

Exh. SH – 21
Docket UW 170924
Witness: Sarah Hand

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

SARAH HAND AND GRETCHEN HAND,
a married couple

Complainant,

v.

RAINIER VIEW WATER COMPANY, INC.,

Respondent.

DOCKET UW 170924

**EXHIBIT 21 TO TESTIMONY OF
COMPLAINANT SARAH HAND**

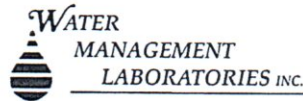
EXHIBIT 21
TO TESTIMONY OF
Sarah Hand
March 19, 2018

Southwood and Fir Meadows IOCS Test Reports from 2013-2017

**EXHIBIT TO TESTIMONY OF SARAH HAND –
DOCKET UW 170924**

NIGEL S. MALDEN LAW, PLLC
711 Court A, Suite 200
Tacoma, Wa. 98402
253-627-0393 p
844-273-6067 f

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INORGANIC CHEMICALS (IOCS) REPORT

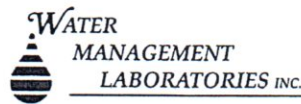
Item ID No: 82844H	System Name: Southwood	
Sample No: 08946908	Date Collected: 03-07-13	DOH Source No: S12
Multiple Source Nos: N/A	Sample Type: A	Sample Purpose: C
Date Received: 03-08-13	Date Reported: 03.12.13	Supervisor: LM
County: Pierce	Date Digested: NA	Group: (A) B Other
Sample Location: Well site - Fir Meadows A, B & C		
Send Results & Bill To: Rainier View Water PO Box 44427 Tacoma, WA 98448		Remarks: AR182R

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS		Method/Analyst	
EPA REGULATED							Trigger?	MCL?		
4	Arsenic	<0.001	mg/L	0.001	0.01	0.01	NO	NO	200.8	<i>AMB</i>
5	Barium	<0.01	mg/L	0.01	2	2	↓	↓	200.8	<i>AMB</i>
6	Cadmium	<0.0001	mg/L	0.0001	0.005	0.005			200.8	<i>AMB</i>
7	Chromium	<0.007	mg/L	0.007	0.1	0.1			200.8	<i>AMB</i>
11	Mercury	<0.0002	mg/L	0.0002	0.002	0.002			200.8	<i>AMB</i>
12	Selenium	<0.002	mg/L	0.002	0.05	0.05			200.8	<i>AMB</i>
110	Beryllium	<0.0003	mg/L	0.0003	0.004	0.004			200.8	<i>AMB</i>
111	Nickel	0.011	mg/L	0.005	0.1	0.1			200.8	<i>AMB</i>
	Antimony	<0.003	mg/L	0.003	0.006	0.006			200.8	<i>AMB</i>
	Thallium	<0.001	mg/L	0.001	0.002	0.002			200.8	<i>AMB</i>
116	Cyanide	<0.01	mg/L	0.01	0.2	0.2				
19	Fluoride	<0.2	mg/L	0.5	2	4			300.0	<i>AMB</i>
114	Nitrite - N	<0.1	mg/L	0.1	0.5	1			300.0	<i>AMB</i>
20	Nitrate - N	0.3	mg/L	0.2	5	10			300.0	<i>AMB</i>
161	Total Nitrate/Nitrite	<0.4	mg/L	0.5	5	10	↓	↓	300.0	<i>AMB</i>
EPA REGULATED (Secondary)										
8	Iron	<0.1	mg/L	0.1	0.3	0.3	NO	NO	3111B	<i>AMB</i>
10	Manganese	0.12	mg/L	0.01		0.05		YES	200.8	<i>AMB</i>
13	Silver	<0.01	mg/L	0.1		0.1		NO	200.8	<i>AMB</i>
21	Chloride	6	mg/L	20		250		↓	300.0	<i>AMB</i>
22	Sulfate	9	mg/L	50		250			300.0	<i>AMB</i>
24	Zinc	1.1	mg/L	0.2	5	5	NO		↓	200.8
STATE REGULATED										
14	Sodium	7	mg/L	5					200.8	<i>AMB</i>
15	Hardness	68	mg/L	10					2340C	<i>AMB</i>
16	Conductivity	151	umhos/cm	70		700		NO	2510B	<i>I.K.</i>
17	Turbidity	1.4	NTU	0.1					2130B	<i>I.K.</i>
18	Color	<5.0	color units	15		15		NO	2120B	<i>I.K.</i>
26	Total Dissolved Solids	NA	mg/L	100		500		—	2540C	—
STATE UNREGULATED										
9	Lead	0.04	mg/L	0.001					200.8	<i>AMB</i>
	Copper	0.24	mg/L	0.02					200.8	<i>AMB</i>

