



Agua Viva WTP
EPDS 002

Utilities Department Laboratory
289 N Figueroa Avenue, Yuma, AZ 85364
(928) 329-2893

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.

Arizona Department of Environmental Quality
 Drinking Water Inorganic Chemical Analysis Report Form
 Entry Point To the Distribution System (EPDS) Only

**Agua Viva WTP
 EPDS 002**

PWS ID#: AZ0414024 PWS Name: City of Yuma

01/15/2019 0735 (24 hr Clock) Betsy Bowman
 Sample Date Sample Time Owner/Contact Person

928-329-2896 928-373-4588
 Owner/Contact Fax Number Owner/Contact Phone Number

Sample Type
 Compliance Monitoring

Sample Collection Point
 EPDS# 002

Agua Viva WTP EPDS 002
 Sampling Site ID

For MCL or Composite Level Exceedance	
_____ Original Violation Specimen Number	
Sample Type	
<input type="checkbox"/> Confirmation	
<input type="checkbox"/> Confirmation - Composite	

INORGANIC CHEMICAL ANALYSIS
 >>>To be completed by laboratory personnel<<<

Analysis Method	MCL	Reporting Limit	Contaminant Name Method	Cont. Code	Analysis Run Date	Results	Exceeds MCL	Exceeds Trigger Limit
<u>200.8</u>	0.010	0.005	Arsenic	1005	<u>01/21/2019</u>	<u>0.0019</u>	<input type="checkbox"/>	
<u>200.8</u>	2	1	Barium	1010	<u>01/21/2019</u>	<u>0.11</u>	<input type="checkbox"/>	
<u>200.8</u>	0.005	0.0025	Cadmium	1015	<u>01/21/2019</u>	<u><0.0005</u>	<input type="checkbox"/>	
<u>200.8</u>	0.1	0.05	Chromium	1020	<u>01/21/2019</u>	<u><0.001</u>	<input type="checkbox"/>	
<u>4500F-C</u>	4	0.5	Fluoride	1025	<u>01/19/2019</u>	<u>0.41</u>	<input type="checkbox"/>	
<u>245.1</u>	0.002	0.001	Mercury	1035	<u>01/22/2019</u>	<u><0.0002</u>	<input type="checkbox"/>	
<u>300.0</u>	10	2.5	Nitrate (as N)	1040	<u>01/17/2019</u>	<u><0.05</u>	<input type="checkbox"/>	(5 mg/L) <input type="checkbox"/>
<u>300.0</u>	1	0.25	Nitrite	1041	<u>01/17/2019</u>	<u><0.05</u>	<input type="checkbox"/>	0.5 mg/L <input type="checkbox"/>
<u>200.8</u>	0.05	0.025	Selenium	1045	<u>01/21/2019</u>	<u><0.005</u>	<input type="checkbox"/>	
<u>200.8</u>	0.006	0.003	Antimony	1074	<u>01/21/2019</u>	<u><0.001</u>	<input type="checkbox"/>	
<u>200.8</u>	0.004	0.002	Beryllium	1075	<u>01/21/2019</u>	<u><0.001</u>	<input type="checkbox"/>	
<u>335.4</u>	0.2	0.1	Cyanide	1024	<u>01/23/2019</u>	<u><0.005</u>	<input type="checkbox"/>	
<u>200.8</u>	No MCL	0.05	Nickel*	1036	<u>01/21/2019</u>	<u><0.005</u>	<input type="checkbox"/>	
<u>200.8</u>	0.002	0.001	Thallium	1085	<u>01/21/2019</u>	<u><0.001</u>	<input type="checkbox"/>	
<u>200.7</u>	No MCL	10	Sodium*	1052	<u>01/18/2019</u>	<u>140</u>	<input type="checkbox"/>	

Laboratory Information

>>>To be completed by laboratory personnel<<<

Lab ID Number: AZ0778
 Specimen Number: 2019011701531
 Name: Eurofins Eaton Analytical, LLC
 Printed Name and Phone Number of Lab Contact: Thomas.D.French (480) 778-1558
 Authorized Signature: _____
 Date Public Water System Notified: _____
 Comments: _____

All units must be reported in milligrams per liter (mg/L)
 *Contaminants without an MCL
 DWAR 2IN: Revised 8/2009

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 783931
 Project: IOC
 Group: Annual IOC

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 EPDS 002

City of Yuma
 Betsy Bowman
 Laboratory
 289 N. Figueroa Ave.
 Yuma, AZ 85364

Samples Received on:
 01/17/2019 1256

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
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Agua Viva WTP EPDS 002 (201901170153)

Sampled on 01/15/2019 0735

PWSID: AZ0414024

Well ID: 002

Variable ID: 0108-19

EPA 200.8 - ICPMS Metals

01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Aluminum Total ICAP/MS	230	ug/L	20	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Antimony Total ICAP/MS	ND	ug/L	1	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Arsenic Total ICAP/MS	1.9	ug/L	1	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Barium Total ICAP/MS	110	ug/L	2	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Beryllium Total ICAP/MS	ND	ug/L	1	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Cadmium Total ICAP/MS	ND	ug/L	0.5	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Chromium Total ICAP/MS	ND	ug/L	1	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Copper Total ICAP/MS	ND	ug/L	2	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Lead Total ICAP/MS	ND	ug/L	0.5	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Nickel Total ICAP/MS	ND	ug/L	5	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Selenium Total ICAP/MS	ND	ug/L	5	1
01/17/19	01/22/19 16:33	1144177	1145188	(EPA 200.8)	Silver Total ICAP/MS	ND	ug/L	0.5	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Thallium Total ICAP/MS	ND	ug/L	1	1
01/17/19	01/21/19 18:41	1144177	1144878	(EPA 200.8)	Zinc Total ICAP/MS	ND	ug/L	20	1

