



4151 Naperville Road Lisle, Illinois 60532-3696 USA Phone 630 505 0160 Fax 630 505 9637 www.wqa.org

A not-for-profit organization

March 24, 2015

Pearl Cai iSpring Water Systems, LLC 3020 Trotters Parkway Alpharetta, GA 30004

Dear Pearl Cai,

For your records, WQA is sending you the test report for the TDS Reduction and Open Atmosphere Testing conducted on the RCC7 according to NSF/ANSI Standard 58 - 2013. Please find the enclosed test report for your review.

We appreciate your business and look forward to working with you on future testing and certification projects. Should you have any questions or need additional information, please feel free to contact Tom Spoden at (630) 505-0160 x 519 or tspoden@wqa.org.

Sincerely, Water Quality Association

Amanda Grass, CWS-VI Laboratory Assistant

Enclosures.



**Report Number:** 

Water Quality Association
International Headquarters & Laboratory

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## **iSpring Water Systems, LLC Test Report**

REP.7168.1501L.032415.03

Certification Project:	7168.1401C
Testing Laboratory:	Water Quality Association Laboratory 4151 Naperville Road Lisle, IL 60532
Client:	iSpring Water Systems, LLC 3020 Trotters Parkway Alpharetta, GA 30004
Test Unit:	7168.1501L.04-05
Model:	RCC7
Test Completion Date:	March 16, 2015
Test Method:	NSF/ANSI Standard 58 - 2013, TDS Reduction and Open Atmosphere
Test Results:	PASS
Comments:	Testing was conducted according to NSF/ANSI Standard 58 with no deviations. The storage tanks were filled and emptied twice with RO/DI water prior to testing. Please see the enclosed <u>Water Quality Association Laboratory Analysis Report</u> .
Testing Conducted By:	Megan Aubry, Laboratory Analyst
Verified By:	
vermed by.	Tom Spoden, CWS-VI, Laboratory Manager

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Revised: 05/26/2010 FORM.10021

# NSF/ANSI 58 / WQA S-300 TDS Data Summary

TEST UNIT INFORMATION	Testing Completed On:	3/16/2015
Manufacturer: iSpring Water Systems, LLC Model: RCC7	Test Unit Numbers:	7168.1501L.04-05
System Type: A	Contaminant:	TDS
A. Systems with storage tank and automatic shut off B. Counter top systems with storage tanks or reservoirs	Target Influent:	710 mg/L - 790 mg/L
C. Systems without storage tanks D. Systems with no shut off provisions	Allowed Influent Range: Acceptance Criteria	450 mg/L - 1050 mg/L 187 mg/L
Darley Company arm or	Units:	mg/L

## **Data Summary:**

	•			
Sample	Influent	Effluent	Effluent	Units
Collection		Unit 1	Unit 2	
Day 1	]			
4 hours	716	21.5	19.6	mg/L
12 hours	724	17.2	19.1	mg/L
16 hours	727	18.1	34.4	mg/L
	•			
Day 2	]			
24 hours	730	74.0	23.9	mg/L
30 hours	732	17.2	18.1	mg/L
36 hours	733	17.2	18.6	mg/L
,	_			
Day 3				
48 hours	739	14.8	17.2	mg/L
54 hours	739	15.8	17.2	mg/L
60 hours	735	16.2	17.2	mg/L
Day 4				
72 hours	714	16.2	17.7	mg/L
78 hours	715	16.2	17.2	mg/L
84 hours	716	16.7	17.7	mg/L
	•	•		<u>.                                     </u>
Day 7	]			
144 hours	755	17.7	18.6	mg/L

Note: No samples are collected during the 54 hour stagnation period covering days 5 and 6.

17.2

## Comments:

148 hours

751

16.2

The valve of the sampler began leaking and not rotating properly during the 24 hour sample point, explaining the high TDS value obtained.

mg/L

## **DATA FOR TESTING DAY 1**

#### PRODUCT INFORMATION

ManufactureiSpring Water Systems, LLCTest Unit Numbers:7168.1501L.04-05Model:RCC7Contaminant:TDS