REMARKS: **Full Chem 28**

SCANNED
 DATE: 4-16-14 *RJ*

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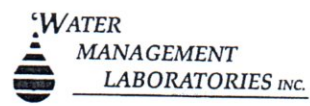
INORGANIC CHEMICALS (IOCS) REPORT

System ID No: NA	System Name: Fir Meadows #4		
Lab/Sample No: 08960678	Date Collected: 04-20-16	DOH Source No: NA	
Multiple Source Nos: NA	Sample Type: B	Sample Purpose: I	
Date Received: 04-20-16	Date Reported: 04.25.16	Supervisor: LK	
County: Pierce	Date Digested: NA	Group: (A) B Other	
Sample Location: Tapon Manifold From Wellhead			
Send Results & Bill To: Rainier View Water Company		Remarks:	
PO Box 44427			
Tacomg, WA 98448			

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst	
EPA REGULATED							Trigger?	MCL?	
4	Arsenic	NA	mg/L	0.001	0.01	0.01			200.8
5	Barium		mg/L	0.1	2	2			200.8
6	Cadmium		mg/L	0.001	0.005	0.005			200.8
7	Chromium		mg/L	0.007	0.1	0.1			200.8
11	Mercury		mg/L	0.0002	0.002	0.002			200.8
12	Selenium		mg/L	0.002	0.05	0.05			200.8
110	Beryllium		mg/L	0.0003	0.004	0.004			200.8
112	Antimony		mg/L	0.003	0.006	0.006			200.8
113	Thallium		mg/L	0.001	0.002	0.002			200.8
	Cyanide		mg/L	0.01	0.2	0.2			4500-CNF
19	Fluoride		mg/L	0.2	2	4			300.0
114	Nitrite - N		mg/L	0.1	0.5	1			300.0
20	Nitrate - N		mg/L	0.2	5	10			300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10			300.0
EPA REGULATED (Secondary)									
8	Iron	<0.1	mg/L	0.1		0.3	NO		3111B amb
10	Manganese	0.12	mg/L	0.01		0.05	YES		200.8 amb
13	Silver	NA	mg/L	0.1		0.1			200.8
21	Chloride		mg/L	20		250			300.0
22	Sulfate		mg/L	50		250			300.0
24	Zinc		mg/L	0.2		5			200.8
STATE REGULATED									
14	Sodium	NA	mg/L	5					200.8
15	Hardness		mg/L	10					2340C
16	Conductivity		umhos/cm	70		700			2510B
17	Turbidity		NTU	0.1					2130B
18	Color		color units	15		15			2120B
26	Total Dissolved Solids		mg/L	100		500			2540C
111	Nickel		mg/L	0.005					200.8
STATE UNREGULATED									
9	Lead	NA	mg/L	0.001					200.8
23	Copper		mg/L	0.02					200.8

COMMENTS: **Iron, Manganese**

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INORGANIC CHEMICALS (IOCS) REPORT

