since '93, so
5		don't know.
6	Q	Is it Rainier View's attorney, Richard Finnigan, that
7		handles the tariff updates or revisions when they're
8		necessary?
9	A	Yes, he does.
10		MR. MALDEN: Let's go off the
11		record a moment.
12		(Pause in proceedings from
13		2:58 p.m. to 3:28 p.m.)
14		(Exhibit No. 9 marked for
15		identification.)
16		
17	Q	(By Mr. Malden) You've just been handed a document
18		marked as Exhibit 9. I'd like to give you a minute
19		or two and have you look through that.
20	A	(Witness peruses exhibit.)
21	Q	Have you had a chance to look at Exhibit 9?
22	A	Yes.
23	Q	Have you ever seen Exhibit 9 before?
24	A	I am not familiar with it.
25	Q	Do you mean by that, that you've not seen Exhibit 9

before? 1 2 I have not seen this. 3 Have you seen anything like Exhibit 9 before? I'm referring, of course, to something --4 5 Α Sure. 6 Well, let me just leave it at that. Have you seen 7 anything like Exhibit 9 before? 8 Well, I see it's from the Water System Design Manual, 9 so I probably read through it and seen it, but I 10 don't recall what it said. What is the Water System Design Manual? 11 12 That's Washington -- I imagine this is from the 13 Washington State Department of Health. When a water 14 system is designed, you will follow their guidelines. 15 Let me ask you a couple of questions in general about this. Now, in this particular instance, Rainier View 16 and DOH determined that the best thing to do was to 17 18 hire ATEC to put in a filtration system; is that 19 right? 20 It was Rainier View's decision to hire ATEC to do the Α 21 pilot study, hire -- hire Apex Engineering to do the 22 engineering to design it and obtain approval from 23 DOH. So once again, DOH never stepped in and ordered 24 25 Rainier to do this, did it?

1 It did not require us to put treatment on this site. Would it be fair to state that, as far as you know, 2 0 3 the Department of Health was not even aware of the complaints of excess levels of manganese? 4 5 Α I'm not aware if DOH has gotten any complaints. 6 Did Rainier View make any specific effort to 7 determine if the customers that were experiencing the 8 brown water were willing to pay, via surcharge, the cost of the ATEC filtration system? 9 10 Because, through our surcharge, they're already 11 paying a portion of all the treatments, so we were 12 just gonna follow that procedure instead of going 13 through as questionnaires or surveys to see if they 14 wanted to pay for it. Because it affects not just 15 the people on this system; it affects everybody. 16 What do you mean by, "It affects everybody"? 17 We have a uniform rate. All water systems pay the 18 same rate. All our customers, whether they're in Gig 19 Harbor or Kitsap County, they pay the same rate as 20 the customers at Springwood and the Southwood System. 21 If that's correct, then would it be also correct, 0 then, that there's a lot of customers paying for this 22 23 ATEC system that will not derive direct benefit from 2.4 it? 25 Α That's correct.

Is that how Rainier View has always handled these 1 Q 2 well improvement projects? 3 That's the way the utilities commission requires us Α 4 to handle them. 5 What do you mean by that? 6 The uniform rates are set by the -- required by the Α 7 UTC. They want us to have one uniform rate for all 8 customers. And is that something that's imposed on Rainier View 9 Q 10 by statute or regulation or the tariff or something 11 else? 12 I'm not sure what -- how the UTC arrived at it, but I 13 know ourselves and I know Washington Water Service, I 14 believe, does it also, which is the other large 15 water -- water purveyor that's regulated. 16 Are you familiar with the use of customer surveys? 17 I have done a customer survey. Α 18 When did you do a customer survey? 0 19 Years ago at Cascade Highlands. We sent out notice Α 20 as they would like to see -- I think it might have 21 been for generators. It was either generators or 22 treatment. I can't remember which. But it would 23 have increased their bills, and they rejected it. I'm going to read to you a -- it's the second 24 25 sentence from Paragraph 2 of Exhibit 9. Well,

