



Annual Summary Report 2020



Order No. R3-2017-0003
MRP No. 2019-0116

*Advanced Water Purification Facility
& Groundwater Replenishment Project*

Prepared For: Central Coast Regional Water Quality Control Board and
State Water Resources Control Board, Division of Drinking Water

Submitted By: Monterey One Water

Date: April 30, 2021



Monterey One Water
Providing Cooperative Water Solutions



2020 Annual Summary Report

TABLE OF CONTENTS

1.0 INTRODUCTION.....	16
1.1 Transmittal Sheet.....	16
1.2 Background	17
1.3 Annual Summary Report Requirements	19
1.4 Monitoring Requirements.....	20
1.5 Monitoring Locations	21
1.6 Acronyms.....	23
2.0 SOURCE WATERS INFLUENT TO THE RTP.....	24
2.1 Priority of Source Waters.....	24
2.2 Summary of Monthly Volumes	25
2.3 Demand Scenario Discussion	26
3.0 TABULAR AND GRAPHICAL SUMMARIES OF MONITORING DATA.....	27
3.1 Flow Volumes.....	27
3.1.1 AWPf Influent - Secondary Effluent from the RTP	27
3.1.2 Waste Equalization Effluent Discharged into the RTP	29
3.1.3 AWPf Recycled Water Injected into the Seaside Basin	31
3.1.4 RO Concentrate Sent to the Ocean Outfall.....	33
3.1.5 AWPf Non-Production Statement	34
3.2 Date and Time of Sampling and Analyses.....	34
3.3 Analytical Results	35
3.3.1 AWPf Influent	35
3.3.2 AWPf Recycled Water (Product Water)	58
3.3.3 RO Feed Water (Prior to RO).....	171
3.3.4 Groundwater	181
4.0 SUMMARY OF COMPLIANCE	246
4.1 General Performance.....	246
4.2 Monitoring Program	246

4.2.1	AWPF Influent	246
4.2.2	AWPF Recycled Water	247
4.2.3	RO Feed Water (Prior to RO).....	250
4.2.4	Groundwater	251
5.0	SUMMARY OF NON-COMPLIANCE	253
5.1	Date, Duration, and Nature of Non-Compliance.....	253
5.2	Summary of Corrective Actions	253
5.2.1	Non-Spec Water	253
5.2.2	TOC	254
5.2.3	Chlorate	256
6.0	DETECTIONS OF MONITORING CHEMICALS AND CONSTITUENTS IN GROUNDWATER MONITORING WELLS.....	257
6.1	Existing Groundwater Quality in the Seaside Basin	257
6.2	Detections and Trends	258
6.2.1	MW-1AD.....	258
6.2.2	MW-1D	258
6.2.3	MW-2AD.....	259
6.2.4	MW-2D	260
6.2.5	MW-1AS	260
6.2.6	MW-1S.....	260
6.2.7	MW-2AS	261
6.3	Explanation of Sampling Schedule Variance.....	261
6.3.1	Formaldehyde	261
6.3.2	Quinoline	261
6.4	Coliform Detections in Monitoring Wells	261
6.5	Arsenic Trends in MW-2D	262
6.6	2020 Non-Detect Parameters	263
7.0	DISCUSSION OF RECHARGE WATER MIGRATION PATTERNS	267
8.0	NEAREST DRINKING WATER SUPPLY WELL TITLE 22 DRINKING WATER QUALITY DATA	270
9.0	OPERATIONAL CHANGES OF UNIT PROCESSES AND FACILITIES.....	271

9.1 On-Line TOC Monitoring	271
9.2 UV AOP to Dose Product	272
9.3 Product Water Stabilization	272
10.0 QUANTITY AND QUALITY OF RECYCLED WATER TO BE UTILIZED IN 2021	273
11.0 LABORATORY INFORMATION	274
11.1 Analytical Methods and Laboratory QA/QC Procedures	274
11.3 Laboratories Utilized	275
11.4 Proficiency Tests.....	276
12.0 STAFFING	277
13.0 REPORT PREPARERS	278
14.0 SUMMARY OF MONITORING REPORTS, REPORTING, AND TREND ANALYSES	279
15.0 INTER-AGENCY COORDINATION	280
15.1 Coordination with MCWD	280
15.1.1 Testing and Maintenance of Backflow Preventers	280
15.1.2 Occurrences of Backflow Incidents	280
15.1.3 Maintenance Activities of the Purified Recycled Water Reservoir	280
16.0 RECYCLED WATER POLICY VOLUMETRIC ANNUAL REPORT	281
17.0 CERTIFICATION STATEMENT	282

Tables:

Table A. Sampling Locations	21
Table 1. Monthly Source Water Volumes Influent to the RTP (MG)	25
Table 2. AWPf Influent – Secondary Effluent from the RTP Daily Average (MGD)	27
Table 3. Waste Equalization Effluent Discharged into the RTP Daily Average (MGD)	29
Table 4. AWPf Recycled Water Injected into the Seaside Basin Daily Average (MGD)	31
Table 5. RO Concentrate Sent to the Ocean Outfall Daily Average (MGD)	33
Table 6. AWPf Influent Monitoring Weekly Ammonia-N (mg/L)	36
Table 7. AWPf Influent Monitoring Weekly CBOD ₅ (mg/L)	37
Table 8. AWPf Influent Monitoring Weekly Boron (mg/L)	38
Table 9. AWPf Influent Monitoring Weekly Chloride (mg/L)	39
Table 10. AWPf Influent Monitoring Weekly Nitrate-N (mg/L)	40
Table 11. AWPf Influent Monitoring Weekly Nitrite-N (mg/L)	41
Table 12. AWPf Influent Monitoring Daily Average pH	42
Table 13. AWPf Influent Monitoring Monthly Minimum and Maximum pH	44
Table 14. AWPf Influent Monitoring Weekly Sodium (mg/L)	45
Table 15. AWPf Influent Monitoring Weekly Sulfate (mg/L)	46
Table 16. AWPf Influent Monitoring Weekly Total Suspended Solids (mg/L)	47
Table 17. AWPf Influent Monitoring Weekly Total Coliform (MPN/100mL)	48
Table 18. AWPf Influent Monitoring Weekly Dissolved Solids (mg/L)	49
Table 19. AWPf Influent Monitoring Monthly Minimum and Maximum Flow (MGD)	50
Table 20. AWPf Influent Monitoring Weekly Total Kjeldahl Nitrogen-N (mg/L)	51
Table 21. AWPf Influent Monitoring Weekly Total Nitrogen (mg/L) ¹	52
Table 22. AWPf Influent Monitoring Weekly Total Organic Carbon (TOC) (mg/L)	53
Table 23. AWPf Influent Monitoring Daily Average Turbidity (NTU)	54
Table 24. AWPf Influent Monitoring Monthly Minimum and Maximum Turbidity (NTU)	56
Table 25. AWPf Influent Monitoring Weekly UVT (%)	57
Table 26. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Conductivity (uS/cm)	59
Table 27. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Conductivity (uS/cm)	61
Table 28. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Conductivity (uS/cm)	63
Table 29. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Total Chlorine Residual (mg/L)	65
Table 30. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Total Chlorine Residual (mg/L)	67
Table 31. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Total Chlorine Residual (mg/L)	69
Table 32. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Total Recycled Water Flow (MGD)	71
Table 33. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Total Recycled Water Flow (MGD)	73
Table 34. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Total Recycled Water Flow (MGD)	75
Table 35. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 1 (mJ/cm ²)	77
Table 36. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 1 (mJ/cm ²)	79
Table 37. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 1 (mJ/cm ²)	81

Table 38. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 2 (mJ/cm ²)	83
Table 39. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 2 (mJ/cm ²)	85
Table 40. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 2 (mJ/cm ²)	87
Table 41. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 3 (mJ/cm ²)	89
Table 42. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 3 (mJ/cm ²)	91
Table 43. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 3 (mJ/cm ²)	93
Table 44. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 4 (mJ/cm ²)	95
Table 45. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 4 (mJ/cm ²)	97
Table 46. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 4 (mJ/cm ²)	99
Table 47. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 5 (mJ/cm ²)	101
Table 48. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 5 (mJ/cm ²)	103
Table 49. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 5 (mJ/cm ²)	105
Table 50. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 6 (mJ/cm ²)	107
Table 51. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 6 (mJ/cm ²)	109
Table 52. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 6 (mJ/cm ²)	111
Table 53. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Transmittance (%)	113
Table 54. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Transmittance (%)	115
Table 55. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Transmittance (%)	117
Table 56. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average pH	119
Table 57. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum pH	121
Table 58. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum pH	123
Table 59. AWPf Product Water Monitoring Monthly Arsenic (ug/L)	124
Table 60. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Boron (ug/L)	125
Table 61. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Chloride (mg/L)	126
Table 62. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Chromium – Total (ug/L)	127
Table 63. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Bi-Weekly Total Nitrogen ¹	128
Table 64. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Weekly Nitrate-N (mg/L)	129
Table 65. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Weekly Total Kjeldahl Nitrogen-N (mg/L)	130

Table 66. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Sodium (mg/L)	131
Table 67. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Sulfate (mg/L)	132
Table 68. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly TDS (mg/L) ...	133
Table 69. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Total Coliform (MPN/100mL).....	134
Table 70. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Weekly TOC (mg/L).....	136
Table 71. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Turbidity (NTU)	137
Table 72. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Turbidity (NTU)	139
Table 73. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Turbidity (NTU)	141
Table 74. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Lead (ug/L) ...	142
Table 75. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Copper (ug/L)	143
Table 76. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs	144
Table 77. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs	148
Table 78. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Radioactivity	153
Table 79. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Regulated Organics.....	157
Table 80. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Disinfection Byproducts	160
Table 81. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring General Physical and General Minerals	162
Table 82. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents with Notification Levels	165
Table 83. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Remaining Priority Pollutants	169
Table 84a. AWPf Product Water Monitoring	171
Table 84b. AWPf Product Water Monitoring	172
Table 85. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring DDW Specified Chemicals	174
Table 86a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Surrogates for CECs – Initial Assessment Phase	177
Table 86b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Surrogates for CECs- Initial Assessment Phase Removal Efficiency	177
Table 87. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Bioanalytical Screening Tools	180
Table 88. Groundwater Monitoring Quarterly Monitoring	185
Table 89. Groundwater Monitoring Semi-Annual Monitoring	194
Table 90. Groundwater Monitoring Inorganics with Primary MCLs Monthly Aluminum (ug/L)	196
Table 91. Groundwater Monitoring Inorganics with Primary MCLs Monthly Antimony (ug/L)	197
Table 92. Groundwater Monitoring Inorganics with Primary MCLs Monthly Arsenic (ug/L)	198
Table 93. Groundwater Monitoring Inorganics with Primary MCLs Monthly Asbestos (MFL)	199
Table 94. Groundwater Monitoring Inorganics with Primary MCLs Monthly Barium (ug/L).....	200
Table 95. Groundwater Monitoring Inorganics with Primary MCLs Monthly Beryllium (ug/L)	201
Table 96. Groundwater Monitoring Inorganics with Primary MCLs Monthly Cadmium (ug/L)	202
Table 97. Groundwater Monitoring Inorganics with Primary MCLs Monthly Chromium (Total) (ug/L)	203
Table 98. Groundwater Monitoring Inorganics with Primary MCLs Monthly Cyanide (ug/L)	204

