

Utilities Department Laboratory 289 N Figueroa Avenue, Yuma, AZ 85364 (928) 373-4596

Samples for the annual inorganic analyses are collected each January.

Definitions

Primary Inorganic Chemicals – Are chemicals, mainly metals, that the Environmental Protection Agency (EPA) has determined can cause health effects if present at the maximum contaminant level (MCL) over a period of time.

Secondary Inorganic Chemicals – No standards have been set by the EPA for these chemicals at this time. These are considered to be mainly of esthetic interest and do not present a health concern.

MCL – Maximum Contaminant Level. The maximum permissible level for a contaminant in water that is delivered to any user of a water system.

Contaminant – Any physical, chemical, biological, microbiological or radiological substance or matter in water.

- **MDL PQL MRL RL** Minimum detection level practical quantitation level minimum reporting level reporting level. The lowest measurable quantity of a contaminant that current laboratory instruments or technology can measure.
- < -- This symbol indicates "less than" the number that appears to the right of it.
- $\mu g/l$ micrograms per liter or parts per billion (ppb). Divide by 1000 to convert $\mu g/l$ to mg/l.
- **mg/l** milligrams per liter or parts per million (ppm).
- **ND** Non-detectable. Rather than claiming a contaminant does not exist or is zero (0), laboratories report a contaminant is "non-detectable," and report the result as less than (<) the reporting level for that particular contaminant.

Analysis Method – Are numbers that identify the specific procedure that was used to test for the contaminant.

Contaminant Code – Identifies the contaminant with a number, mainly for computer/data tracking by the Arizona Department of Environmental Quality.



DRINKING WATER ANALYSIS REPORTING FORM

INORGANIC CHEMICAL (IOCs)

*** Entry Point to the Distribution System (EPDS) Only ***

*** PUBLIC WATER SYSTEM INFORMATION ***

		>>>> T	O BE FILLED O	OUT BY SY	STEM PERSONN	EL <<<<					
AZ0414024				Cit	y of Yuma						
PWS ID Number				PW	/S Name						
01/09/2024		09:03			ah Dennis						
Sample Date		Sample T	ime (24HR CLOCK)	Ow	ner/Contact Pers	on					
leah.dennis@yur	naaz.gov			928	928-373-4596						
Owner/Contact E	Email Addre	ess		Ow	ner/Contact Phor	e Number					
SAMPLE TYPE ☑ Compliance	Monitoring			ll ll	or MCL or Compo		-	ance			
SAMPLE COLLECTION POINT ☑ Entry Point to the Distribution System EPDS				₂ s	SAMPLE TYPE □ Confirmation - or - □ Confirmation Composite						
		>>> TO E			CAL ANALYSIS *** DRATORY PERSO						
Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analysis Run Date	Result	Exceeds MCL	Exceeds Trigger Limit			
200.8	0.010	0.005	Arsenic	1005	01/11/24 18:07	0.0019					
200.8	_ 2	1	Barium	1010	01/11/24 18:07	0.1	□				
200.8	0.005	0.0025	Cadmium	1015	01/11/24 18:07	<0.0005	□				
200.8	0.1	0.05	Chromium	1020	01/11/24 18:07	<0.001	_ □				
SM 4500 F C	_ 4	0.5	Fluoride	1025	01/12/24 20:37	0.47	_ □				
200.8	0.002	0.001	Mercury	1035	01/11/24 18:07	<0.0002	_ □				
300.0	10	2.5	Nitrate (as N)	1040	01/10/24 22:51	0.37	_ □	☐ (5 mg/L)			
300.0	_ 1	0.25	Nitrite (as N)	1041	01/10/24 22:51	<0.050	_ □	□ (0.5 mg/L)			
200.8	0.05	0.025	Selenium	1045	01/11/24 18:07	<0.005	_ □				
200.8	0.006	0.003	Antimony	1074	01/11/24 18:07	<0.001	_ □				
200.8	0.004	0.002	Beryllium	1075	01/11/24 18:07	<0.001					
335.4	0.2	0.1	Cyanide	1024	01/18/24 18:12	<0.0050					
200.8	No MCL	0.05	Nickel*	1036	01/11/24 18:07	<0.005					
200.8	0.002	0.001	Thallium	1085	01/11/24 18:07	<0.001					
200.7	No MCL	10	Sodium*	1052	01/16/24 18:07	190					
380-78005-2		>>> TO E			FORMATION *** DRATORY PERSO	NNEL <<<					
Specimen Numb											
Lab ID Number	Comme AZ0833		Name Eurofi	ns Faton Δ	nalytical Pomona	Phone Nu	ımbor (62	26) 386-1100			
Lab ib iquilibel		Lab	raine <u>Laton</u>		Jacan i omona	1 110116 NC	<u>, </u>	•			
Lab Contact, Pri	nted Name	Thomas	French		Authorized	d Signature	# Lon	D. Fil			
PWS Notification	n Date		PWS P	erson Noti	fied						

All units must be reported in milligrams per liter (mg/L) *Contaminants without MCL DWAR 2IN: Revised 07/2019 ____

Submit completed form to:

EMAIL: WQD Compliance Data@azdeq.gov -or- MAIL: ADEQ Water Quality Compliance Data Unit (MC 5415B-1),

Client Sample Results

Client: City of Yuma Job ID: 380-78005-1

Project/Site: Yuma City of

Client Sample ID: EPDS002 Agua Viva Water Treatment Plant Lab Sample ID: 380-78005-2 Date Collected: 01/09/24 09:03 **Matrix: Drinking Water** Date Received: 01/10/24 11:30

