

**Water Quality Chemistry Services**  
**ELAP Certification #1058**  
 Monthly Complete Report  
 Miramar/Alvarado/Otay Filtration Plants  
 January 2024

Analyte	Method	Miramar Effluent	Alvarado Effluent	Otay Effluent	Units	MDL
pH	SM4500-H+B	8.31	8.58	8.00	SU	
Conductivity	SM2510B	758	849	758	µmho/cm	
Total Alkalinity	SM2320B	100	119	88	mg/L	5
Total Dissolved Solids	SM2540C	451	516	443	mg/L	10
Total Hardness	SM2340C	208	234	195	mg/L	10
Calcium Hardness	SM2340C	120	132	113	mg/L	10
Carbonate	Calculation	0.396	0	0	mg/L	
Bicarbonate	Calculation	121	145	107	mg/L	
Turbidity	EPA180.1	0.10	0.20	0.20	ntu	0.05
Color	SM2120C	ND	ND	ND	color	1
Bromide	EPA300.0	ND	ND	ND	mg/L	0.1
Chloride	EPA300.0	88.3	99.3	97.1	mg/L	0.5
Fluoride	EPA300.0	0.711	0.618	0.637	mg/L	0.02
Silica	SM4500-SiO <sub>2</sub> E	9.30	10.9	9.20	mg/L	0.625
Sulfate	EPA300.0	129	145	126	mg/L	0.5
Aluminum	EPA200.8	ND	ND	ND	µg/L	15
Calcium	EPA200.7	49.1	51.9	44.7	mg/L	0.15
Copper	EPA200.8	ND	ND	ND	µg/L	5
Iron	EPA200.7	ND	8.02	ND	µg/L	5
Lead	EPA200.8	ND	ND	ND	µg/L	5
Manganese	EPA200.8	ND	6.65	ND	µg/L	5
Magnesium	EPA200.7	19.5	22.9	17.8	mg/L	0.15
Potassium	EPA200.7	4.35	4.81	4.06	mg/L	0.15
Sodium	EPA200.7	78.4	86.5	78.4	mg/L	0.15
Zinc	EPA200.8	ND	ND	ND	µg/L	5
Aggressive Index	Calculation	12.3	12.3	12.3	.	
Langlier Index	Calculation	0.500	0.560	0.490	.	
Bromate	EPA300.1	---	ND	---	µg/L	5
Chlorite	EPA300.1	---	---	196	µg/L	20
Chlorate	EPA300.1	---	---	167	µg/L	20
Perchlorate	EPA314.0	---	---	---	µg/L	2
Boron	EPA200.8	---	---	---	µg/L	15
Total Organic Carbon	SM5310B	2.37	2.73	2.05	mg/L	0.3
Nitrate	EPA300.0	1.09	0.87	1.70	mg/L	0.4
Nitrate (as N)	EPA353.2	0.310	0.285	0.562	mg/L	Calculation
Ortho Phosphate	EPA300.0	ND	ND	ND	mg/L	0.5
Total Nitrogen	SM4500-N B	NA	NA	NA	mg/L	0.2
Total THMs	EPA524.2	23.2	11.9	23.7	µg/L	0.4
HAA5	EPA552.2	6.97	4.05	4.05	µg/L	1

**Note:** Color and Total Nitrogen are non-ELAP certified methods; however, these non-regulatory analyses fulfill our quality control requirements.

< = Less than

ND = Not Detected

--- = Not Sampled, Not Needed

MDL = Minimum Detection Limit

NR = Not Reportable

NA = Not Analyzed; No analyst available

NS = Not Sampled