1		actually, I may as well read the first two sentences
2		of the paragraph to make it complete.
3		Quote, "The purveyor of any public water system
4		providing service that has secondary inorganic MCL
5		exceedances shall take follow-up action as required
6		by the department. Follow-up action shall be
7		commensurate with the degree of consumer acceptance
8		of the water quality and their willingness to bear
9		the costs of meeting the secondary standard," close
10		quote.
11		My question is: Did Rainier View make any effort
12		to determine the degree of consumer acceptance of the
13		water quality?
14	A	No.
15	Q	Did Rainier View make any effort to determine the
16		willingness of the customers to bear the cost of
17		installing the ATEC system filtration?
18	A	Rephrase that or re-ask that.
19		MR. MALDEN: Could I have you read
20		back that last question?
21		(Question on Page 99, Lines
22		15 through 17, read by the
23		reporter.)
24		
25		THE WITNESS: We didn't send out

1		any surveys or notices to ask if they wanted it or
2		not. We felt that it was just something that was
3		necessary to provide the service that a number of
4		customers requested.
5	Q	(By Mr. Malden) You felt it was necessary because
6		you knew that a number of customers had legitimate
7		complaints about the brown water; is that right?
8	A	That's correct.
9	Q	The fourth paragraph down on the first page of this
10		exhibit says that, "DOH will require action by the
11		purveyor when the purveyor receives five or more
12		specific complaints associated with a secondary
13		contaminant from different customers in a 12-month
14		period, " close quote.
15		Would it be fair to state that Rainier View did,
16		in fact, receive five or more specific complaints
17		involving brown water from different customers
18		MR. RANKIN: Objection.
19	Q	(Continuing by Mr. Malden) during a 12-month
20		period? I'm referring to the customers that are in
21		the same, I believe you used the word "pressure"?
22	A	Pressure zone?
23	Q	Pressure zone?
24		MR. RANKIN: Objection; misquotes
25		the misrepresents the document.

1		MR. MALDEN: You know, I actually
2		can rephrase my question. I don't need to look at
3		the specific document. I'm just let me ask it
4		this way.
5		THE WITNESS: Okay.
6	Q	(By Mr. Malden) Okay. To your knowledge, did
7		Rainier, in fact, receive five or more specific
8		complaints associated with brown water from different
9		customers in a 12-month period?
10	A	Yes.
11	Q	I'm looking down near the bottom of the first page of
12		Exhibit 9, and there's a paragraph that begins, "If a
13		water system has a 'significant' problem." Do you
14		see that?
15	A	Yes, I do.
16	Q	Would you agree that Rainier View installed the ATEC
17		filtration system because it recognized the water
18		system had a significant problem?
19		MR. RANKIN: Objection.
20		THE WITNESS: I don't know what
21		"significant problem" means in this case, but we felt
22		it was best to put a filtration system on.
23	Q	(By Mr. Malden) Did you prepare an engineering
24		report that evaluated all reasonable alternatives to
25		this filtration system?

1 I believe our engineer did. 2 Who's your engineer? 0 3 Kim Savage from Apex Engineering. Did Rainier View hire Apex Engineering to prepare an 4 5 engineering report? 6 Yes. Α 7 And did you get an engineering report? 8 Α Yes. 9 When did you get the engineering report? 10 When it was submitted to DOH. Is it your recollection that the engineering report 11 12 came up with more than one option? 13 Probably not. Α 14 Do you know why not? 15 Well, we have a proven record with the ATEC system. 16 And the other methodologies are not near as effective 17 and cost-effective. 18 Have you worked with Kim Savage and Apex Engineering 19 before? 20 Α Yes. 21 How long have you worked with them? 22 I've worked with Apex before Kim, probably the last 23 15 years. 15 to 20 years. 24 This report prepared by Kim Savage and Apex 25 Engineering, was that made available to Rainier's

1		customers?
2	A	It was a DOH document. So if someone requested it
3		from DOH, they would probably provide it. But we did
4		not offer it to the customers.
5	Q	Did the DOH ever ask Rainier View whether this ATEC
6		solution had been run by the customers?
7	A	I don't believe they ever asked.
8	Q	If I could direct your attention to the third page of
9		Exhibit 9, under the heading Roman numeral 3,
10		"Treatment Considerations."
11	A	Mm-hmm.
12	Q	It says here, quote, "When removal of iron or
13		manganese is required, the most common method for
14		removal employs oxidation followed by sedimentation
15		and filtration."
16		I'm just curious whether you know what these
17		other methods are: Oxidation and sedimentation.
18	A	Well, that's actually one method. When the water
19		comes out of the wellhead, it's perfectly clear.
20		Manganese is in a state that can't be treated, so you
21		have to oxidize it with either the chlorine or the
22		potassium per potassium permanganate, right?
23	Q	Yes.
24	A	Yeah. Anyways, those two oxidants will break that
25		manganese into a state that you can actually see, and

then it -- you can then filter it.