System ID No: <i>NA</i>	System Name: <i>Fir Meadows</i>		
Sample No: <i>08963794</i>	Date Collected: <i>11-18-16</i>	DOH Source No: <i>NA</i>	
Multiple Source Nos: <i>NA</i>	Sample Type: <i>B</i>	Sample Purpose: <i>I</i>	
Date Received: <i>11-18-16</i>	Date Reported: <i>11-22-16</i>	Supervisor: <i>LM</i>	
County: <i>Pierce</i>	Date Digested: <i>NA</i>	Group: <input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> Other	
Sample Location: <i>Well #1 - Wellhead</i>			
Send Results & Bill To: <i>Rainier View Water Company</i>		Remarks:	
<i>PO Box 44427</i>			
<i>Tacoma, WA 98448</i>			

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	<i>NA</i>	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	<i><0.1</i>	mg/L	0.1		0.3	<i>NO</i>	3111B <i>DMS</i>
10	Manganese	<i><0.01</i>	mg/L	0.01		0.05	<i>NO</i>	200.8 <i>DMS</i>
13	Silver	<i>NA</i>	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	<i>NA</i>	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	<i>NA</i>	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: *Iron, Manganese*

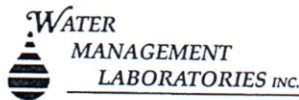
INORGANIC CHEMICALS (IOCS) REPORT

System ID No: *NA* System Name: *Fir Meadows*
 Sample No: *08963795* Date Collected: *11-18-16* DOH Source No: *NA*
 Multiple Source Nos: *NA* Sample Type: *B* Sample Purpose: *I*
 Date Received: *11-18-16* Date Reported: *11-22-16* Supervisor: *LM*
 County: *Pierce* Date Digested: *NA* Group: A B Other
 Sample Location: *Well #4 - Wellhead*
 Send Results & Bill To: *Rainier View Water Company* Remarks:
PO Box 44427
Tacoma, WA 98448

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	<i>NA</i>	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	<i><0.1</i>	mg/L	0.1		0.3	<i>NO</i>	3111B <i>DMB</i>
10	Manganese	<i>0.11</i>	mg/L	0.01		0.05	<i>YES</i>	200.8 <i>DMB</i>
13	Silver	<i>NA</i>	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	<i>NA</i>	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	<i>NA</i>	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: *Iron, Manganese*

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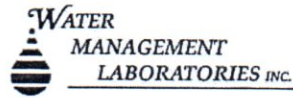
INORGANIC CHEMICALS (IOCS) REPORT

System ID No: NA System Name: Fir Meadows
 Sample No: 08963796 Date Collected: 11-18-16 DOH Source No: N/A
 Multiple Source Nos: NA Sample Type: B Sample Purpose: I
 Date Received: 11-18-16 Date Reported: 11-22-16 Supervisor: LM
 County: Pierce Date Digested: NA Group: (A) B Other
 Sample Location: Well # 2 - Wellhead
 Send Results & Bill To: Rainier View Water Company Remarks:
PO Box 44427
Tacoma, WA 98448

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium	↓	mg/L	0.1	2	2		200.8
6	Cadmium	↓	mg/L	0.001	0.005	0.005		200.8
7	Chromium	↓	mg/L	0.007	0.1	0.1		200.8
11	Mercury	↓	mg/L	0.0002	0.002	0.002		200.8
12	Selenium	↓	mg/L	0.002	0.05	0.05		200.8
110	Beryllium	↓	mg/L	0.0003	0.004	0.004		200.8
112	Antimony	↓	mg/L	0.003	0.006	0.006		200.8
113	Thallium	↓	mg/L	0.001	0.002	0.002		200.8
	Cyanide	↓	mg/L	0.01	0.2	0.2		4500-CNF
	Fluoride	↓	mg/L	0.2	2	4		300.0
114	Nitrite - N	↓	mg/L	0.1	0.5	1		300.0
20	Nitrate - N	↓	mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite	↓	mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	<0.1	mg/L	0.1		0.3	NO	3111B <i>AMS</i>
10	Manganese	<0.01	mg/L	0.01		0.05	NO	200.8 <i>AMS</i>
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride	↓	mg/L	20		250		300.0
22	Sulfate	↓	mg/L	50		250		300.0
24	Zinc	↓	mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness	↓	mg/L	10				2340C
16	Conductivity	↓	umhos/cm	70		700		2510B
17	Turbidity	↓	NTU	0.1				2130B
18	Color	↓	color units	15		15		2120B
26	Total Dissolved Solids	↓	mg/L	100		500		2540C
111	Nickel	↓	mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper	↓	mg/L	0.02				200.8