EPA 200.7 - ICP Metals

01/17/19	01/18/19 13:10	1144177	1144393	(EPA 200.7)	Calcium Total ICAP	92	mg/L	1	1
01/17/19	01/18/19 13:10	1144177	1144393	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.02	1
01/17/19	01/18/19 13:10	1144177	1144393	(EPA 200.7)	Magnesium Total ICAP	33	mg/L	0.1	1
01/17/19	01/18/19 13:10	1144177	1144393	(EPA 200.7)	Potassium Total ICAP	5.4	mg/L	1	1
01/17/19	01/18/19 13:10	1144177	1144393	(EPA 200.7)	Sodium Total ICAP	140	mg/L	1	1

EPA 245.1 - Mercury Total

01/22/19	01/22/19 19:56	1145023	1145302	(EPA 245.1)	Mercury	ND	ug/L	0.2	1
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EPA 200.7 - ICP Metals

01/17/19	01/18/19 13:10	1144177	1144241	(EPA 200.7)	Silica	10	mg/L	0.5	1
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SM2330B - Hydroxide as OH, Calculated

01/18/19 16:30				(SM2330B)	Hydroxide as OH Calculated	ND	mg/L	2	1
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SM 2330B - pH of CaCO3 saturation(60C)

01/18/19 14:46				(SM 2330B)	pH of CaCO3 saturation(60C)	6.7	Units	0.1	1
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SM4500-CO2-D - Carbon Dioxide,Free(25C)-Calc.

01/18/19 16:30				(SM4500-CO2-D)	Carbon Dioxide,Free(25C)-Calc.	ND	mg/L	2	1
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SM 2330B - Langelier Index - 25 degree

Rounding on totals after summation.
 (c) - indicates calculated results

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City of Yuma
 Betsy Bowman
 Laboratory
 289 N. Figueroa Ave.
 Yuma, AZ 85364

Samples Received on:
 01/17/2019 1256

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	01/18/19 16:30			(SM 2330B)	Langelier Index - 25 degree	0.99	None		1
					SM2330B - Carbonate as CO3, Calculated				
	01/18/19 22:36			(SM2330B)	Carbonate as CO3, Calculated	2.0	mg/L	2	1
					SM 2340B - Total Hardness as CaCO3 by ICP				
	01/18/19 14:47			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360	mg/L	3	1
					SM 1030E - Anion Sum - Calculated				
	01/18/19 16:21			(SM 1030E)	Anion Sum - Calculated	13	meq/L	0.001	1
					SM 1030E - Cation Sum - Calculated				
	01/18/19 14:47			(SM 1030E)	Cation Sum - Calculated	14	meq/L	0.001	1
					SM 2330B - pH of CaCO3 saturation(25C)				
	01/18/19 22:36			(SM 2330B)	pH of CaCO3 saturation(25C)	7.2	Units	0.1	1
					SM2330B - Bicarb.Alkalinity as HCO3,calc				
	01/18/19 16:30			(SM2330B)	Bicarb.Alkalinity as HCO3calc	190	mg/L	2	1
					SM 2330 - Agressiveness Index-Calculated				
	01/18/19 16:30			(SM 2330)	Agressiveness Index-Calculated	13 (C)	None	0.1	1
					SM 2330B - Langlier Index at 60 degrees C				
	01/18/19 16:30			(SM 2330B)	Langelier Index at 60 degrees C	1.4	None		1
					SM 1030E - Cation/Anion Difference				
	01/19/19 01:09			(SM 1030E)	Cation/Anion Difference	1.3	%		1
					EPA 300.0 - Nitrate, Nitrite by EPA 300.0				
	01/17/19 15:25		1144067	(EPA 300.0)	Nitrate as Nitrogen by IC	ND	mg/L	0.25	5
	01/17/19 15:25		1144067	(EPA 300.0)	Nitrate as NO3 (calc)	ND	mg/L	1.1	5
	01/17/19 15:25		1144067	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	01/17/19 15:25		1144067	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	ND	mg/L	0.1	1
					EPA 300.0 - Chloride, Sulfate by EPA 300.0				
	01/17/19 15:25		1144065	(EPA 300.0)	Chloride	130	mg/L	2.5	5
	01/17/19 15:25		1144065	(EPA 300.0)	Sulfate	300	mg/L	2.5	5
					EPA 335.4 - Cyanide by manual distillation				
01/21/19	01/23/19 12:35	1144865	1144866	(EPA 335.4)	Cyanide by manual distillation	ND (M2)	mg/L	0.005	1
					SM 4500F-C - Fluoride				
	01/19/19 06:54		1144345	(SM 4500F-C)	Fluoride	0.41	mg/L	0.05	1
					SM 2320B - Alkalinity in CaCO3 units				
	01/18/19 07:22		1144277	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2	1
					E160.1/SM2540C - Total Dissolved Solids (TDS)				
01/18/19	01/19/19 14:52	1144349	1144540	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	830	mg/L	10	1
					SM4500-HB - PH (H3=past HT not compliant)				
	01/18/19 07:22		1144280	(SM4500-HB)	PH (H3=past HT not compliant)	8.2	Units	0.1	1
					SM 5540C/EPA 425.1 - Surfactants				

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	01/18/19 09:28		1144368	(SM 5540C/EPA 425.1)	Surfactants	ND (H3)	mg/L	0.1	1
SM2510B - Specific Conductance									
	01/18/19 07:22		1144286	(SM2510B)	Specific Conductance, 25 C	1300	umho/cm	10	1