Table 99. Groundwater Monitoring Inorganics with Primary MCLs Monthly Fluoride (mg/L)	205
Table 100. Groundwater Monitoring Inorganics with Primary MCLs Monthly Mercury (ug/L)	206
Table 101. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nickel (ug/L)	207
Table 102. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nitrate (as Nitrogen) (mg/L)	208
Table 103. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nitrite (as Nitrogen) (mg/L)	209
Table 104. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nitrate + Nitrite (mg/L)	210
Table 105. Groundwater Monitoring Inorganics with Primary MCLs Monthly Perchlorate (ug/L)	211
Table 106. Groundwater Monitoring Inorganics with Primary MCLs Monthly Selenium (ug/L)	212
Table 107. Groundwater Monitoring Inorganics with Primary MCLs Monthly Thallium (ug/L)	213
Table 108. Groundwater Monitoring	214
Table 109. Groundwater Monitoring Annual Groundwater Monitoring N-Nitrosopyrrolidine (ug/L)	228
Table 110. Groundwater Monitoring General Physical and General Minerals Monthly Asbestos (MFL)	229
Table 111. Groundwater Monitoring General Physical and General Minerals Monthly Calcium (mg/L)	230
Table 112. Groundwater Monitoring General Physical and General Minerals Monthly Chloride (mg/L)	231
Table 113. Groundwater Monitoring General Physical and General Minerals Monthly Copper (ug/L)	232
Table 114. Groundwater Monitoring General Physical and General Minerals Monthly Iron (mg/L)	233
Table 115. Groundwater Monitoring General Physical and General Minerals Monthly Manganese (ug/L)	234
Table 116. Groundwater Monitoring General Physical and General Minerals Monthly Potassium (mg/L)	235
Table 117. Groundwater Monitoring General Physical and General Minerals Monthly Sodium (mg/L)	236
Table 118. Groundwater Monitoring General Physical and General Minerals Monthly Sulfate (mg/L)	237
Table 119. Groundwater Monitoring General Physical and General Minerals Monthly Zinc (ug/L)	238
Table 120. Groundwater Monitoring General Physical and General Minerals Monthly Color	239
Table 121. Groundwater Monitoring General Physical and General Minerals Monthly Corrosivity	240
Table 122. Groundwater Monitoring General Physical and General Minerals Monthly Foaming Agents (mg/L)	241
Table 123. Groundwater Monitoring General Physical and General Minerals Monthly Odor (TON)	242
Table 124. Groundwater Monitoring General Physical and General Minerals Monthly Specific Conductance (uS/cm)	243
Table 125. Groundwater Monitoring General Physical and General Minerals Monthly TDS (mg/L)	244
Table 126. Groundwater Monitoring General Physical and General Minerals Monthly Hardness (ug/L)	245
Table 127a. 2020 AWPf Influent Compliance Summary	247
Table 127b. 2020 AWPf Recycled Water Compliance Summary	247
Table 127c. 2020 RO Feed Water Compliance Summary	250
Table 127d. 2020 Groundwater Monitoring Compliance Summary	251
Table 128. Date, Duration, and Nature of Non-Compliance	253
Table 129. Historic Seaside Basin Water Quality Exceedances	258
Table 130. Monitoring Well Total Coliform Detections (MPN/100 mL)	261
Table 131. Arsenic Levels in MW-2D (ug/L) and Compliance with Running Annual Average MCL of 10 ug/L	263
Table 132. MRP No. R3-2019-0116 Non-Detect Parameters and Frequencies	263
Table 133. Project Groundwater Modeling: Underground Travel Times – N/A	268
Table 135. Analytical Methods and Laboratory QA/QC Procedures	274
Table 136. Laboratories Utilized	276
Table 137. Operational Personnel, Responsibilities, and Certifications	277
Table 138. Report Preparers	278

Figures:

Figure A. Flow Schematic	17
Figure B. Map of RTP, AWPf, and Injection Wells	18
Figure C. Map of AWPf On-Site Monitoring Locations	22
Figure D. Map of Groundwater Monitoring Well Locations	22
Figure 1. Monthly Source Water Volumes Influent to the RTP (MG)	25

Figure 2. AWPf Influent – Secondary Effluent from the RTP Daily Average (MGD)	28
Figure 3. Waste Equalization Effluent Discharged into the RTP Daily Average (MGD)	30
Figure 4. AWPf Recycled Water Injected into the Seaside Basin Daily Average (MGD)	32
Figure 5. RO Concentrate Sent to the Ocean Outfall Daily Average (MGD)	34
Figure 6. AWPf Influent Monitoring Weekly Ammonia-N (mg/L)	36
Figure 7. AWPf Influent Monitoring Weekly CBOD ₅ (mg/L)	37
Figure 8. AWPf Influent Monitoring Weekly Boron (mg/L)	38
Figure 9. AWPf Influent Monitoring Weekly Chloride (mg/L)	39
Figure 10. AWPf Influent Monitoring Weekly Nitrate-N (mg/L)	40
Figure 11. AWPf Influent Monitoring Weekly Nitrite-N (mg/L)	41
Figure 12. AWPf Influent Monitoring Daily Average pH	43
Figure 13. AWPf Influent Monitoring Monthly Minimum and Maximum pH	44
Figure 14. AWPf Influent Monitoring Weekly Sodium (mg/L)	45
Figure 15. AWPf Influent Monitoring Sulfate (mg/L)	46
Figure 16. AWPf Influent Monitoring Weekly Total Suspended Solids (mg/L)	47
Figure 17. AWPf Influent Monitoring Weekly Total Coliform (MPN/100 mL)	48
Figure 18. AWPf Influent Monitoring Weekly Dissolved Solids (mg/L)	49
Figure 19. AWPf Influent Monitoring Monthly Minimum and Maximum Flow (MGD)	50
Figure 20. AWPf Influent Monitoring Weekly Total Kjeldahl Nitrogen-N (mg/L)	51
Figure 21. AWPf Influent Monitoring Weekly Total Nitrogen (mg/L)	52
Figure 22. AWPf Influent Monitoring Weekly Total Organic Carbon (TOC) (mg/L)	53
Figure 23. AWPf Influent Monitoring Daily Average Turbidity (NTU)	55
Figure 24. AWPf Influent Monitoring Monthly Minimum and Maximum Turbidity (NTU)	56
Figure 25. AWPf Influent Monitoring Weekly UVT (%)	57
Figure 26. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Conductivity (uS/cm)	60
Figure 27. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Conductivity (uS/cm)	62
Figure 28. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Conductivity (uS/cm)	64
Figure 29. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Total Chlorine Residual (mg/L)	66
Figure 30. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Total Chlorine Residual (mg/L)	68
Figure 31. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Total Chlorine Residual (mg/L)	70
Figure 32. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Total Recycled Water Flow (MGD)	72
Figure 33. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Total Recycled Water Flow (MGD)	74
Figure 34. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Total Recycled Water Flow (MGD)	76
Figure 35. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 1 (mJ/cm ²)	78
Figure 36. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 1 (mJ/cm ²)	80
Figure 37. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV dose for Reactor 1 (mJ/cm ²)	82
Figure 38. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for reactor 2 (mJ/cm ²)	84
Figure 39. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 2 (mJ/cm ²)	86

Figure 40. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 2 (mJ/cm ²)	88
Figure 41. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 3 (mJ/cm ²)	90
Figure 42. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 3 (mJ/cm ²)	92
Figure 43. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 3 (mJ/cm ²)	94
Figure 44. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 4 (mJ/cm ²)	96
Figure 45. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 4 (mJ/cm ²)	98
Figure 46. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 4 (mJ/cm ²)	100
Figure 47. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 5 (mJ/cm ²)	102
Figure 48. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 5 (mJ/cm ²)	104
Figure 49. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 5 (mJ/cm ²)	106
Figure 50. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Dose for Reactor 6 (mJ/cm ²)	108
Figure 51. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Dose for Reactor 6 (mJ/cm ²)	110
Figure 52. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Dose for Reactor 6 (mJ/cm ²)	112
Figure 53. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average UV Transmittance (%)	114
Figure 54. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum UV Transmittance (%)	116
Figure 55. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum UV Transmittance (%)	118
Figure 56. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average pH	120
Figure 57. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum pH	122
Figure 58. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum pH	124
Figure 59. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Arsenic (ug/L) – N/A	125
Figure 60. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Boron (ug/L)	125
Figure 61. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Chloride (mg/L)	126
Figure 62. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Chromium – Total (ug/L)	127
Figure 63. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Bi-Weekly Total Nitrogen ¹	128
Figure 64. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Weekly Nitrate-N (mg/L)	129
Figure 65. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Weekly Total Kjeldahl Nitrogen-N (mg/L)	130
Figure 66. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Sodium (mg/L)	131
Figure 67. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Sulfate (mg/L)	132

Figure 68. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly TDS (mg/L) ..	133
Figure 69. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Total Coliform (MPN/100mL) – N/A	135
Figure 70. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Weekly TOC (mg/L) ...	136
Figure 71. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Average Turbidity (NTU)	138
Figure 72. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Minimum Turbidity (NTU)	140
Figure 73. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Daily Maximum Turbidity (NTU)	142
Figure 74. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Lead (ug/L) – N/A	143
Figure 75. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Monthly Copper (ug/L) – N/A	143
Figure 76a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs Monthly Aluminum (ug/L)	144
Figure 76b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs Monthly Barium (ug/L)	145
Figure 76c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs Monthly Chromium (ug/L)	145
Figure 76d. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs Monthly Nitrate (as Nitrogen) (mg/L)	146
Figure 76e. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs Monthly Nitrite (as Nitrogen) (mg/L)	146
Figure 76f. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Inorganics with Primary MCLs Nitrate + Nitrite (mg/L)	147
Figure 77a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Aluminum (ug/L)	149
Figure 77b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Chloride (mg/L)	149
Figure 77c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Iron (mg/L)	150
Figure 77d. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Manganese (ug/L)	150
Figure 77e. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Odor (TON)	151
Figure 77f. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Specific Conductance (uS/cm)	151
Figure 77g. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Sulfate (mg/L)	152
Figure 77h. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly TDS (mg/L)	152
Figure 77i. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents/Parameters with Secondary MCLs Monthly Turbidity (NTU)	153
Figure 78a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Radioactivity Monthly Gross Alpha Particle Activity (pCi/L)	154
Figure 78b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Radioactivity Monthly Gross Beta Particle Activity (pCi/L)	154
Figure 78c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Radioactivity Monthly Combined Radium-226 and Radium-228 (pCi/L)	155
Figure 78d. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Radioactivity Monthly Strontium-90 (pCi/L)	155