COMMENTS: Iron, Manganese

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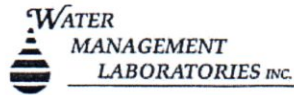
INORGANIC CHEMICALS (IOCS) REPORT

System ID No: 82844H	System Name: Southwood - Silver Creek	
Lab/Sample No: 08964022	Date Collected: 12-15-16	DOH Source No: S45
Multiple Source Nos: NA	Sample Type: B	Sample Purpose: I
Date Received: 12-15-16	Date Reported: 12-19-16	Supervisor: LK
County: Pierce	Date Digested: NA	Group: (A) B Other
Sample Location: Wellhead		
Send Results & Bill To: Rainier View Water Company P.O. Box 44427 Tacoma, WA 98448		Remarks: AR 182 R

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS		Method/Analyst
							Trigger?	MCL?	
EPA REGULATED									
4	Arsenic	NA	mg/L	0.001	0.01	0.01			200.8
5	Barium		mg/L	0.1	2	2			200.8
6	Cadmium		mg/L	0.001	0.005	0.005			200.8
7	Chromium		mg/L	0.007	0.1	0.1			200.8
11	Mercury		mg/L	0.0002	0.002	0.002			200.8
12	Selenium		mg/L	0.002	0.05	0.05			200.8
110	Beryllium		mg/L	0.0003	0.004	0.004			200.8
112	Antimony		mg/L	0.003	0.006	0.006			200.8
113	Thallium		mg/L	0.001	0.002	0.002			200.8
116	Cyanide		mg/L	0.01	0.2	0.2			4500-CNF
19	Fluoride		mg/L	0.2	2	4			300.0
114	Nitrite - N		mg/L	0.1	0.5	1			300.0
20	Nitrate - N		mg/L	0.2	5	10			300.0
161	Total Nitrate/Nitrite	↓	mg/L	0.5	5	10			300.0
EPA REGULATED (Secondary)									
8	Iron	0.12	mg/L	0.1		0.3		NO	3111B JMS
10	Manganese	0.13	mg/L	0.01		0.05		YES	200.8 JMS
13	Silver	NA	mg/L	0.1		0.1			200.8
21	Chloride	2	mg/L	20		250		NO	300.0 PL
22	Sulfate	2	mg/L	50		250		NO	300.0 PL
24	Zinc	NA	mg/L	0.2		5			200.8
STATE REGULATED									
14	Sodium	NA	mg/L	5					200.8
15	Hardness	48	mg/L	10					2340C RL
16	Conductivity	NA	umhos/cm	70		700			2510B
17	Turbidity	↓	NTU	0.1					2130B
18	Color	↓	color units	15		15			2120B
26	Total Dissolved Solids	101	mg/L	100		500		NO	2540C JBT
111	Nickel	NA	mg/L	0.005					200.8
STATE UNREGULATED									
9	Lead	NA	mg/L	0.001					200.8
23	Copper	↓	mg/L	0.02					200.8

COMMENTS: Alkalinity, Calcium, pH, Chloride, Hardness, Iron, Manganese, Sulfate, TDS
 Sample exceeds the 15-minute holding time for pH measurement

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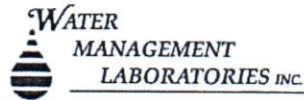
INORGANIC CHEMICALS (IOCS) REPORT