The others, methodologies would be sequestering, which is not a real good -- you know, it's much more expensive. It's where you put a chemical into the water. It -- there again you still have to oxidize it to a point where the chemical encapsulates it and it settles down to the bottom of the tank, and then you have to remove it that way. And it's just much more complicated, expensive, and I don't believe it's as effective.

It's used in large -- sequestering is used in large wastewater treatment plants with big open basins where they can treat millions of gallons at once. But at the most, iron manganese removal is done with this first methodology of oxidation and filtration.

- 17 0 Which is the method that --
- 18 A ATEC does.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

22

23

2.4

25

- 19 Q -- ATEC -- okay.
- Since installing the ATEC system, has Rainier

 View been checking water samples monthly?
 - A Yes. We do posttreat -- post and pretreatment, or posttreat testing. Results have been what we are expecting, coming in below the MCLs. I believe we've tested it every three weeks or so.

1 Okay. I'd like to go back for a minute to the Q 2 amended notice of deposition marked as Exhibit 1. 3 What we're going to do here is just coast through a couple of these numbered paragraphs. I've got to ask 4 5 you some follow-up questions about each subject 6 category. Okay? 7 Mm-hmm. Α 8 I've already asked you some questions about customer 9 complaints submitted to Rainier regarding the quality 10 of the water. I just want to ask a couple of follow-up questions. 11 12 Does Rainier View have a system for keeping 13 written or electronic complaints from customers? 14 If they're electronic -- either way, they should be Α 15 put into the customer comments on their account. 16 they should show up when we run a report. 17 Would that require, though, someone to look at the 18 individual bill of every customer? 19 No. You can run -- you can filter it and just ask Α 20 for all comments about brown water. 21 Have you ever done that? 22 Α Yes. 23 Q And --24 Well, back up a little bit. I have to -- I'm not 25 sure that the report that we ran, the last one we

1 did, if that was just service orders. So to actually 2 go in, do customer -- I'm not -- I'm not sure if we 3 could do it that way. We may have to go in and look 4 at every account. 5 Okay. On the service orders, though, if someone made Q 6 a complaint that required someone to go out --7 Α Mm-hmm. 8 -- or someone went out in response to the complaint, then you would keep a record of that? 9 10 The service order -- we have a record of all 11 the service orders that way. 12 Okay. But would it be possible to have someone make 13 a complaint, but no one goes out on a service order? 14 There could be a complaint. Like, I think I Α 15 mentioned earlier, scenario would be if a water main 16 broke and it was a large event where hundreds of 17 calls came in -- maybe not hundreds; we wouldn't be 18 able to handle hundreds -- you know, dozens of calls 19 came in, there might not be a record of it. 20 Okay. So did you recently do a report, then, that Q 21 showed how many brown water complaints there were that resulted in a service visit or --22 23 Yes. Α 24 -- service appointment? 25 Α Yes.

And what were those results? 1 Q Okay. 2 We ran them from June of 2015 to June of 2016 and had 3 roughly 400 complaints or service orders. And then 4 from June of '16 through June of '17, we had 180-some 5 service orders. 6 Could you discern any trend in the complaints? Are Q 7 they getting better? 8 We feel they're better, and that we've got a lot less 9 of the brown water complaints since -- since we've 10 put the other treatments on. The statistic of 400 complaints resulting in service 11 orders between June 2015 and June 2016, that is out 12 of a pool of customers of how many? 13 14 18,000. Α 15 Do you have the ability to do the same type of research in years before 2015? 16 17 I don't know if we could go back that far, but might 18 be able to. Did you personally pick this one time period of June 19 2015 to June 2016? 20 21 We actually started, the utilities commission asked Α 22 for that report in June of '17. So that's why we 23 started with the June number. We went back from June 24 '17 to June '16, came up with 180 service orders. 25 And then we decided, you know, let's see what we did

