



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.

µg/l – micrograms per liter or parts per billion (ppb). Divide by 1000 to convert µg/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 *****

>>>> TO BE FILLED OUT BY SYSTEM PERSONNEL <<<<

<u>AZ0414024</u> PWS ID Number	<u>City of Yuma</u> PWS Name
<u>01/09/2024</u> Sample Date	<u>09:53</u> Sample Time (24HR CLOCK)
<u>leah.dennis@yumaaz.gov</u> Owner/Contact Email Address	<u>Leah Dennis</u> Owner/Contact Person
	<u>928-373-4596</u> Owner/Contact Phone Number

SAMPLE TYPE

Compliance Monitoring

SAMPLE COLLECTION POINT

Entry Point to the Distribution System **EPDS** 001

For MCL or Composite Level Sample Exceedance

Original Violation Specimen Number _____

SAMPLE TYPE

Confirmation - or - Confirmation Composite

***** INORGANIC CHEMICAL ANALYSIS *****

>>> TO BE COMPLETED BY LABORATORY PERSONNEL <<<

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 18:05	0.0011	<input type="checkbox"/>	
200.8	2	1	Barium	1010	01/11/24 18:05	0.13	<input type="checkbox"/>	
200.8	0.005	0.0025	Cadmium	1015	01/11/24 18:05	<0.0005	<input type="checkbox"/>	
200.8	0.1	0.05	Chromium	1020	01/11/24 18:05	<0.001	<input type="checkbox"/>	
SM 4500 F C	4	0.5	Fluoride	1025	01/12/24 20:42	0.42	<input type="checkbox"/>	
200.8	0.002	0.001	Mercury	1035	01/11/24 18:05	<0.0002	<input type="checkbox"/>	
300.0	10	2.5	Nitrate (as N)	1040	01/10/24 22:38	0.31	<input type="checkbox"/>	<input type="checkbox"/> (5 mg/L)
300.0	1	0.25	Nitrite (as N)	1041	01/10/24 22:38	<0.050	<input type="checkbox"/>	<input type="checkbox"/> (0.5 mg/L)
200.8	0.05	0.025	Selenium	1045	01/11/24 18:05	<0.005	<input type="checkbox"/>	
200.8	0.006	0.003	Antimony	1074	01/11/24 18:05	<0.001	<input type="checkbox"/>	
200.8	0.004	0.002	Beryllium	1075	01/11/24 18:05	<0.001	<input type="checkbox"/>	
335.4	0.2	0.1	Cyanide	1024	01/18/24 18:10	<0.0050	<input type="checkbox"/>	
200.8	No MCL	0.05	Nickel*	1036	01/11/24 18:05	<0.005	<input type="checkbox"/>	
200.8	0.002	0.001	Thallium	1085	01/11/24 18:05	<0.001	<input type="checkbox"/>	
200.7	No MCL	10	Sodium*	1052	01/16/24 17:51	140	<input type="checkbox"/>	

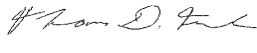
***** LABORATORY INFORMATION *****

>>> TO BE COMPLETED BY LABORATORY PERSONNEL <<<

380-78005-1
Specimen Number

Comment _____

Lab ID Number <u>AZ0833</u>	Lab Name <u>Euofins Eaton Analytical Pomona</u>	Phone Number <u>(626) 386-1100</u>
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Lab Contact, Printed Name Thomas French **Authorized Signature** 

PWS Notification Date _____ **PWS Person Notified** _____

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@azdeg.gov -or- **MAIL:** ADEQ Water Quality Compliance Data Unit (MC 5415B-1), 1110 W. Washington St., Phoenix, AZ 85007.
For questions go to: azdeg.gov/DWComplianceAssistance

Client Sample Results

Client: City of Yuma
Project/Site: Yuma City of

Job ID: 380-78005-1

Client Sample ID: EPDS001 Main Street Water Treatment Plant

Lab Sample ID: 380-78005-1

Date Collected: 01/09/24 09:53

Matrix: Drinking Water

Date Received: 01/10/24 11:30

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		0.50	mg/L			01/10/24 22:38	5
Nitrate as N	0.31		0.050	mg/L			01/10/24 22:38	5
Nitrite as N	ND		0.050	mg/L			01/10/24 22:38	5
Sulfate	330		0.25	mg/L			01/10/24 22:38	5