System ID No: 82844H	System Name: Southwood - Silver Creek		
Lab/Sample No: 08964017	Date Collected: 12-15-16	DOH Source No: S45	
Multiple Source Nos: NA	Sample Type: B	Sample Purpose: I	
Date Received: 12-15-16	Date Reported: 12-16-16	Supervisor: LMK	
County: Pierce	Date Digested: NA	Group: (A) B Other	
Sample Location: Pre sample station			
Send Results & Bill To: Rainier View Water Company		Remarks:	
P.O. Box 44427		AR182R	
Tacoma, WA 98448			

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
116	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
19	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	0.15	mg/L	0.1		0.3	NO	3111B DMS
10	Manganese	0.13	mg/L	0.01		0.05	YES	200.8 DMS
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: Iron, manganese

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INORGANIC CHEMICALS (IOCS) REPORT

System ID No: 82844H	System Name: Southwood - Silver Creek		
Lab/Sample No: 08964022	Date Collected: 12-15-16	DOH Source No: S45	
Multiple Source Nos: NA	Sample Type: B	Sample Purpose: I	
Date Received: 12-15-16	Date Reported: 12-19-16	Supervisor: LM	
County: Pierce	Date Digested: NA	Group: (A) B Other	
Sample Location: Wellhead			
Send Results & Bill To: Rainier View Water Company		Remarks:	
P.O. Box 44427		AR 182 R	
Tacoma, WA 98448			

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
116	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
19	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite	↓	mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	0.12	mg/L	0.1		0.3	NO	3111B JMS
10	Manganese	0.13	mg/L	0.01		0.05	YES	200.8 JMS
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride	2	mg/L	20		250	NO	300.0 RL
22	Sulfate	2	mg/L	50		250	NO	300.0 RL
24	Zinc	NA	mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness	48	mg/L	10				2340C RL
16	Conductivity	NA	umhos/cm	70		700		2510B
17	Turbidity	↓	NTU	0.1				2130B
18	Color	↓	color units	15		15		2120B
26	Total Dissolved Solids	101	mg/L	100		500	NO	2540C JGH
111	Nickel	NA	mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper	↓	mg/L	0.02				200.8

COMMENTS: Alkalinity, Calcium, pH, Chloride, Hardness, Iron, Manganese, Sulfate, TDS
Sample exceeds the 15-minute holding time for pH measurement

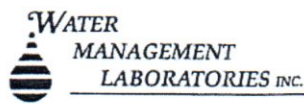
INORGANIC CHEMICALS (IOCS) REPORT

System ID No: 82844H	System Name: Southwood - Silver Creek	
Lab/Sample No: 08964017	Date Collected: 12-15-16	DOH Source No: S45
Multiple Source Nos: NA	Sample Type: B	Sample Purpose: I
Date Received: 12-15-16	Date Reported: 12-16-16	Supervisor: [Signature]
County: Pierce	Date Digested: NA	Group: (A) B Other
Sample Location: Pre sample station		
Send Results & Bill To: Rainier View Water Company		Remarks:
P.O. Box 44427		AR182R
Tacoma, WA 98448		

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
116	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
19	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	0.15	mg/L	0.1		0.3	NO	3111B [Signature]
10	Manganese	0.13	mg/L	0.01		0.05	YES	200.8 [Signature]
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: **Iron, Manganese**

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INORGANIC CHEMICALS (IOCS) REPORT

A2¹⁴

System ID No: 82844H	System Name: Southwood - Fir Meadows #4		
Lab/Sample No: 08965826	Date Collected: 06-14-17	DOH Source No: S27	
Multiple Source Nos: NA	Sample Type: B	Sample Purpose: I	
Date Received: 06-16-17	Date Reported: 06-19-17	Supervisor: LM	
County: Pierce	Date Digested: NA	Group: A B Other	
Sample Location: Manifold tap from wellhead			
Send Results & Bill To: Rainier View Water Company PO Box 44427 Tacoma, WA 98448		Remarks: AR182R	