1 the prior year. So we went back an additional year. 2 For 2014? 0 3 2000 -- June of '16 to June of '17. 4 0 Oh, okay. 5 Α So we have two years' worth. 6 If you wanted to, could you get the same records for 7 2014? 8 Might be able to. I say we -- typically three years 9 is the max that the billing program holds, but I 10 can... Did you say billing program? 11 Q 12 Yeah. It's still held in the billing. It's just --13 it's not under customer comments. It's under service 14 orders. But it's the same software. 15 Do you have a, like, a customer complaint department? If someone is calling with a complaint, do they go to 16 17 one specific person? 18 If the complaint -- depends whether it's a billing 19 issue or a water quality. 20 What if it's a water quality issue? 21 It'll typically go to Art Cullen. He handles it and Α 22 distributes -- makes up the work order and sends it 23 out. 24 What is Art Cullen's job title?

25

Α

Customer service.

1 Did you have a conversation with Mr. Cullen about 2 what to tell customers that called with a concern or 3 a complaint about brown water? 4 I've had several comments with him about what to say. 5 What's the gist of the conversation? 6 That we will get somebody out and flush. They, you Α 7 know, recommend, you know, they might open their 8 faucets a little, you know, run a little bit of 9 water, see if they can get the flush to stop, or 10 flush to do their own service, and if it clears up, 11 let us know. Otherwise, you know, in the interim, 12 the service order is made up and we're gonna -- we'll 13 send somebody out to double-check. 14 Did Rainier -- or strike that. 15 Is it up to Mr. Cullen, then, to decide when a customer complaint warranted a service order? 16 17 He's supposed to send them out to all -- all calls 18 that come in. We also have an after-hours line that 19 they receive, and we'll make up the notes and service 20 order if it comes in on that. 21 To your knowledge, did Mr. Cullen ever tell the 0 22 customers that called with a complaint of brown 23 water, "We're aware of the concern. We're in the 2.4 process of getting a filtration system. We're in the 25 process of taking care of it"?

Depends -- we have multiple systems, multiple areas. 1 2 It's hard to determine exactly which treatment's 3 going to handle which customer. So it's kind of a --4 it's actually too much of a position to try to get 5 him into it and say, Yes, this is going to solve your 6 problem. 7 Okay. I think maybe what I was getting at is, if 8 someone called that was being served by one of the --9 by the Firwood Meadows well and had a brown water 10 complaint --11 Α Mm-hmm. -- to your knowledge, did Mr. Cullen ever tell them, 12 13 "Well, we understand the complaint. We're taking 14 steps to resolve it. And that's basically it. 15 There's no reason to send anyone out because there's nothing really they can do right now"? 16 17 No. I can't believe he would say that. 18 Well, what -- let's talk, for example, about Ms. Hand. 19 20 Mm-hmm. Α 21 If she called Rainier and said, "I'm complaining 22 because I have brown water coming out of the faucet," what exactly would Rainier View be able to do via a 23 24 work order to solve the problem, if anything? 25 Α We would go out and flush her service, flush the

mains, and try to remedy her immediate service. 1 2 What's involved with flushing the mains? 3 Opening up hydrants and blow-off assemblies, move 4 enough water to get the manganese that's been 5 disrupted, get it out of the system, pull her 6 service, pull the meter, and open up a valve so that 7 you can flush out the service line. 8 Do you know if the excess levels of manganese in this 9 well, do they fluctuate day to day or week to week or 10 do they remain relatively constant? 11 Remain relatively constant. I have seen where 12 earth -- the earthquake from, I think it was '02 did 13 disrupt quite a few of the wells. 14 If the manganese level, though, remains relatively 15 constant, what good does it do to flush the system? 16 Temporary fix. Α 17 When you say "temporary," what do you mean? 18 It could -- it could solve the issue for weeks or 19 months. Could solve it for a day. We don't know. 20 We can't see where the manganese is flowing, so 21 that's always -- it's always a difficult issue. 22 The approximately 400 complaints -- or actually let me ask you: Was the 400, was that an approximate 23 2.4 number or was that exact? 25 Α It's 4 -- I don't know the exact number we have.

