

2021 Regulated Contaminants

Radionuclides								
Contaminant	Unit of Measure	MCL Violation Y or N	Highest Level Detected	Range of All Samples	MCL	MCLG	Sample Year	Likely Sources of Contamination
Gross alpha, excluding radon and uranium	piC/L	N	5.0	2.4 - 5.0	15	0	2021	Erosion of natural deposits
Inorganic Chemicals								
Contaminant	Unit of Measure	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low - High)	MCL	MCLG	Sample Year	Likely Sources of Contamination
Arsenic	ppb	N	10.8**	1.20 - 10.8	10**	0	2021	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	ppm	N	0.11	0.005 - 0.11	2	2	2021	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium, Total	ppb	N	24	ND - 24	100	100	2021	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	ppm	N	1.11	0.12 - 1.11	4	4	2021	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	ppm	N	6.46	ND - 6.46	10	10	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	N	190	53 - 190	N/A	N/A	2021	Erosion of natural deposits.
Synthetic Organic Chemicals								
Contaminant	Unit of Measure	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low - High)	MCL	MCLG	Sample Year	Likely Sources of Contamination
Dibromochloropropane	ppt	N	26	ND - 26	200	0	2021	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Volatile Organic Chemicals								
Contaminant	Unit of Measure	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low - High)	MCL	MCLG	Sample Year	Likely Sources of Contamination
Dichloromethane	ppb	N	0.5	ND - 0.5	5	0	2021	Discharge from pharmaceutical and chemical factories.
Tetrachloroethylene	ppb	N	0.56	ND - 0.56	5	0	2021	Discharge from factories and dry cleaners
Trichloroethylene	ppb	N	0.54	ND - 0.54	5	0	2021	Discharge from metal degreasing sites and other factories.

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Surface Water Monitoring - *CRYPTOSPORIDIUM*

The City of Mesa performed surface water monitoring for Cryptosporidium in 2020. Eight (8) samples were collected. There was no indication of the presence of Cryptosporidium in our source water during the 2020 calendar year.

Violation Summary (for MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement)

*The City of Phoenix was issued a violation for Treatment Technique (TT) for one turbidity sample in January 2021. Compliance was restored upon submission of the report. The City of Mesa was issued a monitoring violation for missed reporting for the DBP Stage 1 Monitoring Plan for Total Organic Carbon for January 2021.

**This Arsenic result was from a single annual sample in the fourth quarter of 2021, which triggered quarterly monitoring. Compliance is then based on a location-specific running four quarter average.

Other Parameters of Interest

Contaminant	Unit of Measure	Range of All Samples (Low - High)	Non-enforceable Secondary Standard	Sample Year	
pH	S.U. (standard units)	6.87 - 8.4	6.5 - 8.5	2021	<p>WHY IS THE RANGE OF HARDNESS SO WIDE? Drinking water in Mesa comes from surface water and groundwater sources. Depending on utility operations, the water you consume may have a higher percentage of groundwater. Groundwater sources also vary in the concentration of mineral deposits and hardness. A range for the sources sampled in 2020 and 2021 is provided.</p>
Calcium	ppm	49 - 79	N/A	2021	
Magnesium	ppm	11 - 40	N/A	2020	
Hardness	ppm	140 - 410	N/A	2020	
Hardness	gpg	8.2 - 25	N/A	2020	
Sodium	ppm	53 - 190	N/A	2021	
Potassium	ppm	5 - 5.39	N/A	2020	
Nickel	ppb	ND - 3.8	N/A	2021	
Iron	ppb	ND - 50	300	2020	



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LABORATORY REPORT

Client: Celtic Plastic
329 S Rockford Dr
Tempe, AZ 85281

Date Submitted: 10/28/22
Date Reported: 11/04/22

Attn: Corey McIlveen

Project: Sentry Filtration Wellness System

RESULTS

Client ID: Mesa Home Sample 2
ACT Lab No.: CE08418

Sample Type: Drinking Water
Sample Time: 10/28/22 09:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Chromium, Hexavalent	10/28/22	10/28/22	SM3500Cr D	<0.01	mg/L
Arsenic	11/01/22	11/01/22	200.8	<0.0050	mg/L

Reviewed by:

Frederick A. Amalfi, Ph.D.
Laboratory Director



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Date Submitted: 10/28/22
Date Reported: 11/04/22

Attn: Corey McIlveen

Project: Sentry Filtration Wellness System

RESULTS

Client ID: Mesa Home Sample 1
ACT Lab No.: CE08417

Sample Type: Drinking Water
Sample Time: 10/28/22 09:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Fluoride	10/28/22	10/28/22	SM4500F C	<0.5	mg/L
Total Hardness	11/01/22	11/01/22	SM2340C	298.	mg/L as CaCO ₃
Calcium Hardness	11/03/22	11/03/22	200.7	100.	mg/L as CaCO ₃
pH	10/28/22	10/28/22	SM4500H+ B	8.5@23C	SU

Calcium = 40 ppm, Magnesium = 48 ppm.

Reviewed by:

Frederick A. Amalfi, Ph.D.
Laboratory Director