Figure 78e. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Radioactivity Monthly Tritium (pCi/L)	156
Figure 79. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Regulated Organics Monthly Xylenes (ug/L)	159
Figure 80a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Disinfection Byproducts Monthly Chlorite (ug/L)	161
Figure 80b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Disinfection Byproducts Monthly Dichloroacetic Acid (ug/L)	161
Figure 81a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring General Physical and General Minerals Quarterly Calcium, Potassium, Sodium & Hardness (mg/L)	162
Figure 81b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring General Physical and General Minerals Quarterly Chloride & Sulfate (mg/L)	163
Figure 81c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring General Physical and General Minerals Quarterly Iron (mg/L), & Copper, Manganese, and Zinc (ug/L)	163
Figure 81d. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring General Physical and General Minerals Quarterly Odor (TON)	164
Figure 81e. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring General Physical and General Minerals Quarterly Corrosivity (LSI)	164
Figure 82a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents with Notification Levels Monthly Boron (ug/L)	166
Figure 82b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents with Notification Levels Monthly Chlorate (ug/L)	166
Figure 82c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents with Notification Levels Monthly Formaldehyde (ug/L)	167
Figure 82d. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents with Notification Levels Monthly Manganese (ug/L)	167
Figure 82e. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Constituents with Notification Levels Monthly TBA (ug/L)	168
Figure 83. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Remaining Priority Pollutants – N/A	170
Figure 84a. AWPf Product Water Monitoring	172
Figure 84b. AWPf Product Water Monitoring	173
Figure 84c. AWPf Product Water Monitoring	173
Figure 85a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring DDW Specified Chemicals Quarterly DCPA (ug/L)	175
Figure 85b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring DDW Specified Chemicals Quarterly Chloropicrin (ug/L)	175
Figure 85c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring DDW Specified Chemicals Quarterly Quinoline (ug/L)	176
Figure 86a. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Surrogates for CECs – Initial Assessment Phase Quarterly Electrical Conductivity (uS/cm)	178
Figure 86b. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Surrogates for CECs – Initial Assessment Phase Quarterly UV Absorbance cm-1	178
Figure 86c. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Surrogates for CECs – Initial Assessment Phase Quarterly TOC (mg/L)	179
Figure 87. AWPf Product Water Monitoring Recycled Water Discharge Limits Monitoring Bioanalytical Screening Tools – N/A	180
Figure 88a. Groundwater Monitoring Quarterly Water Level Elevation (ft-bgs)	186
Figure 88b. Groundwater Monitoring Quarterly Chlorine Residual (mg/L)	186
Figure 88c. Groundwater Monitoring Quarterly Chloride (mg/L)	187
Figure 88d. Groundwater Monitoring Quarterly Nitrate-N (mg/L)	187
Figure 88e. Groundwater Monitoring Quarterly Nitrite-N (mg/L)	188

Figure 88f. Groundwater Monitoring Quarterly Nitrate + Nitrite (mg/L)	188
Figure 88g. Groundwater Monitoring Quarterly pH	189
Figure 88h. Groundwater Monitoring Quarterly Sodium (mg/L)	189
Figure 88i. Groundwater Monitoring Quarterly Sulfate (mg/L)	190
Figure 88j. Groundwater Monitoring Quarterly TOC (mg/L)	190
Figure 88k. Groundwater Monitoring Quarterly Total Coliform (MPN/100mL)	191
Figure 88l. Groundwater Monitoring Quarterly BOD ₅ 20°C (mg/L)	191
Figure 88m. Groundwater Monitoring Quarterly Oil and Grease (mg/L)	192
Figure 88n. Groundwater Monitoring Quarterly Total Nitrogen (mg/L)	192
Figure 88o. Groundwater Monitoring Quarterly Turbidity (NTU)	193
Figure 89a. Groundwater Monitoring Semi-Annual BOD ₅ 20° C (mg/L)	195
Figure 89b. Groundwater Monitoring Semi-Annual TSS (mg/L)	195
Figure 90. Groundwater Monitoring Inorganics with Primary MCLs Monthly Aluminum (ug/L)	196
Figure 91. Groundwater Monitoring Inorganics with Primary MCLs Monthly Antimony (ug/L)	197
Figure 92. Groundwater Monitoring Inorganics with Primary MCLs Monthly Arsenic (ug/L)	198
Figure 93. Groundwater Monitoring Inorganics with Primary MCLs Monthly Asbestos (MFL)	199
Figure 94. Groundwater Monitoring Inorganics with Primary MCLs Monthly Barium (ug/L)	200
Figure 95. Groundwater Monitoring Inorganics with Primary MCLs Monthly Beryllium (ug/L) – N/A	201
Figure 96. Groundwater Monitoring Inorganics with Primary MCLs Monthly Cadmium (ug/L) – N/A	202
Figure 97. Groundwater Monitoring Inorganics with Primary MCLs Monthly Chromium (Total) (ug/L)	203
Figure 98. Groundwater Monitoring Inorganics with Primary MCLs Monthly Cyanide (mg/L)	204
Figure 99. Groundwater Monitoring Inorganics with Primary MCLs Monthly Fluoride (mg/L)	205
Figure 100. Groundwater Monitoring Inorganics with Primary MCLs Monthly Mercury (ug/L) – N/A	206
Figure 101. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nickel (ug/L)	207
Figure 102. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nitrate (as N) (mg/L)	208
Figure 103. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nitrite (as Nitrogen) (mg/L)	209
Figure 104. Groundwater Monitoring Inorganics with Primary MCLs Monthly Nitrate + Nitrite (mg/L)	210
Figure 105. Groundwater Monitoring Inorganics with Primary MCLs Monthly Perchlorate (ug/L) – N/A	211
Figure 106. Groundwater Monitoring Inorganics with Primary MCLs Monthly Selenium (ug/L)	212
Figure 107. Groundwater Monitoring Inorganics with Primary MCLs Monthly Thallium (ug/L) - N/A	213
Figure 108a. Groundwater Monitoring Radioactivity Quarterly Gross Alpha (pCi/L)	220
Figure 108b. Groundwater Monitoring Radioactivity Quarterly Gross Beta (pCi/L)	220
Figure 108c. Groundwater Monitoring Radioactivity Quarterly Combined Radium-226 and Radium-228 (pCi/L)	220
Figure 108d. Groundwater Monitoring Radioactivity Quarterly Radium-226 (pCi/L)	221
Figure 108e. Groundwater Monitoring Radioactivity Quarterly Radium-228 (pCi/L)	221
Figure 108f. Groundwater Monitoring Radioactivity Quarterly Strontium-90 (pCi/L)	222
Figure 108g. Groundwater Monitoring Radioactivity Quarterly Tritium (pCi/L)	222
Figure 108h. Groundwater Monitoring Volatile Organic Chemicals Quarterly Toluene (ug/L)	223
Figure 108i. Groundwater Monitoring Synthetic Organic Chemicals Quarterly Caffeine (ug/L)	223
Figure 108j. Groundwater Monitoring Synthetic Organic Chemicals Quarterly Erythromycin (ug/L)	224
Figure 108k. Groundwater Monitoring Disinfection Byproducts Quarterly Haloacetic Acid (Five) (HAA5) (ug/L)	224
Figure 108l. Groundwater Monitoring Constituents/Parameters with Secondary MCLs Quarterly Dichloroacetic Acid (ug/L)	225
Figure 108m. Groundwater Monitoring Disinfection Byproducts Quarterly Total Trihalomethanes (ug/L)	225
Figure 108n. Groundwater Monitoring Disinfection Byproducts Quarterly Bromodichloromethane (ug/L)	226
Figure 108o. Groundwater Monitoring Disinfection Byproducts Quarterly Chloroform (ug/L)	226
Figure 108p. Groundwater Monitoring Quarterly Boron (ug/L)	227
Figure 108q. Groundwater Monitoring Quarterly Chlorate (ug/L)	227
Figure 108r. Groundwater Monitoring Quarterly Ethylene Glycol (ug/L)	228
Figure 109. Groundwater Monitoring Annual Groundwater Monitoring- N/A N-Nitrosopyrrolidine (ug/L)	228
Figure 110. Groundwater Monitoring General Physical and General Minerals Monthly Asbestos (MFL)	229
Figure 111. Groundwater Monitoring General Physical and General Minerals Monthly Calcium (mg/L)	230

Figure 112. Groundwater Monitoring General Physical and General Minerals Monthly Chloride (mg/L)	231
Figure 113 Groundwater Monitoring General Physical and General Minerals Monthly Copper (ug/L)- N/A	232
Figure 114. Groundwater Monitoring General Physical and General Minerals Monthly Iron (mg/L)	233
Figure 115. Groundwater Monitoring General Physical and General Minerals Monthly Manganese (ug/L)	234
Figure 116. Groundwater Monitoring General Physical and General Minerals Monthly Potassium (mg/L)	235
Figure 117. Groundwater Monitoring General Physical and General Minerals Monthly Sodium (mg/L)	236
Figure 118. Groundwater Monitoring General Physical and General Minerals Monthly Sulfate (mg/L)	237
Figure 119. Groundwater Monitoring General Physical and General Minerals Monthly Zinc (ug/L)	238
Figure 120. Groundwater Monitoring General Physical and General Minerals Monthly Color	239
Figure 121. Groundwater Monitoring General Physical and General Minerals Monthly Corrosivity.....	240
Figure 122. Groundwater Monitoring General Physical and General Minerals Monthly Foaming Agents (mg/L) – N/A	241
Figure 123. Groundwater Monitoring General Physical and General Minerals Monthly Odor (TON)	242
Figure 124. Groundwater Monitoring General Physical and General Minerals Monthly Specific Conductance (uS/cm)	243
Figure 125. Groundwater Monitoring General Physical and General Minerals Monthly TDS (mg/L)	244
Figure 126. Groundwater Monitoring General Physical and General Minerals Monthly Hardness (ug/L)	245
Figure 127. Summary of Compliance- N/A	252
Figure 128a. Modified MRP R3-2019-0116 TOC Monitoring Requirements	255
Figure 128b. Chlorate Trends, Product Water Pump Station and MW-1D.....	256
Figure 129. MRP R3-2019-0116 Table 2. Existing Groundwater Quality in the Seaside Basin	257
Figure 130. Monitoring Well Total Coliform Detections (MPN/100 mL) – N/A	262
Figure 131. Arsenic Levels in MW-2D (ug/L) and Compliance with Running Annual Average MCL of 10 ug/L	263
Figure 132. MRP No. R3-2019-0116 Non-Detect Parameters and Frequencies- N/A	266
Figure 133a. Project Groundwater Modeling: Underground Travel Times	268
Figure 133b. Project Groundwater Modeling: Underground Travel Times	269
Figure 134. Analytical Methods and Laboratory QA/QC Procedures – N/A	275