System Type: A Influent Response Factor: 0.5188

Effluent Response Factor: 0.4776

### Day One Data Summary:

Sample	Influent	Influent	Effluent 1	Effluent 2	Effluent 1	Effluent 2
Collection	Cond	TDS	Cond	Cond	TDS	TDS
Collection	(mS/cm)	(mg/L)	(mS/cm)	(mS/cm)	(mg/L)	(mg/L)
4 hours	1380	716	45	41	21.5	19.6
12 hours	1395	724	36	40	17.2	19.1
16 hours	1402	727	38	72	18.1	34.4

<u>Unit 1</u> <u>Unit 2</u>

#### **Recovery Rating Test**

Reject water volume (mL) 255 Reject water volume (mL) 210

Recovery (%): 30.1

#### **Daily Production Rate Test**

Day 1 Avg. Efficiency Rating (%):

Step 1 \_\_\_\_\_ Step 1

Time required to fill tank (min): 206 Time required to fill tank (min): 204

Reject Volume Step 1 (gal): 13.1

Step 2 Step 2

Product Volume Step 2 (mL): 1880 Product Volume Step 2 (mL): 1890 Time required to refill tank (min): 87 Time required to refill tank (min): 86 Reject Volume Step 2 (gal): Reject Volume Step 2 (gal): 6.4 5.8 Product Volume Step 1 (mL): 9160 Product Volume Step 1 (mL): 8860

Unit 1 Daily Prod. Rate (gpd): 14.3 Unit 2 Daily Prod. Rate (gpd): 14.1 Unit 1 Efficiency Rating (%): 11.3 Unit 2 Efficiency Rating (%): 11.5

Day 1 Avg. Daily Prod. Rate (gpd): 14.2

11.4

# DATA FOR TESTING DAYS 2, 3, and 4

#### **PRODUCT INFORMATION**

Manufacture iSpring Water Systems, LLC
Model: Test Unit Numbers: 7168.1501L.04-05
Contaminant: TDS

System Type: A Influent Response Factor: 0.5188

Influent Response Factor: 0.5188
Effluent Response Factor: 0.4776

## Day Two Data Summary:

Sample	Influent	Influent	Effluent 1	Effluent 2	Effluent 1	Effluent 2
Collection	Cond	TDS	Cond	Cond	TDS	TDS
Collection	(mS/cm)	(mg/L)	(mS/cm)	(mS/cm)	(mg/L)	(mg/L)
24 hours	1407	730	155	50	74.0	23.9
30 hours	1410	732	36	38	17.2	18.1
36 hours	1412	733	36	39	17.2	18.6

## Day Three Data Summary:

Sample	Influent	Influent	Effluent 1	Effluent 2	Effluent 1	Effluent 2
Collection	Cond	TDS	Cond	Cond	TDS	TDS
Collection	(mS/cm)	(mg/L)	(mS/cm)	(mS/cm)	(mg/L)	(mg/L)
48 hours	1425	739	31	36	14.8	17.2
54 hours	1424	739	33	36	15.8	17.2
60 hours	1417	735	34	36	16.2	17.2

## Day Four Data Summary:

Sample	Influent	Influent	Effluent 1	Effluent 2	Effluent 1	Effluent 2
Collection	Cond	TDS	Cond	Cond	TDS	TDS
Collection	(mS/cm)	(mg/L)	(mS/cm)	(mS/cm)	(mg/L)	(mg/L)
72 hours	1377	714	34	37	16.2	17.7
78 hours	1379	715	34	36	16.2	17.2
84 hours	1381	716	35	37	16.7	17.7

## DATA FOR TESTING DAY 7

#### PRODUCT INFORMATION

Manufacture	iSpring Water Systems, LLC	Test Unit Numbers:	7168.1501L.04-05
Model:	RCC7	Contaminant:	TDS

System Type: A Influent Response Factor: 0.5188

Effluent Response Factor: 0.4776

#### Day Seven Data Summary:

Sample Collection	Influent Cond (mS/cm)	Influent TDS (mg/L)	Effluent 1 Cond (mS/cm)	Effluent 2 Cond (mS/cm)	Effluent 1 TDS (mg/L)	Effluent 2 TDS (mg/L)
144 hours	1455	755	37	39	17.7	18.6
148 hours	1447	751	34	36	16.2	17.2

Unit 1 Unit 2

## **Recovery Rating Test**

Reject water volume (mL) 220 Reject water volume (mL) 210

Recovery (%): 31.7

#### **Daily Production Rate Test**

Day 7 Avg. Efficiency Rating (%):

