

Arizona Department of Environmental Quality
Drinking Water TOCA (Total Organic Carbon/Alkalinity) Analysis Reporting Form

Please see page 2 for TOCA Treatment Technique Compliance Rules

PWS ID#: AZ04 _____

PWS Name: _____

 Sample Date Sample Time (24 hr clock)

 Owner/Contact Person/ Phone Number

 Surface Water Inlet Number

 Treatment Plant Number

_____ (Month) _____ (Year) Percent Removal Ratio (Or Alternative Criteria) _____ Running Annual Average _____ Sample Type <input type="checkbox"/> TOCA (Must be ≥ 1.0 to meet compliance) <input type="checkbox"/> Alternative Criteria <input type="checkbox"/> System has Enhanced Softening

Total Organic Carbon 2920 Method: _____

	RAW	TREATED
Sampling Site ID		
Lab specimen #		
Analysis Run Date		
Analysis Result (mg/L)		

TOC Removed (Raw TOC – Treated TOC)	
Percent TOC Removal (TOC Removed/TOC Raw)	
Required TOC Removal (See page 2)	
Removal Ratio (Percent TOC Removed/Required TOC Removed)	

Alkalinity 1927 Method: _____

	RAW	TREATED
Sampling Site ID		
Lab specimen #		
Analysis Run Date		
Analysis Result (mg/L – CaCO ₃)		

Alternative Criteria

Check the alternative criteria used for your facility for meeting TOCA

SUVA 2923 (L/mg-m) Method: _____

TTHM (mg/L) Method: _____ **HAA5 (mg/L) Method:** _____

Indicate if Cl₂ is the only disinfectant throughout system Circle one: Yes / No

Magnesium as CaCO₃ (mg/L) 1918 Method: _____

	RAW	TREATED
Sampling Site ID		
Lab specimen #		
Analysis Run Date		
Analysis Result		

Laboratory Information

Lab ID Number: AZ _____ Lab Name: _____

Printed Name and Phone Number of Lab Contact: _____

I hereby certify that the information provided on this form is accurate and correct to the best of my knowledge.

Authorized Name: _____ Authorized Signature: _____

Return to WQD_Compliance_Data@azdeq.gov

For questions call (602)771-9200

-OR- 1110 W. Washington Ave. 5415B-2

Phoenix, AZ 85007

DWAR 17C (revised 10/2016)

As per §141.135 of the Arizona Administrative Code of ADEQ's Safe Drinking Water Regulations, systems with conventional filtration must meet the following conditions.

- Removal of Total Organic Carbon (TOC) based on the below table.

Step 1 TOC Table: Required TOC Removal Matrix			
Source Water TOC (mg/L)	Source Water Alkalinity, mg/L, as Ca CO ₃		
	0-60	>60-120	>120
>2.0 to 4.0	35.0%	25.0%	15.0%
>4.0 to 8.0	45.0%	35.0%	25.0%
>8.0	50.0%	40.0%	30.0%

- If the system cannot meet the TOC percent removal ratio, one of the following alternative criteria may also be used. (Any of the following alternative criteria would give the system a 1.0 Percent Removal Ratio for the month.)
 - Raw TOC results are less than or equal to 2.0 mg/L, calculated quarterly as a running annual average.
 - Treated TOC results are less than or equal to 2.0 mg/L, calculated quarterly as a running annual average.
 - Raw SUVA results are less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.
 - Treated SUVA results are less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.
 - Raw TOC is less than 4.0 mg/L and Raw Alkalinity is greater than 60 mg/L and TTHM is less than or equal to 0.04 mg/L and HAA5 is less than or equal to 0.03 mg/L.
 - TTHM is less than or equal to 0.04 mg/L and HAA5 is less than or equal to 0.03 mg/L as a running annual average and systems are only using Chlorine as disinfectant throughout the system.
- If none of the above criteria is achievable and the system is using enhanced softening ONLY. (Any of the following alternative criteria would give the system a 1.0 Percent Removal Ratio for the month.)
 - Softening results in treated alkalinity is less than 60 mg/L (CaCO₃) measured monthly, calculated quarterly as a running annual average.
 - Softening results remove at least 10 mg/L of Mg hardness as CaCO₃, measured monthly, calculated quarterly as a running annual average.