Appendices:

Appendix A. Laboratory Proficiency Test Documentation
Appendix B. Laboratory ELAP Certificates
Appendix C. 2019 CalAm Water System #2710004 Consumer Confidence Report
Appendix D. GeoTracker Report Access Instructions for Quarterly Monitoring Reports



1.0 INTRODUCTION

1.1 Transmittal Sheet

California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Document

Date: 4/30/2021

Submit this Self Monitoring Report to: centralcoast@waterboards.ca.gov

FACILITY NAME: Monterey One Water

FACILITY ADDRESS: 14811 Del Monte Blvd
Marina, CA 93933

CONTACT PERSON: Jose O. Guzman

JOB TITLE: Chief Plant Operator

PHONE NUMBER: 831-883-6183

EMAIL: joseg@my1water.org

WDR ORDER (Permit) Number: R3-2017-003

WDID NUMBER: 3 270417589

PERMITTED FLOW (see facility WDR Permit): 5,000,000 gpd

AVERAGE WASTEWATER FLOW (over monitoring period): 3,133,650.6 gpd

TYPE OF REPORT: ☒ **Annual** ☐ **Semiannual** ☐ **Quarterly**
☐ **Monthly** ☐ **Other:** _____

REPORTING PERIOD: 1/1/2020 **TO** 12/31/2020

MONITORING PERFORMED DURING THIS PERIOD (check all that apply):

☒ Groundwater	☒ Lab Reports	☒ Recycled Water
☒ Treatment System Effluent	☐ Solids Disposal	☐ Disposal Area
☒ Treatment System Influent	☐ Water Supply	☐ Use Area
☒ Source Water Monitoring	☐ Other: _____	

Violation(s) during this monitoring period? ☒ **YES** ☐ **NO**

Parameter(s) in Violation: Pursuant to Standard Provisions¹ see footnote on next page, monitoring reports must contain date of violation, explanation of cause and corrective actions planned or taken to prevent recurrence. Please include parameter(s) and date(s) of violation in space provided below. If space is insufficient, include an independent discussion containing explanation of cause and corrective action within monitoring report.

Please see report narrative for details related to TOC exceedance.

Discharger Comments:

Submit this self-monitoring report to centralcoast@waterboards.ca.gov in searchable PDF format. Include attached cover sheet and signature page. DO NOT submit via US mail.

In accordance with the Standard Provisions¹ and Reporting Requirements, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Print Name: Jose O. Guzman

Title: Chief Plant Operator

Signature:* Jose O. Guzman

Digitally signed by Jose O. Guzman
DN: cn=Jose O. Guzman, o=Monterey One Water
Operations, email=joguz@montereyowater.org
Reason: I am the author of this document
Location:
Date: 2021.05.04 12:28:07-00

Date: 4/30/2021

*All reports shall be signed by one of the following:

- a. For a corporation: by a principle executive officer of at least the level of vice president.
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
- c. For a public agency: by either a principle executive officer or ranking elected official.
- d. For a LLC: either a member or manager given signing authority by the operating agreement of LLC.
- e. a "duly authorized representative" of one of the above.

¹ Electronic access to Standard Provisions: https://www.waterboards.ca.gov/centralcoast/board_decisions/docs/wdr_standard_provisions_2013.pdf

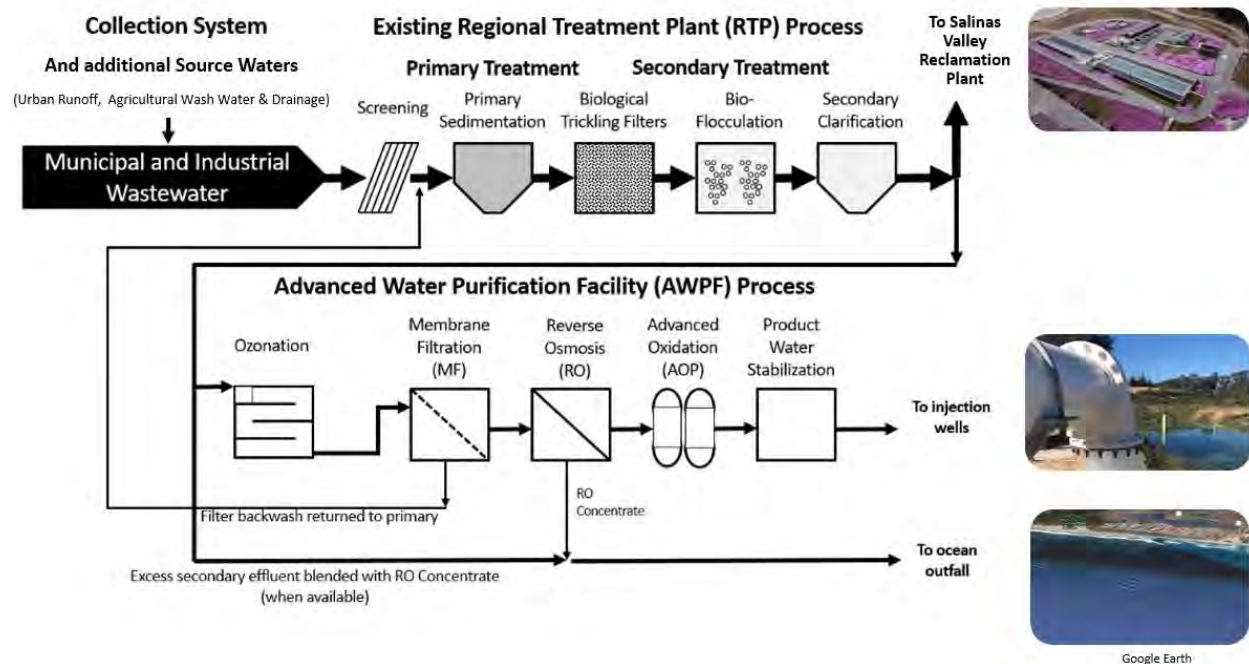
1.2 Background

The Monterey One Water (M1W) in partnership with the Monterey Peninsula Water Management District (MPWMD) developed the Pure Water Monterey Groundwater Replenishment Project (Project) to deliver 3,500 acre-feet per year (AFY) of purified recycled water to replenish the Seaside Groundwater Basin (Seaside Basin), in Monterey County.

The Project includes an Advanced Water Purification Facility (AWPF) with a design capacity of 5 MGD, located adjacent to the Regional Treatment Plant (RTP). AWPF consists of ozone pre-treatment, low-pressure membrane filtration, Reverse Osmosis (RO) treatment, advanced oxidation, and product water stabilization. Purified recycled water from the AWPF is conveyed by pipeline to the Seaside Basin for groundwater recharge using both deep injection and vadose zone wells. The injected purified recycled water subsequently mixes with existing groundwater and stored for future urban use, including use as a potable water source.

The RO concentrate generated from on-site operations is piped to M1W's existing ocean outfall, regulated by Central Coast Regional Water Quality Control Board (Regional Water Board) Order No. R3-2018-00017, NPDES No. CA0048551, along with secondary wastewater effluent, and hauled saline waste. The other AWPF waste streams from the waste equalization basin are diverted to the RTP headworks or the RTP sludge thickening process for treatment.

Figure A. Flow Schematic



Injection Well Facilities (IWF) are located in the eastern boundary of the City of Seaside, about 1.5 miles inland from Monterey Bay, in an area located within the Northern Inland Subarea of the Seaside Basin. Currently, there are two Vadose Zone Wells (VZWs) in the Paso Robles aquifer and two Deep Injection Wells (DIWs) in the Santa Margarita aquifer.

Figure B. Map of RTP, AWPf, and Injection Wells



1.3 Annual Summary Report Requirements

Annual Summary Reports must contain a discussion of the previous calendar year's analytical results, as well as graphical and tabular summaries of the analytical data per Page MRP-3. Page MRP-11 further enumerates the following requirements for the Annual Summary Report:

Annual Summary Reports must include, at a minimum, the following information:

- a. M1W must provide a summary on the makeup of source waters (municipal wastewater, agricultural wash water, Blanco Drain, and Reclamation Ditch) entering the Regional Treatment Plant in the Annual Summary Report to DDW and Central Coast Water Board required per title 22 section 60320.228(a). At a minimum, the summary must include discussion on the following items:*
 - i. The priority of source water usage for the period reported and the basis for the priority;*
 - ii. A summary of monthly volume for each source water type; and*
 - iii. An evaluation of which demand scenario best fit the volumes observed during reporting period (Drought, Normal/Wet Full Reserve, Normal/Wet Building Reserve).*
- b. Tabular and graphical summaries of the monitoring data obtained during the previous calendar year;*
- c. A summary of compliance status with all monitoring requirements during the previous calendar year;*
- d. For any non-compliance during the previous calendar year, a description of:*
 - i. The date, duration, and nature of the violation;*
 - ii. A summary of any corrective actions and/or suspensions of subsurface application of recycled water resulting from a violation; and*
 - iii. If uncorrected, a schedule for and summary of all pending and completed remedial actions.*
- e. Any detections of monitored chemicals or contaminants, and any observed trends in the monitoring wells;*
- f. Information pertaining to the vertical and horizontal migration of the recharge water plume;*
- g. Title 22 drinking water quality data for the nearest drinking water supply well;*
- h. A description of any changes in the operation of any unit processes or facilities;*
- i. The estimated quantity and quality of the recycled water to be utilized for the next calendar year;*
- j. A list of the analytical methods used for each test and associated laboratory quality assurance/quality control procedures. Identification of the laboratories used by M1W to monitor compliance with Order No. R3-2017-0003, their status of certification, and a summary of proficiency test;*
- k. A list of current operating personnel, their responsibilities, and their corresponding grade of certification.*
- l. The Annual Report must be prepared by a properly qualified engineer registered and licensed in California and experienced in the field of wastewater or water treatment; and*