Analyte	Result Qu	ualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300	0.50	mg/L			01/12/24 00:13	10
Nitrate as N	0.37	0.050	mg/L			01/10/24 22:51	5
Nitrite as N	ND	0.050	mg/L			01/10/24 22:51	5
Sulfate	280	0.25	mg/L			01/10/24 22:51	5

Method: EPA 300.0 - Nitrogen, Nitra	ate-Nitrite							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.37	T5	0.050	mg/L			01/10/24 22:51	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100		1.0	mg/L			01/16/24 18:07	1
Magnesium	35		0.10	mg/L			01/16/24 18:07	1
Potassium	6.3	T5	1.0	mg/L			01/16/24 18:07	1
Sodium	190		1.0	mg/L			01/16/24 18:07	1
Iron	ND		0.010	mg/L			01/16/24 18:07	1
Silica	14		0.43	mg/L			01/16/24 18:07	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City of Yuma Job ID: 380-78005-1

Project/Site: Yuma City of

Client Sample ID: EPDS002 Agua Viva Water Treatment Plant

Lab Sample ID: 380-78005-2 Date Collected: 01/09/24 09:03 **Matrix: Drinking Water**

Date Received: 01/10/24 11:30

Magnesium hardness as calcium

Method: EPA 200.8 - Mercury (IC	CP/MS)							
Analyte	Result	Qualifier	RL	Unit	<u>D</u> .	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	ug/L			01/11/24 18:07	1
Method: EPA 200.8 - Metals (ICF	P/MS)							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	130		20	ug/L			01/11/24 18:07	1
Antimony	ND		1.0	ug/L			01/11/24 18:07	1
Barium	100		2.0	ug/L			01/11/24 18:07	1
Beryllium	ND		1.0	ug/L			01/11/24 18:07	1
Cadmium	ND		0.50	ug/L			01/11/24 18:07	1
Chromium	ND		1.0	ug/L			01/11/24 18:07	1
Copper	ND		2.0	ug/L			01/11/24 18:07	1
Lead	ND		0.50	ug/L			01/11/24 18:07	1
Manganese	ND		2.0	ug/L			01/11/24 18:07	1
Nickel	ND		5.0	ug/L			01/11/24 18:07	1
Selenium	ND		5.0	ug/L			01/11/24 18:07	1
Silver	ND		0.50	ug/L			01/11/24 18:07	1
Thallium	ND		1.0	ug/L			01/11/24 18:07	1
Zinc	ND		20	ug/L			01/11/24 18:07	1
Arsenic	1.9		1.0	ug/L			01/11/24 18:07	1
Method: SM 2340B - Total Hardr	ness (as CaCO3) by calculation	on					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness (as CaCO3)	400		3.0	mg/L			01/17/24 22:51	1
Calcium hardness as CaCO3	260		2.5	mg/L			01/17/24 22:51	1

0.80

140

mg/L

_carbonate								
General Chemistry Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Cations (SM 1030E)	16	T5		meq/L		<u> </u>	01/11/24 22:49	1
Total Anions (SM 1030E)	18	T5		meq/L			01/11/24 22:49	1
Percent Difference (SM 1030E)	-4.2	T5		%			01/11/24 22:49	1
Anion/Cation Balance (SM 1030E)	-4.2	T5		%			01/11/24 22:49	1
K (SM 1030E)	6.3	T5		mg/L			01/11/24 22:49	1
Calculated TDS (SM 1030E)	27	T5		mg/L			01/11/24 22:49	1
TDS Ratio (SM 1030E)	41	T5		NONE			01/11/24 22:49	1
pH of CaCO3 saturation (60C) (SM 2330B)	6.6	T5		SU			01/12/24 09:33	1
Langelier Index at 60C (SM 2330B)	1.6	T5		LangSU			01/12/24 09:33	1
pH of CaCO3 saturation (25C) (SM 2330B)	7.2	T5		SU			01/12/24 09:25	1
Langelier Index at 25C (SM 2330B)	0.99	T5		LangSU			01/12/24 09:25	1
Cyanide, Total (EPA 335.4)	ND		0.0050	mg/L		01/17/24 19:15	01/18/24 18:12	1
Aggressive Index (EPA Agressive Index)	13	T5	0.10	SU			01/12/24 09:00	1
Alkalinity as CaCO3 (SM 2320B)	170		2.0	mg/L			01/16/24 18:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	170	T5	2.0	mg/L			01/16/24 18:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND	T5	2.0	mg/L			01/16/24 18:43	1
Langelier Index (SM 2330B)	0.90			LangSU			01/12/24 10:22	1
Specific Conductance (SM 2510B)	1800		2.0	umhos/cm			01/16/24 18:43	1

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01/17/24 22:51

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Client Sample Results

Client: City of Yuma Job ID: 380-78005-1

Project/Site: Yuma City of

Client Sample ID: EPDS002 Agua Viva Water Treatment Plant

Lab Sample ID: 380-78005-2 Date Collected: 01/09/24 09:03 **Matrix: Drinking Water**

Date Received: 01/10/24 11:30

General Chemistry (Continued)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10	mg/L			01/11/24 13:15	1
Fluoride (SM 4500 F C)	0.47		0.050	mg/L			01/12/24 20:37	1
pH (SM 4500 H+ B)	8.2	H5	0.01	SU			01/16/24 18:43	1
Methylene Blue Active Substances (SM 5540C)	ND		0.10	mg/L			01/10/24 21:16	1