1		don't know if you want to break it out, or
2		MR. RANKIN: Of course we don't
3		have numbers.
4		THE WITNESS: Is it on the bottom
5		of that spreadsheet?
б		MR. RANKIN: No, there's no totals.
7		THE WITNESS: It's 400 and
8		something.
9	Q	(By Mr. Malden) Okay. Was that broken down by again
10		the pressure zone?
11	A	No.
12	Q	What is that broken down by?
13	A	That is the company-wide. That's all all our
14		systems, all our customers. All 18,000 customers.
15	Q	Including the customers that have already had the
16		filtration system put on their wells?
17	A	I can't I don't know that.
18	Q	Earlier on in the deposition, you took us through a
19		list of wells
20	A	Mm-hmm.
21	Q	that had been outfitted with the ATEC filtration
22		system. Do you remember that?
23	A	Yes.
24	Q	Do you know what percentage of your total customers
25		are already on systems outfitted with the ATEC

filtration? 1 2 The system -- I mean, because you get -- like, in the 3 Southwood, there's 22 different wells. Some are 4 treated; some aren't. Some don't need it; some do. 5 That's a portion of the system. 6 Other systems, we have some small systems with 7 one well that had high manganese levels that are --8 seem to be operating fine now. So I don't know -- on 9 the 400-and-some complaints, I don't know where 10 they're from. I can't -- I -- I don't know. 11 sorry. I think I also asked for the number of complaints 12 13 arising specifically from the Springwood Estates 14 residential community. 15 Α Mm-hmm. Were you able to break that down? 16 17 Α No. 18 0 And that's because logistically you can't do it? 19 Logistically I can't -- not without going through 20 each one and breaking down, saying, Oh, this one's 21 within -- have to look at each account and say, Okay, 22 this account's in, this one's out, this one's in, 23 this one's out. No way to do that automatically? 24 25 Α No.

1 I also asked about Rainier's investigation response 2 to customer complaints regarding the quality of the 3 I think you've explained that in terms of, if you get a complaint, you will send someone out. 4 5 Α Mm-hmm. 6 Now, they don't go inside the house, though, right? 7 Correct. Α 8 Did Rainier View arrange a flushing in response to every single one of those 400 complaints? 9 10 I'd have to take a look at them. Probably --11 majority of them. What's involved? How long does it take? What's 12 required to flush the system? 13 14 On some of them, it's a matter of pulling one Α 15 service, just the meter. Open it up until it runs 16 clear. Can take five, 10 minutes. Other times it 17 can -- open up a fire hydrant and do a major flushing 18 and can take several hours. Once you open up the 19 fire hydrant, you're actually -- you can make things 20 worse because you're actually dragging all the 21 manganese in the line that's settled on the bottom of 22 the main, you're disrupting that because of the 23 velocity you're pushing through. So you have to wait 2.4 for that whole portion of the main to clear up. 25 that can take hours sometimes.

1 Q One of my subject categories was measures taken by 2 Rainier View to remediate or mitigate manganese 3 levels in water supplied to residents of Pierce 4 County. And I think you -- we've discussed that, and that 5 6 you've explained the use of the ATEC filtration 7 system. 8 Α Yes. 9 Is there anything else that Rainier has recommended 10 that people do to minimize or mitigate manganese in the water? Is there anything else they can do? 11 12 There's really nothing they can do other than maybe 13 flushing their own out of their hose bibs and try and 14 clean it up that way a little bit. 15 What do you mean out of the hose bibs? 16 Faucets. Outside faucets. Α 17 One of the subject categories I asked about was 18 potential risk to health of pets and people due to 19 the manganese. I think we've already covered that. 20 I believe you explained that you defer to the DOH. 21 Correct. Α 22 Another subject category was potential risk of damage 23 to plumbing, pipes, and fixtures and household 2.4 appliances caused by manganese in drinking water. 25 think I actually did start to ask you about this.