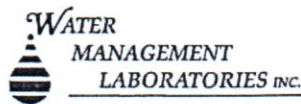
DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
116	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
19	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	<0.1	mg/L	0.1		0.3	NO	3111B JMB
10	Manganese	0.13	mg/L	0.01		0.05	YES	200.8 JMB
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: Iron, Manganese

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INORGANIC CHEMICALS (IOCS) REPORT

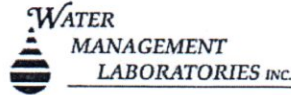
A2^H

System ID No: 82844H	System Name: Southwood-Silver Creek	
Lab/Sample No: 08965833	Date Collected: 06-15-17	DOH Source No: 545
Multiple Source Nos: NA	Sample Type: A	Sample Purpose: I
Date Received: 06-16-17	Date Reported: 06-19-17	Supervisor: UK
County: Pierce	Date Digested: NA	Group: (A) B Other
Sample Location: Post Sample Station		
Send Results & Bill To: Rainier View Water Company	Remarks: AR182R	
P.O. Box 44427		
Tacoma, WA 98448		

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
116	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
19	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	<0.1	mg/L	0.1		0.3	NO	3111B
10	Manganese	<0.01	mg/L	0.01		0.05	NO	200.8
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: Iron, Manganese

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INORGANIC CHEMICALS (IOCS) REPORT

+2¹¹

System ID No: 82844H	System Name: Southwood - Silver Creek	
Lab/Sample No: 08965832	Date Collected: 06-15-17	DOH Source No: S45
Multiple Source Nos: NA	Sample Type: A	Sample Purpose: I
Date Received: 06-16-17	Date Reported: 06-19-17	Supervisor: LM
County: Pierce	Date Digested: NA	Group: (A) B Other
Sample Location: Pre Sample station		
Send Results & Bill To: Rainier View Water Company PO Box 44427 Tacoma, WA 98448		Remarks: ARIER

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	EXCEEDS	Method/Analyst
EPA REGULATED							Trigger?	MCL?
4	Arsenic	NA	mg/L	0.001	0.01	0.01		200.8
5	Barium		mg/L	0.1	2	2		200.8
6	Cadmium		mg/L	0.001	0.005	0.005		200.8
7	Chromium		mg/L	0.007	0.1	0.1		200.8
11	Mercury		mg/L	0.0002	0.002	0.002		200.8
12	Selenium		mg/L	0.002	0.05	0.05		200.8
110	Beryllium		mg/L	0.0003	0.004	0.004		200.8
112	Antimony		mg/L	0.003	0.006	0.006		200.8
113	Thallium		mg/L	0.001	0.002	0.002		200.8
116	Cyanide		mg/L	0.01	0.2	0.2		4500-CNF
19	Fluoride		mg/L	0.2	2	4		300.0
114	Nitrite - N		mg/L	0.1	0.5	1		300.0
20	Nitrate - N		mg/L	0.2	5	10		300.0
161	Total Nitrate/Nitrite		mg/L	0.5	5	10		300.0
EPA REGULATED (Secondary)								
8	Iron	0.27	mg/L	0.1		0.3	NO	3111B JMB
10	Manganese	0.16	mg/L	0.01		0.05	YES	200.8 JMB
13	Silver	NA	mg/L	0.1		0.1		200.8
21	Chloride		mg/L	20		250		300.0
22	Sulfate		mg/L	50		250		300.0
24	Zinc		mg/L	0.2		5		200.8
STATE REGULATED								
14	Sodium	NA	mg/L	5				200.8
15	Hardness		mg/L	10				2340C
16	Conductivity		umhos/cm	70		700		2510B
17	Turbidity		NTU	0.1				2130B
18	Color		color units	15		15		2120B
26	Total Dissolved Solids		mg/L	100		500		2540C
111	Nickel		mg/L	0.005				200.8
STATE UNREGULATED								
9	Lead	NA	mg/L	0.001				200.8
23	Copper		mg/L	0.02				200.8

COMMENTS: Iron, Manganese