- m. A summary of monitoring reports, reporting, and trend analysis, to describe the changes in water quality and contrast them to background measurements for all constituents exceeding MCLs or where concentration trends increase after the addition of recycled water. Specifically describe studies or investigations made to identify the source, fate and transport path of constituents which exceed the MCL at the monitoring wells.*
- n. M1W must submit to DDW and the Central Coast Water Board a summary of coordination activities with Marina Coast Water District on the operation and maintenance of the Product Water Pipeline and the Purified Water Reservoir necessary for protection of the product water for injection. At a minimum, M1W must be kept informed of the status of testing and maintenance of backflow preventers on the Product Water Pipeline, occurrence of backflow incidents (if any), and maintenance activities of the Purified Water Reservoir*
- o. Volumetric Monitoring: M1W must report in accordance with each of the items in section 3 of the Recycled Water Policy.*

1.4 Monitoring Requirements

Project monitoring requirements as outlined in the MRP No. R3-2019-0116, Page MRP-6 are as follows:

M1W must monitor the flow and quality of the water according to the manner, locations, and frequency specified in this Monitoring and Reporting Program:

- a. Influent to the AWPf - At a location before clarified secondary effluent enters the ozone pre-treatment system of the AWPf;*
- b. Prior to RO - At a location where all membrane filtration effluent streams are combined prior to RO treatment;*
- c. After RO – At a location after RO treatment where all RO effluent streams are combined prior to AOP treatment;*
- d. AWPf Recycled Water – At a location downstream of the last chemical injection point and prior to well injection;*
- e. Upon approval by the Central Coast Water Board and DDW, if potable water is used as a diluent, blend of recycled water and diluent water; and*
- f. Groundwater Monitoring Wells (ID#’s) – MW-2D, MW-2AD, MW-2AS, MW-1D, MW-1S, MW-1AD, MW-1AS. (7 total).*

Monitoring reports must include, but not limited to, the following:

- a. Analytical results;*
- b. Location of each sampling station where representative samples are obtained, including a map at a scale of 1-inch equals 1,200 feet or less, that clearly identifies the locations of all injection wells, project monitoring wells, and production wells;*
- c. Analytical test methods used and the corresponding minimum reporting levels;*
- d. Name(s) of the laboratory, which conducted the analyses;*
- e. Copy of laboratory certifications by ELAP;*

- f. Quality assurance and control information, including documentation of chain of custody; and
- g. Maximum contaminant level (MCL), notification level (NL), response level (RL), DDW Condition, or Recycled Water Discharge Limit (RWDL).

1.5 Monitoring Locations

There are eleven monitoring locations, including seven groundwater monitoring wells listed in **Table A**, Sampling Locations, which includes the Primary Station (PS) Code, and latitude/longitude information. A map illustrating the AWPf on-site monitoring locations, and the groundwater monitoring wells is provided in **Figure C** and **Figure D**, respectively.

Table A. Sampling Locations

	Site Description	Sample ID	PS Code	Latitude	Longitude
1	Influent to the AWPf	AWPf Influent	2790002-301	36.7070	-121.7711
2	Prior to RO	AWPf RO Feed	2790002-302	36.7069	-121.7722
3	After RO (Prior to AOP)	AWPf RO Permeate	2790002-303	36.7068	-121.7725
4	AWPf Recycled Water	AWPf Product Water	2790002-300	36.7062	-121.7725
5	Groundwater Monitoring Wells (MW-1D)	MW-1D SANTA MARGARITA	2790002-203	36.6183	-121.8143
6	Groundwater Monitoring Wells (MW-1S)	MW-1S PASO ROBLES	2790002-204	36.6183	-121.8143
7	Groundwater Monitoring Wells (MW-1AD)	MW-1AD SANTA MARGARITA	2790002-205	36.6198	-121.8149
8	Groundwater Monitoring Wells (MW-1AS)	MW-1AS PASO ROBLES	2790002-206	36.6197	-121.8150
9	Groundwater Monitoring Wells (MW-2D)	MW-2D SANTA MARGARITA	2790002-207	36.6168	-121.8171
10	Groundwater Monitoring Wells (MW-2AS)	MW-2AS PASO ROBLES	2790002-209	36.6182	-121.8168
11	Groundwater Monitoring Wells (MW-2AD)	MW-2AD SANTA MARGARITA	2790002-210	36.6182	-121.8168

Note: Per MRP No. R3-2019-0116 Section II.1.e, M1W will include monitoring if potable water is used as a diluent. In 2020, no potable water was used as a diluent.

Figure C. Map of AWPf On-Site Monitoring Locations



Figure D. Map of Groundwater Monitoring Well Locations





1.6 Acronyms

Acronym/Abbreviation	Term
AFY	Acre-Feet/Year
AWPF	Advanced Water Purification Facility
CBOD ₅	Carbonaceous Biochemical Oxygen Demand
CEC	Constituents of Emerging Concern
DDW	State Water Resources Control Board, Division of Drinking Water
DIW	Deep Injection Well
DNQ	Detected, but Not Quantified
DNQ	Detected, but Not Quantified
DTW	Distance to Water
ELAP	California Environmental Laboratory Accreditation Program
GWR	Groundwater Replenishment
IWF	Injection Well Facilities
LSI	Langelier Saturation Index
M1W	Monterey One Water
MCL	Maximum Contaminant Level
MCWD	Marina Coast Water District
MCWRA	Monterey County Water Resources Agency
MDL	Minimum Detection Level
MGD	Million Gallons Per Day
MPN	Most Probable Number
MPWMD	Monterey Peninsula Water Management District
MRL	Minimum Reporting Level
MS4	Municipal Separate Storm Sewer System
MTL	Monitoring Trigger Levels
MW	Monitoring Well
ND	Not Detected
NL	Notification Level
NTU	Nephelometric Turbidity Units
P3PS	Pond 3 Pump Station (Salinas Stormwater Projects)
Project	Pure Water Monterey Groundwater Replenishment Project
PS Codes	Primary Station Codes
PWM	Pure Water Monterey
PWPS	Product Water Pump Station
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RDL	Reporting Detection Limit
Recycled Water Policy	Water Quality Control Policy for Recycled Water
Regional Water Board	Central Coast Regional Water Quality Control Board
RL	Response Level
RO	Reverse Osmosis
RTP	Regional Treatment Plant
RWDL	Recycled Water Discharge Limit
SAPS	Salinas Pump Station
Seaside Basin	Seaside Groundwater Basin
State Water Board	State Water Resources Control Board
SVRP	Salinas Valley Reclamation Project
TDS	Total Dissolved Solids
Title 22	California Code of Regulations, Title 22
TKN	Total Kjeldahl Nitrogen
TOC	Total Organic Carbon
TSS	Total Suspended Solids
UV	Ultraviolet
UVT	UV Transmittance
VZW	Vadose Zone Well

2.0 SOURCE WATERS INFLUENT TO THE RTP

M1W must provide a summary on the makeup of source waters (municipal wastewater, agricultural wash water, Blanco Drain, and Reclamation Ditch) entering the Regional Treatment Plant in the Annual Summary Report to DDW and the Central Coast Regional Water Board required per Title 22 Section 60320.228(a). At a minimum, the summary must include discussion on the following items:

- i. The priority of source water usage for the period reported and the basis for the priority;*
- ii. A summary of monthly volume for each source water type; and*
- iii. An evaluation of which demand scenario best fit the volumes observed during the reporting period (Drought, Normal/Wet Full Reserve, Normal/Wet Building Reserve)*

This section provides a summary of the makeup of source waters (municipal wastewater, industrial wastewater (IWW), Blanco Drain, and Reclamation Ditch) entering the RTP in 2020.

2.1 Priority of Source Waters

During 2020, municipal wastewater flows at the RTP consistently met the secondary effluent needs for influent to both recycling facilities (SVRP and the AWPf). M1W has developed a preliminary prioritization for source waters to meet the needs during times of low wastewater flows and peak recycled water demands. As of the end of 2020, M1W operators have the ability to divert additional source waters into the collection and treatment facilities. M1W would typically turn on diversions in the following priority based on operational cost and ease of conveyance and treatment:

1. Surface water in the Reclamation Ditch near Davis Road west of Salinas;
2. Surface water in the Blanco Drain near the Salinas River; and
3. Industrial Wastewater (also referred to as “Agricultural Wash Water”) which can be diverted to the Salinas Pump Station (SAPS).

Diversion of surface water from the Reclamation Ditch and Blanco Drain are subject to applicable water rights permits (SWRCB Water Rights Permits Nos. 21377 and 21376). The priority is subject to change based on operational considerations and the need for maintenance of the new facilities.

2.2 Summary of Monthly Volumes

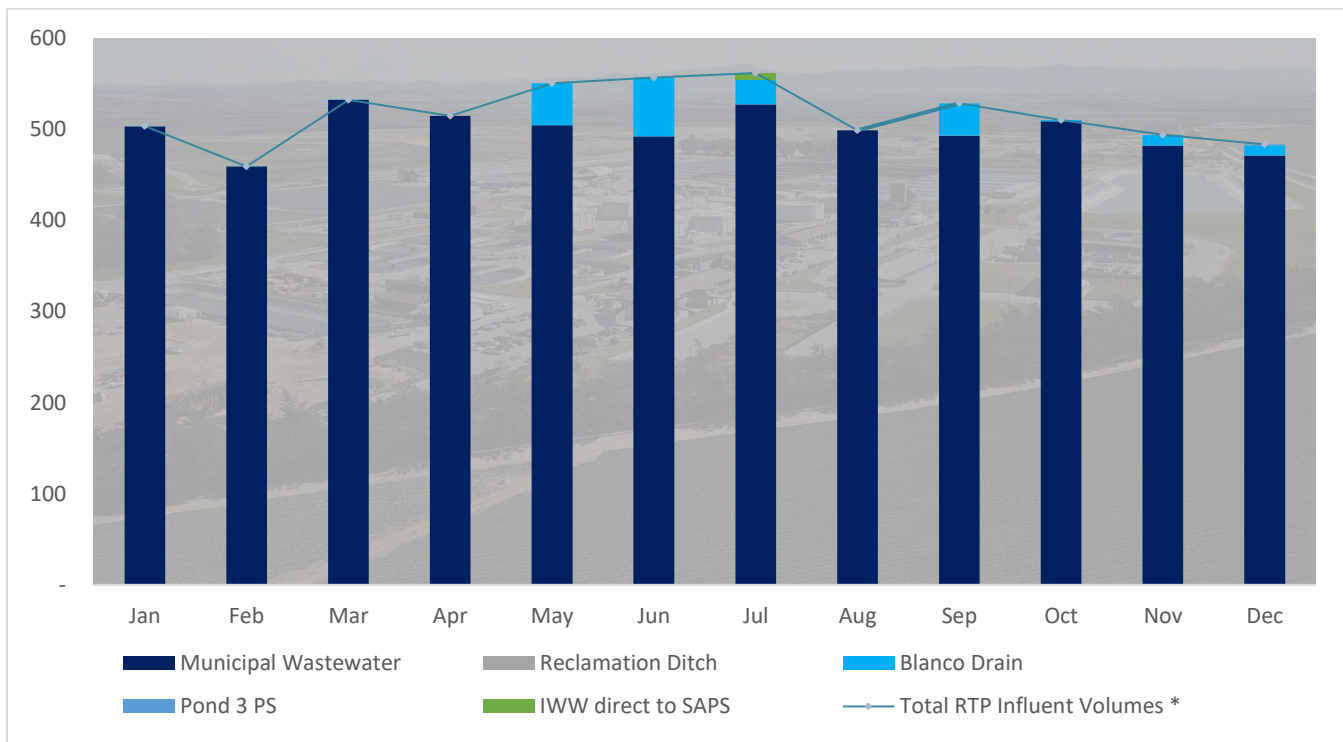
Monthly volumes of source waters influent to the RTP are provided in **Table 1**, below.