Method: EPA 300.0 - Nitrogen, Nitrate-Nitrite

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.31	T5	0.050	mg/L			01/10/24 22:38	1

Method: EPA 200.7 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	96		1.0	mg/L			01/16/24 17:51	1
Magnesium	35		0.10	mg/L			01/16/24 17:51	1
Potassium	5.9	T5	1.0	mg/L			01/16/24 17:51	1
Sodium	140		1.0	mg/L			01/16/24 17:51	1
Iron	ND		0.010	mg/L			01/16/24 17:51	1
Silica	9.1		0.43	mg/L			01/16/24 17:51	1

Method: EPA 200.8 - Mercury (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	ug/L			01/11/24 18:05	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		20	ug/L			01/11/24 18:05	1
Antimony	ND		1.0	ug/L			01/11/24 18:05	1
Barium	130		2.0	ug/L			01/11/24 18:05	1
Beryllium	ND		1.0	ug/L			01/11/24 18:05	1
Cadmium	ND		0.50	ug/L			01/11/24 18:05	1
Chromium	ND		1.0	ug/L			01/11/24 18:05	1
Copper	ND		2.0	ug/L			01/11/24 18:05	1
Lead	ND		0.50	ug/L			01/11/24 18:05	1
Manganese	ND		2.0	ug/L			01/11/24 18:05	1
Nickel	ND		5.0	ug/L			01/11/24 18:05	1
Selenium	ND		5.0	ug/L			01/11/24 18:05	1
Silver	ND		0.50	ug/L			01/11/24 18:05	1
Thallium	ND		1.0	ug/L			01/11/24 18:05	1
Zinc	ND		20	ug/L			01/11/24 18:05	1
Arsenic	1.1		1.0	ug/L			01/11/24 18:05	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness (as CaCO3)	380		3.0	mg/L			01/17/24 22:51	1
Calcium hardness as CaCO3	240		2.5	mg/L			01/17/24 22:51	1
Magnesium hardness as calcium carbonate	140		0.80	mg/L			01/17/24 22:51	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Cations (SM 1030E)	14	T5		meq/L			01/11/24 22:49	1
Total Anions (SM 1030E)	15	T5		meq/L			01/11/24 22:49	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City of Yuma
Project/Site: Yuma City of

Job ID: 380-78005-1

Client Sample ID: EPDS001 Main Street Water Treatment Plant

Lab Sample ID: 380-78005-1

Date Collected: 01/09/24 09:53

Matrix: Drinking Water

Date Received: 01/10/24 11:30

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Difference (SM 1030E)	-3.2	T5		%			01/11/24 22:49	1
Anion/Cation Balance (SM 1030E)	-3.2	T5		%			01/11/24 22:49	1
K (SM 1030E)	5.9	T5		mg/L			01/11/24 22:49	1
Calculated TDS (SM 1030E)	21	T5		mg/L			01/11/24 22:49	1
TDS Ratio (SM 1030E)	45	T5		NONE			01/11/24 22:49	1
pH of CaCO3 saturation (60C) (SM 2330B)	6.7	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)	1.1	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 18:10	1
Aggressive Index (EPA Aggressive 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 20:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	170	T5	2.0	mg/L			01/16/24 20:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND	T5	2.0	mg/L			01/16/24 20:29	1
Langelier Index (SM 2330B)	1.0			LangSU			01/12/24 10:22	1
Specific Conductance (SM 2510B)	1400		2.0	umhos/cm			01/16/24 20:29	1
Total Dissolved Solids (SM 2540C)	920		10	mg/L			01/11/24 13:15	1
Fluoride (SM 4500 F C)	0.42		0.050	mg/L			01/12/24 20:42	1
pH (SM 4500 H+ B)	8.3	H5	0.01	SU			01/16/24 20:29	1
Methylene Blue Active Substances (SM 5540C)	ND		0.10	mg/L			01/10/24 21:16	1