1		I'm not sure I finished up with it.
2	A	Mm-hmm.
3	Q	My question would be: Are you aware of excess levels
4		of manganese causing any damage or risk of damage to
5		plumbing, pipes, and fixtures and household
6		appliances?
7	A	About the only item I have had, it's not really
8		damaging; it's really doing its job. And that's the
9		refrigerator filters. That's the number-one thing
10		that gets clogged up, because it's doing its job.
11		Other than that, sediment on the bottom of hot
12		water tanks, which manufactures typically recommend
13		that you flush those out on an annual basis. And
14		that's the only thing I'm really aware of.
15	Q	One of the subject categories I asked about was
16		Rainier's duties and responsibilities, if any, to
17		investigate and correct customer complaints regarding
18		brown water or discolored by manganese.
19		Are you aware of the origin of any specific duty
20		you have to investigate customer complaints?
21		MR. RANKIN: Objection to the
22		extent that calls for a legal conclusion.
23		But you can answer, if you're able.
24		THE WITNESS: I'm not able to.
25		MR. MALDEN: Okay. I think that I

1 may be through with my questions. I'd like to take 2 just a minute and converse with Anna. This time, we 3 can just run out for a second. 4 (Pause in proceedings from 5 4:06 p.m. to 4:08 p.m.) 6 7 (By Mr. Malden) Okay. I think we just have one O 8 other little question, one other little topic here. 9 Okay. Α 10 I'm looking at an e-mail that you sent to Rachel Stark. 11 12 Mm-hmm. 13 I actually don't have an extra copy of it, but you 14 guys can take a quick look at this. And my 15 question's going to be real simple about it. Okay. I remember this one. 16 Α Okay. For the record, let me just identify the date 17 of this is November 28, 2016. And in this, one thing 18 19 that you mentioned is that you'd spoke with Sarah Hand and suggested that, We would install an 20 21 electronic meter which would help us determine --22 Α Mm-hmm. 23 -- the amount of water used to flush their lines and 2.4 credit their account by that amount. 25 Α Mm-hmm.

Is that something that is easy to do, that you can 1 2 install an electronic meter on someone's water 3 supply? 4 It's -- it is doable. We have several, actually 5 several -- we're switching to that. 6 And in order for this to work the way --7 Mm-hmm. Α 8 -- you've explained it, would the customer then have 9 to call up Rainier and say, "Okay, I'm going to flush 10 my lines now"? 11 Mm-hmm. 12 "And so between this period and this period, I'm 13 flushing"? 14 We could -- we could --15 Is that what you had in mind? 16 That's what we had in mind, you know, to try to help 17 mitigate that issue with -- when she flushed water, 18 you know, that water she's paying for. We might be 19 able to help her out on that end of it. 20 Okay. Q 21 She wasn't real receptive to that. You know, she was 22 receptive until -- and I mentioned something, and she 23 threw a few words at me that just -- not -- yeah, 24 she -- she didn't like me very well. So it was 25 something along the lines of, "Screw you," dah, dah,

1		dah, dah.
2	Q	Okay.
3	A	So it never got done.
4	Q	Okay.
5	A	Yeah, I was trying to be nice and try to help her
6		out, and that's why we didn't do it.
7		MR. MALDEN: Okay. Well, thank you
8		very much for your time and patience today. I'm
9		sorry that you had to wait at the start of the day.
10		But appreciate your time and your effort. And I
11		think that's all the questions we have.
12		THE WITNESS: Okay.
13		
14		
15		EXAMINATION
16		BY MR. RANKIN:
17	Q	I just have one quick follow-up question that I need
18		a little bit of clarification on.
19		So just within the last 10 or so minutes, you
20		mentioned that the flow of manganese remains
21		constant. Do you remember making that statement?
22	A	The flow of manganese or the level of manganese? The
23		level stays pretty constant in the wells.
24	Q	Okay. But in the water, when the wells feed into the
25		water lines, is the level of manganese constant as it

1 | leads into the water lines?

- 2 A Yes. I mean, whatever comes out of the wellhead is 3 what you're gonna get.
- Q So when it goes from the water lines, downstream,
 through the system, into the consumer homes, will it
 remain constant or will it be variable?
 - A That actually can become variable. Because as it oxidizes -- say it comes out of the wellhead. It's gonna be, you know, 1. -- .12, which it's been. As it comes out of the wellhead, it actually becomes oxidized through the air that's in the pipes. That's just the way -- you wouldn't think there'd be any more air, but there is.