Table 1. Monthly Source Water Volumes Influent to the RTP (MG)

Month	Total Influent to the RTP ¹	Total Municipal Wastewater ¹	New Source Waters			
			Reclamation Ditch Diversions	Blanco Drain Diversions	Salinas IWW Treatment Facility Pond 3 Diversions	Salinas IWW to Salinas Pump Station Diversions
January	503.29	503.13	0.00	0.16	0.00	0.00
February	459.12	459.09	0.00	0.03	0.00	0.00
March	532.00	531.92	0.01	0.07	0.00	0.00
April	514.43	514.43	0.00	0.00	0.00	0.00
May	550.26	504.25	0.00	46.01	0.00	0.00
June	556.83	492.21	0.00	64.62	0.00	0.00
July	561.62	527.13	0.00	27.73	0.00	6.76
August	498.67	498.67	0.00	0.00	0.00	0.00
September	528.27	492.93	0.02	35.32	0.00	0.00
October	509.95	508.55	0.00	1.40	0.00	0.00
November	493.78	481.80	0.00	11.60	0.38	0.00
December	483.31	470.83	0.18	11.31	0.99	0.00
Total	6,191.53	5,984.94	0.21	198.25	1.37	6.76

¹Volumes do not include de minimis on-site wastewater, liquid waste hauled to site, Monterey Regional Waste Management District domestic wastewater, or backwash from the Salinas River Diversion Facility, which enter the plant after the flowmeter.

Figure 1. Monthly Source Water Volumes Influent to the RTP (MG)



*See **Table 1**, Footnote 1.

Between July 7th and 9th, 6.76 million gallons (20.8 acre-feet) of Salinas IWW was diverted to M1W's SAPS to be comingled with municipal wastewater and conveyed to the RTP. This diversion was required to enable the construction of an intertie of the City's Municipal Separate Storm Sewer System (MS4) to the City's industrial wastewater conveyance system as part of the Salinas Storm Water Project (Phase 1A, Dry Weather Flow Diversion Project).

All 630 acre-feet of diverted, interruptible source water became influent to the RTP primary and secondary treatment processes. The diversions occurred while AWPf was operating. In 2020, all new source waters have been diverted for recycling and beneficial reuse through groundwater injection into the Seaside Basin and subsequent extraction for potable supply.

2.3 Demand Scenario Discussion

During 2020, M1W began operation of the AWPf and worked to produce and inject as much purified recycled water as possible. Due to initial equipment testing, commissioning, and programming of facilities, the AWPf and injection wells did not operate at their peak capacity until late December 2020. The source water scenario that was assumed was a "Wet Year/Building Reserve" because the Salinas River Diversion Facility was operating and M1W was building a reserve for most of the year; however, the volumes of AWPf influent were less than they would have been in a typical wet year when building a reserve.

The first 1,000 acre feet delivered to the Seaside Basin constituted an operating reserve for Monterey Peninsula potable supplies. M1W has not produced or injected water for the "Drought Reserve" for the Castroville Seawater Intrusion Project to date because Monterey County Water Resources Agency (MCWRA) has not committed to fund the new source water facilities or diversions. In addition, Marina Coast Water District (MCWD) did not use purified recycled water for urban irrigation in 2020.

3.0 TABULAR AND GRAPHICAL SUMMARIES OF MONITORING DATA

Tabular and graphical summaries of the monitoring data obtained during the previous calendar year...

Note that for parameters for which all of calendar year 2020 monitoring results were non-detect (ND), no graphical summary is provided as approved by the Regional Water Board (James Bishop, email communication 1/20/2021).

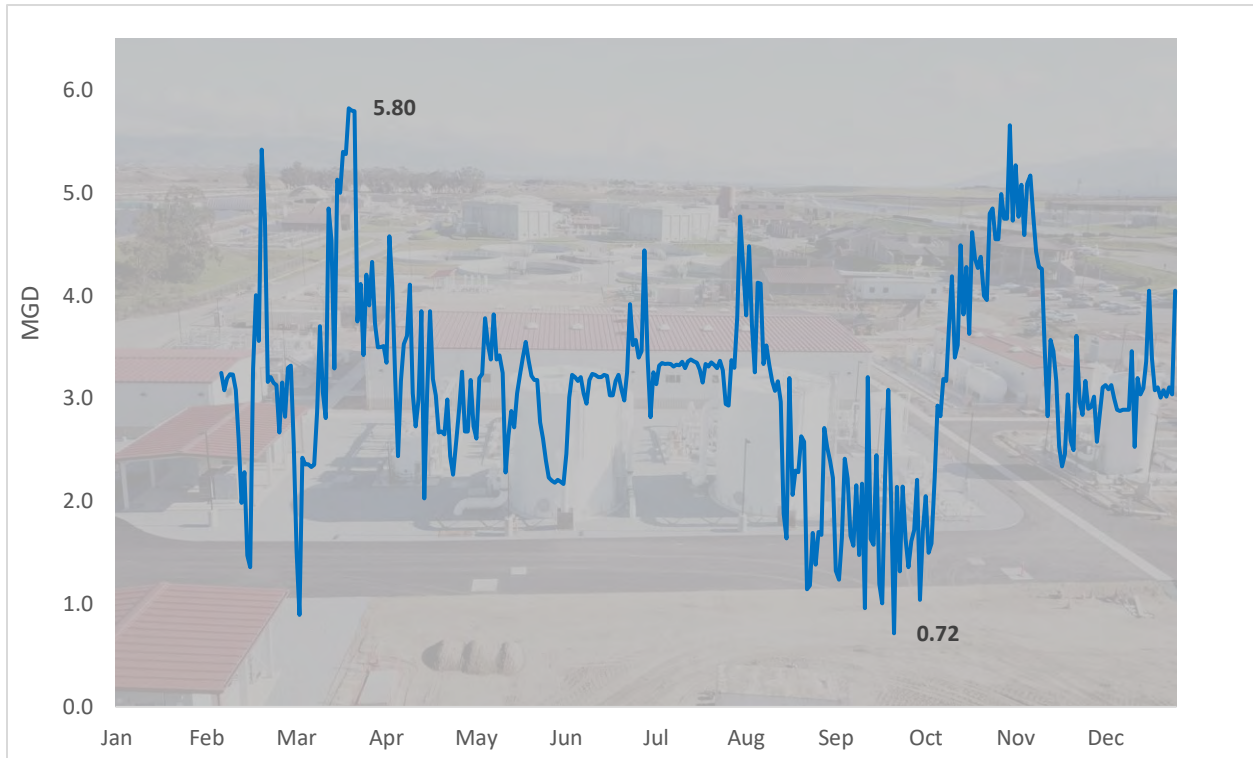
3.1 Flow Volumes

3.1.1 AWPf Influent - Secondary Effluent from the RTP

**Table 2. AWPf Influent – Secondary Effluent from the RTP
Daily Average (MGD)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	3.32	3.50	2.68	2.21	4.44	3.30	2.71	1.61	4.99	2.90
2	-	-	2.56	3.51	3.18	2.19	3.39	3.79	2.53	1.72	4.75	2.92
3	-	-	1.51	3.35	2.73	2.17	2.82	4.77	2.39	2.21	4.75	3.02
4	-	-	0.89	4.58	2.61	2.46	3.25	4.26	2.23	1.04	5.66	2.58
5	-	-	2.42	4.10	3.20	3.01	3.14	3.81	1.32	1.71	4.73	2.85
6	-	3.25	2.36	3.21	3.24	3.23	3.32	4.48	1.24	2.05	5.27	3.11
7	-	3.08	2.36	2.44	3.78	3.21	3.35	3.71	1.64	1.50	4.77	3.13
8	-	3.20	2.33	3.17	3.53	3.17	3.34	3.26	2.42	1.59	5.08	3.09
9	-	3.24	2.35	3.53	3.38	3.21	3.34	4.13	2.22	2.23	4.59	3.13
10	-	3.23	2.86	3.61	3.82	3.05	3.34	4.12	1.66	2.93	5.09	3.00
11	-	3.08	3.70	4.11	3.38	2.95	3.31	3.34	1.57	2.83	5.17	2.89
12	-	2.60	3.07	3.05	3.42	3.18	3.33	3.52	2.16	3.19	4.78	2.88
13	-	1.98	2.81	2.73	3.25	3.24	3.32	3.33	1.48	3.17	4.43	2.89
14	-	2.28	4.85	2.99	2.28	3.23	3.36	3.17	2.17	3.72	4.28	2.89
15	-	1.47	4.54	3.85	2.64	3.21	3.30	3.07	0.96	4.19	4.26	2.89
16	-	1.36	3.29	2.03	2.88	3.21	3.36	3.17	3.21	3.40	3.47	3.46
17	-	3.29	5.13	3.06	2.72	3.23	3.38	2.97	1.63	3.52	2.83	2.53
18	-	4.01	5.00	3.85	3.05	3.22	3.36	1.88	1.58	4.49	3.57	3.20
19	-	3.56	5.40	3.19	3.23	3.03	3.35	1.64	2.45	3.82	3.46	3.04
20	-	5.42	5.38	3.03	3.40	3.03	3.28	3.20	1.20	4.28	3.17	3.10
21	-	4.75	5.82	2.67	3.55	3.17	3.16	2.06	1.01	3.63	2.53	3.36
22	-	3.16	5.80	2.68	3.37	3.23	3.34	2.30	2.23	4.62	2.34	4.05
23	-	3.21	5.80	2.65	3.22	3.09	3.31	2.28	3.09	4.36	2.46	3.39
24	-	3.15	3.75	2.99	3.18	2.98	3.35	2.63	2.00	4.27	3.04	3.08
25	-	3.13	4.12	2.44	3.18	3.26	3.33	2.58	0.72	4.38	2.59	3.11
26	-	2.67	3.42	2.26	2.77	3.92	3.30	1.14	2.14	4.00	2.50	3.01
27	-	3.16	4.20	2.59	2.61	3.52	3.37	1.18	1.32	3.96	3.61	3.08
28	-	2.82	3.90	2.90	2.40	3.57	3.27	1.69	2.14	4.80	2.97	3.02
29	-	3.30	4.33	3.26	2.23	3.40	2.95	1.38	1.64	4.85	2.84	3.11
30	-		3.73	2.68	2.20	3.46	2.93	1.70	1.36	4.55	3.17	3.04
31	-		3.50		2.18		3.37	1.67		4.55		4.05