#### Step 1 Step 1

Time required to fill tank (min): 139 Time required to fill tank (min): 123

Reject Volume Step 1 (gal): 9.5 Reject Volume Step 1 (gal): 8.1

Step 2

#### Step 2

Product Volume Step 2 (mL): 1380 Product Volume Step 2 (mL): 1440 Time required to refill tank (min): 45 Time required to refill tank (min): 46 Reject Volume Step 2 (gal): 2.6 Reject Volume Step 2 (gal): 2.9 7440 Product Volume Step 1 (mL): 8680 Product Volume Step 1 (mL):

Unit 1 Daily Prod. Rate (gpd): 20.8 Unit 2 Daily Prod. Rate (gpd): 20.0 Unit 1 Efficiency Rating (%): 15.6

Day 7 Avg. Daily Prod. Rate (gpd): 20.4

15.7

## **Open Atmosphere Daily Production Rate and TDS Reduction Summary**

#### **TEST UNIT INFORMATION**

Manufacturer: iSpring Water Systems, LLC
Model: RCC7
Test Unit Numbers: 7168.1501L.04-05

Testing Completed On 3/16/2015

**Daily Production Rate Test:** 

Test Unit Numbers:

Day 1 Weight of Product Water Collected in 60 Minutes (lbs):

Volume of product water collected (gal):

Daily Production Rate (gpd):

Day 1 Avg. Daily Prod. Rate (gpd):

Day 7 Weight of Product Water Collected in 60 Minutes (lbs):

Volume of product water collected (gal):

Daily Production Rate (gpd):

Day 7 Avg. Daily Prod. Rate (gpd):

Avg. Daily Prod. Rate (1 & 7) (gpd):

7168.1501L.04	7168.1501L.05			
16.8	16.5			
2.01	1.98			
48.3	47.5			
47.9				
15.8	15.7			
1.893576222	1.881591563			
45.4	45.2			
45.3				
46.6				

**TDS Reduction:** 

Day 1 Influent (mg/L):

Effluent (mg/L):

Percent Reduction (%):

Day 1 Avg. TDS Reduction (%):

Day 7 Influent (mg/L):

Effluent (mg/L):

Percent Reduction (%):

Day 7 Avg. TDS Reduction (%):

Avg. TDS Reduction (1 & 7) (%):

Test Unit Numbers:

Tool office (tamboro)					
7168.1501L.04	7168.1501L.05				
723	723				
22.9	21.5				
96.8	97.0				
9	96.9				
751	751				
16.2	17.2				
97.8	97.7				
97.8					
97.4					

#### **Comments:**

N/A

# WQA S-300 / NSF 58 TDS and Organic Contaminant Reduction (including Nitrate/Nitrite) Influent Water Characteristics Summary TEST UNIT INFORMATION

Manufacturer:	iSpring Water Systems, LLC
Model:	RCC7
Test Unit Numbers:	7168.1501L.04-05
Contaminant:	TDS

#### **TANK SUMMARY**

Tank	Samples		
031015TDS	4-16 hrs		
031115TDS	24-36 hrs		
031215TDS	48-60 hrs		
031315TDS	72-84 hrs		
031615TDS	144-148 hrs		

#### **INFLUENT SUMMARY**

Sample	Temperature	Pressure	Turbidity		
Collection	(°F)	(psi)	(NTU)	TDS (mg/L)	рН
D4	1				
Day 1				1	
4 hours	75.9	50	0.097	716	7.53
12 hours	75.9	50	0.097	724	7.53
16 hours	75.9	50	0.097	727	7.53
Day 2	]				
24 hours	75.2	50	0.057	730	7.43
30 hours	75.2	50	0.057	732	7.43
36 hours	75.2	50	0.057	733	7.43
Day 3	]				
48 hours	75.4	50	0.055	739	7.2
54 hours	75.4	50	0.055	739	7.2
60 hours	75.4	50	0.055	735	7.2
Day 4	]				
72 hours	75.3	50	0.087	714	7.71
78 hours	75.3	50	0.087	715	7.71
84 hours	75.3	50	0.087	716	7.71
Day 7	]				
144 hours	77.2	50	0.069	755	7.71
148 hours	77.2	50	0.069	751	7.71
Averages:	75.7	50.0	0.073	730.4	7.50

Note: No samples are collected during the 54 hour stagnation period covering days 5 and 6.

#### **Comments:**

N/A