And as it's -- as it's coming down the main slowly, it actually oxidizes and turns into this precipitant that actually settles to the bottom of the mains. So by the time the consumer gets it, the levels in the -- of the raw waters might be down, but they're gonna see the particulate, the stuff that's giving them the dirty-water look, as it breaks loose off the bottom of that main and comes down and floats down the service. And whoever happens to be running their water at the time, that draws in out of the main and into their homes.

O So --

1	A	So
2	Q	as different amounts of customers at different
3		times of day, different seasons of the year,
4		different events take place, different customers may
5		experience spurts of brown in the midst of clear
б		water?
7	A	Yeah.
8	Q	Am I
9	A	Yeah.
10	Q	Am I understanding that right?
11	A	Because you have to yeah, just remember, because
12		there's it doesn't matter what system you're on.
13		There's going to be sediment on the bottom of water
14		mains. Just the way, nature of the game.
15		You have a disruption in service for some reason.
16		You know, hydrant gets opened, or you know, just
17		or it just sloughs off the bottom of the pipe for no
18		apparent reason. It's coming down the pipe, all
19		dirty. I won't name names, but somebody turns on a
20		faucet. It gets drawn into their service. That
21		dirty water goes up into their home.
22		The next person, across the street, comes home an
23		hour later, turns theirs on, and it's perfectly
24		clear, because it's already had a chance to dissipate
25		back down to the bottom of the mains or whatever.

```
1
        And so that's why, when a customer calls, your first
   Q
 2
        response is, We're going to create a work order and
 3
        we'll be out, but in the meantime, try flushing and
        let us know if it clears up?
 4
 5
   Α
        Yeah.
 6
        And oftentimes that solves the problem?
 7
   Α
        Yes.
8
        And if it doesn't, that's when --
9
        That's when we go out.
   Α
10
        -- your staff goes out to flush?
11
        Yeah, we'll follow up with a major flush.
12
        And that's a bigger amount of water to clear up that
13
        burst, right?
14
   Α
        Right. Yeah. That's when we have to open up
15
        hydrants, several hours of flushing in different
16
        hydrants, and try and clear it up system -- more of a
17
        regional area to clean up instead of one home.
18
                          MR. RANKIN: Okay. I understand.
19
        That's the only question I had.
20
                          MR. MALDEN: No further questions
21
        from me.
22
                                  (Signature waived.)
23
                                  (Deposition concluded at
2.4
                                   4:14 p.m.)
25
```

1	STATE OF WASHINGTON) I, JOHN M.S. BOTELHO, CCR, RPR,) ss a certified court reporter
2	County of Pierce) in the State of Washington, do hereby certify:
3	neresy ceretry.
4	
5	That the foregoing deposition of ROBERT L. BLACKMAN was taken before me and completed on August 28, 2017, and thereafter was transcribed under my direction; that the
6	deposition is a full, true and complete transcript of the
7	testimony of said witness, including all questions, answers, objections, motions and exceptions;
8	That the witness, before examination, was by me duly sworn to testify the truth, the whole truth, and nothing but
9	the truth, and that the witness waived the right of signature;
10	
11	That I am not a relative, employee, attorney or counsel of any party to this action or relative or employee of any
12	<pre>such attorney or counsel and that I am not financially interested in the said action or the outcome thereof;</pre>
13 14	That I am herewith securely sealing the said deposition and promptly delivering the same to Nigel S. Malden.
15	IN WITNESS WHEREOF, I have hereunto set my signature on the 22nd day of September, 2017.
16	
17	"WDTC4.
18	gned &
19	Take long M.S. Botelling D. D.D.
20	John M.S. Botelho, CCR, RPR Certified Court Reporter No. 2976 (Certification expires 05/26/18.)
21	Byers & Anderson certifies that court reporting fees,
22	arrangements, terms of payment, costs, and/or services are being offered to all parties on equal terms, and that if
23	there is an agreement between Byers & Anderson and/or its court reporters and any persons and/or entities involved in
24	this litigation, and/or any third party agreements relevant to this litigation, Byers & Anderson shall disclose the
25	agreement to all parties.