**Figure 2. AWPf Influent – Secondary Effluent from the RTP
Daily Average (MGD)**



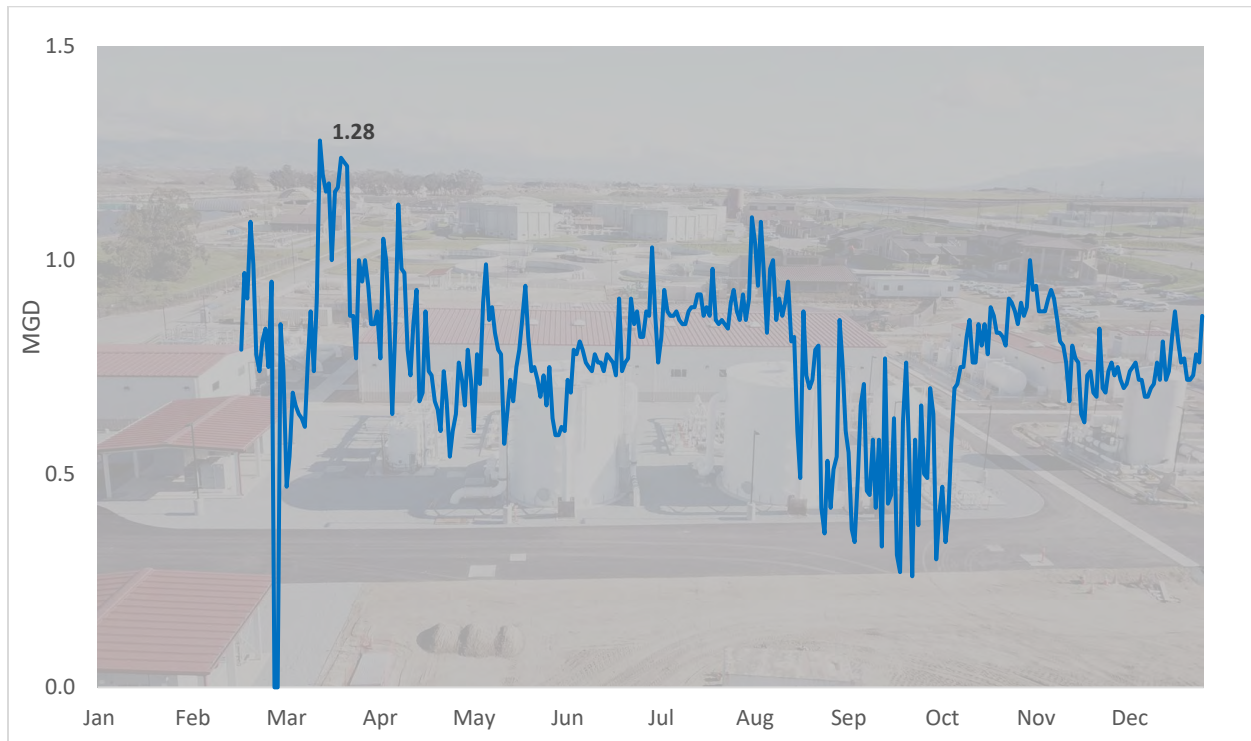
3.1.2 Waste Equalization Effluent Discharged into the RTP

**Table 3. Waste Equalization Effluent Discharged into the RTP
Daily Average (MGD)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.85	0.85	0.66	0.59	0.87	0.92	0.54	0.49	0.90	0.76
2	-	-	0.74	0.88	0.79	0.61	1.03	0.86	0.86	0.70	0.87	0.73
3	-	-	0.47	0.77	0.72	0.60	0.87	0.91	0.76	0.64	0.89	0.75
4	-	-	0.54	1.05	0.60	0.72	0.76	1.10	0.60	0.30	1.00	0.72
5	-	-	0.69	1.00	0.78	0.69	0.82	1.04	0.55	0.41	0.93	0.70
6	-	-	0.66	0.85	0.71	0.79	0.93	0.94	0.37	0.47	0.94	0.71
7	-	-	0.64	0.64	0.90	0.78	0.88	1.09	0.34	0.34	0.88	0.74
8	-	-	0.63	0.85	0.99	0.81	0.87	0.96	0.49	0.41	0.88	0.75
9	-	-	0.61	1.13	0.86	0.79	0.87	0.83	0.66	0.57	0.88	0.76
10	-	-	0.76	0.98	0.89	0.76	0.88	0.98	0.71	0.70	0.91	0.72
11	-	-	0.88	0.97	0.83	0.75	0.86	1.00	0.46	0.71	0.93	0.72
12	-	-	0.74	0.79	0.79	0.74	0.85	0.86	0.45	0.75	0.91	0.68
13	-	-	0.90	0.73	0.78	0.78	0.85	0.91	0.58	0.75	0.86	0.68
14	-	-	1.28	0.85	0.57	0.76	0.88	0.87	0.42	0.82	0.81	0.70
15	-	-	1.20	0.93	0.64	0.76	0.89	0.90	0.58	0.86	0.80	0.71
16	-	-	1.16	0.67	0.72	0.74	0.89	0.95	0.33	0.76	0.76	0.76
17	-	0.79	1.18	0.69	0.67	0.78	0.92	0.81	0.77	0.76	0.67	0.72
18	-	0.97	1.00	0.88	0.75	0.77	0.92	0.82	0.43	0.85	0.80	0.81
19	-	0.91	1.16	0.74	0.79	0.76	0.87	0.60	0.45	0.80	0.77	0.72
20	-	1.09	1.17	0.73	0.86	0.73	0.89	0.49	0.63	0.85	0.76	0.74
21	-	0.99	1.24	0.67	0.94	0.91	0.87	0.88	0.31	0.78	0.64	0.82
22	-	0.78	1.23	0.65	0.82	0.74	0.98	0.73	0.27	0.89	0.62	0.88
23	-	0.74	1.22	0.60	0.74	0.76	0.86	0.70	0.62	0.87	0.73	0.81
24	-	0.81	0.87	0.74	0.75	0.77	0.85	0.72	0.76	0.83	0.74	0.76
25	-	0.84	0.87	0.67	0.72	0.91	0.86	0.79	0.56	0.83	0.69	0.77
26	-	0.75	0.77	0.54	0.68	0.85	0.85	0.80	0.26	0.82	0.68	0.72
27	-	0.95	1.00	0.60	0.73	0.88	0.84	0.42	0.58	0.80	0.84	0.72
28	-	- *	0.95	0.64	0.66	0.82	0.90	0.36	0.38	0.91	0.70	0.73
29	-	- *	1.00	0.76	0.75	0.82	0.93	0.53	0.66	0.90	0.69	0.78
30	-		0.94	0.72	0.63	0.88	0.88	0.42	0.50	0.88	0.74	0.76
31	-		0.85		0.59		0.86	0.51		0.85		0.87

*Due to leap year, SCADA programming reset values before recording data.

**Figure 3. Waste Equalization Effluent Discharged into the RTP
Daily Average (MGD)**



3.1.3 AWPf Recycled Water Injected into the Seaside Basin

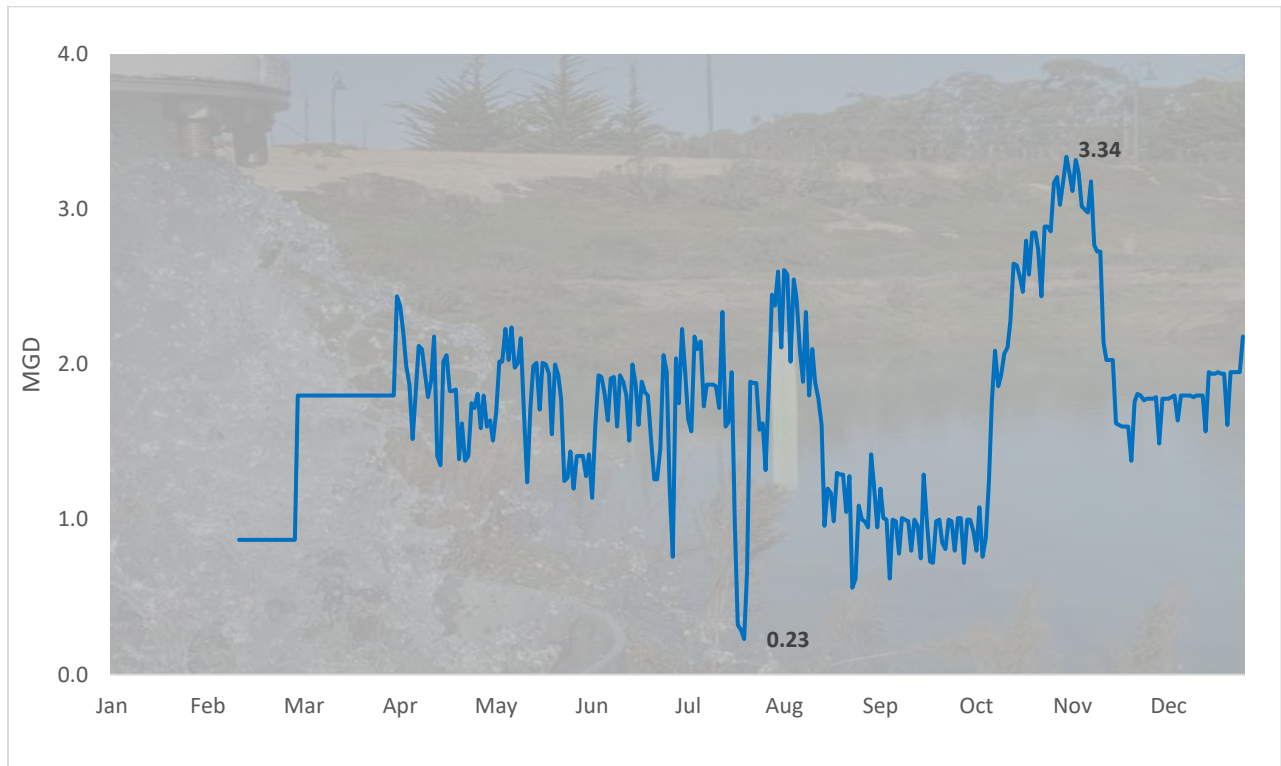
Table 4. AWPf Recycled Water Injected into the Seaside Basin ¹
Daily Average (MGD)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	1.80	1.80	1.60	1.41	2.04	2.45	0.95	1.01	3.21	1.78
2	-	-	1.80	2.44	1.64	1.28	1.75	2.38	1.42	0.72	3.03	1.78
3	-	-	1.80	2.38	1.51	1.42	2.23	2.60	1.21	1.00	3.18	1.79
4	-	-	1.80	2.20	1.69	1.14	1.94	2.11	0.95	1.00	3.34	1.49
5	-	-	1.80	1.99	2.02	1.61	1.65	2.61	1.20	0.93	3.24	1.78
6	-	-	1.80	1.87	2.02	1.93	1.57	2.58	1.01	0.80	3.12	1.78
7	-	-	1.80	1.52	2.23	1.92	2.18	2.02	1.00	1.08	3.32	1.78
8	-	-	1.80	1.80	2.03	1.81	2.10	2.55	0.62	0.76	3.24	1.79
9	-	-	1.80	2.12	2.24	1.64	2.15	2.42	1.00	0.88	3.02	1.80
10	-	-	1.80	2.10	1.98	1.91	1.73	2.10	0.99	1.25	3.00	1.64
11	-	0.87	1.80	1.95	2.01	1.92	1.87	1.89	0.78	1.76	2.98	1.80
12	-	0.87	1.80	1.79	2.17	1.60	1.87	2.34	1.01	2.09	3.18	1.80
13	-	0.87	1.80	1.90	1.68	1.93	1.87	1.80	1.00	1.86	2.77	1.80
14	-	0.87	1.80	2.18	1.24	1.89	1.86	2.10	0.99	1.93	2.73	1.80
15	-	0.87	1.80	1.41	1.72	1.80	1.72	1.88	0.80	2.07	2.73	1.79
16	-	0.87	1.80	1.35	1.99	1.51	2.34	1.78	1.00	2.11	2.14	1.80
17	-	0.87	1.80	2.02	2.01	2.00	1.60	1.61	0.96	2.28	2.03	1.80
18	-	0.87	1.80	2.06	1.71	1.87	1.63	0.96	0.75	2.65	2.03	1.80
19	-	0.87	1.80	1.83	2.01	1.61	1.95	1.20	1.29	2.64	2.03	1.57
20	-	0.87	1.80	1.83	2.00	1.89	0.96	1.17	0.99	2.57	1.62	1.95
21	-	0.87	1.80	1.84	1.94	1.82	0.32	0.99	0.73	2.47	1.61	1.94
22	-	0.87	1.80	1.39	1.55	1.80	0.29	1.30	0.72	2.80	1.60	1.94
23	-	0.87	1.80	1.62	2.00	1.52	0.23	1.29	0.99	2.58	1.60	1.95
24	-	0.87	1.80	1.38	1.93	1.26	0.66	1.29	1.00	2.85	1.60	1.94
25	-	0.87	1.80	1.41	1.78	1.26	1.89	1.05	0.85	2.85	1.38	1.94
26	-	0.87	1.80	1.75	1.25	1.46	1.88	1.28	0.81	2.74	1.76	1.61
27	-	0.87	1.80	1.72	1.27	2.06	1.88	0.56	1.00	2.44	1.81	1.95
28	-	0.87	1.80	1.81	1.44	1.95	1.58	0.62	0.99	2.89	1.80	1.95
29	-	0.87	1.80	1.59	1.20	1.22	1.62	1.09	0.80	2.89	1.77	1.95
30	-		1.80	1.80	1.41	0.76	1.32	1.00	1.01	2.86	1.78	1.95
31	-		1.80		1.41		1.86	0.99		3.17		2.18

**Note: February and March data values were manually entered during SCADA programming and commissioning.*

¹Volumes include backwash water.

**Figure 4. AWPf Recycled Water Injected into the Seaside Basin
Daily Average (MGD)**

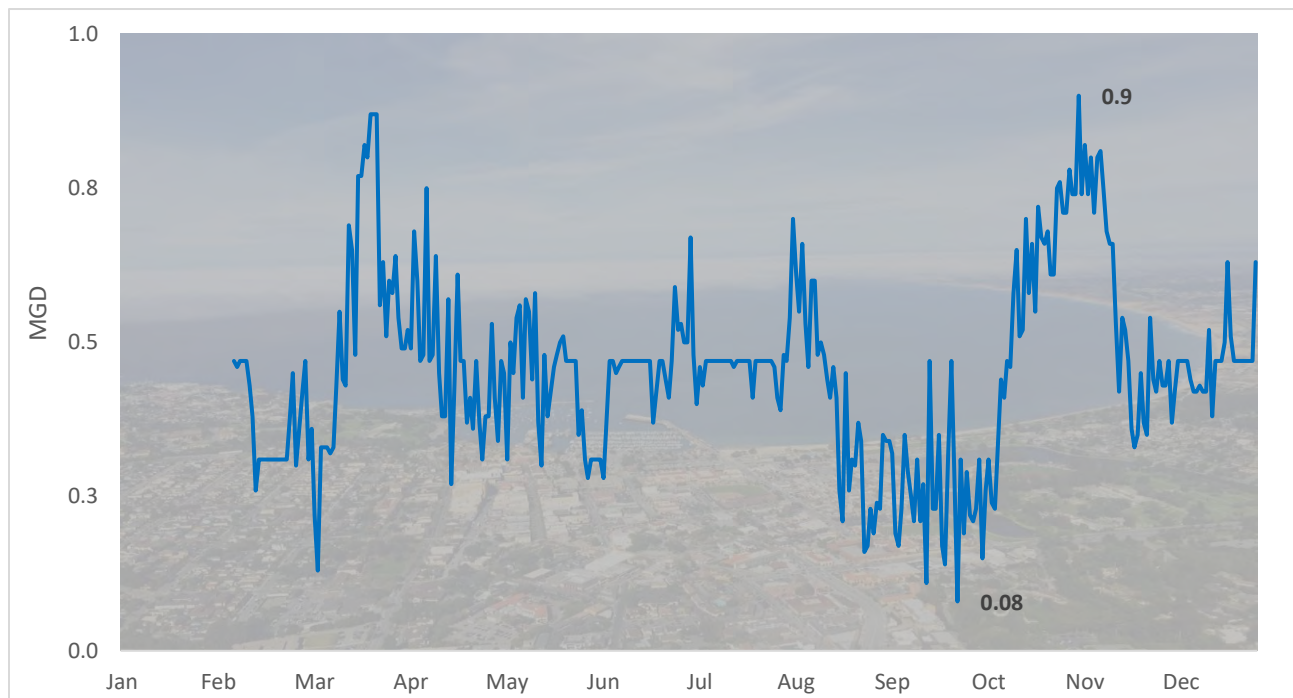


3.1.4 RO Concentrate Sent to the Ocean Outfall

Table 5. RO Concentrate Sent to the Ocean Outfall
Daily Average (MGD)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.31	0.49	0.34	0.31	0.50	0.48	0.23	0.21	0.78	0.43
2	-	-	0.36	0.52	0.47	0.31	0.67	0.47	0.35	0.23	0.74	0.43
3	-	-	0.22	0.49	0.45	0.31	0.48	0.54	0.34	0.31	0.74	0.47
4	-	-	0.13	0.68	0.31	0.28	0.40	0.70	0.34	0.15	0.90	0.37
5	-	-	0.33	0.60	0.50	0.38	0.46	0.61	0.32	0.26	0.74	0.42
6	-	0.47	0.33	0.47	0.45	0.47	0.43	0.55	0.19	0.31	0.82	0.47
7	-	0.46	0.33	0.48	0.54	0.47	0.47	0.66	0.17	0.24	0.74	0.47
8	-	0.47	0.32	0.75	0.56	0.45	0.47	0.53	0.23	0.23	0.80	0.47
9	-	0.47	0.33	0.47	0.41	0.46	0.47	0.46	0.35	0.33	0.71	0.47
10	-	0.47	0.43	0.48	0.57	0.47	0.47	0.60	0.29	0.44	0.80	0.44
11	-	0.43	0.55	0.64	0.55	0.47	0.47	0.60	0.25	0.41	0.81	0.42
12	-	0.38	0.44	0.45	0.44	0.47	0.47	0.48	0.21	0.47	0.75	0.42
13	-	0.26	0.43	0.38	0.58	0.47	0.47	0.50	0.31	0.46	0.68	0.43
14	-	0.31	0.69	0.38	0.37	0.47	0.47	0.48	0.21	0.58	0.66	0.42
15	-	0.31	0.65	0.57	0.30	0.47	0.47	0.44	0.27	0.65	0.66	0.42
16	-	0.31	0.48	0.27	0.48	0.47	0.46	0.41	0.11	0.51	0.53	0.52
17	-	0.31	0.77	0.43	0.38	0.47	0.47	0.46	0.47	0.52	0.42	0.38
18	-	0.31	0.77	0.61	0.42	0.47	0.47	0.41	0.23	0.70	0.54	0.47
19	-	0.31	0.82	0.47	0.46	0.47	0.47	0.26	0.23	0.58	0.52	0.47
20	-	0.31	0.80	0.47	0.48	0.37	0.47	0.21	0.35	0.66	0.47	0.47
21	-	0.31	0.87	0.37	0.50	0.42	0.47	0.45	0.17	0.55	0.36	0.50
22	-	0.31	0.87	0.41	0.51	0.47	0.41	0.26	0.14	0.72	0.33	0.63
23	-	0.31	0.87	0.36	0.47	0.47	0.47	0.31	0.32	0.67	0.35	0.51
24	-	0.38	0.56	0.47	0.47	0.44	0.47	0.30	0.47	0.66	0.45	0.47
25	-	0.45	0.63	0.37	0.47	0.41	0.47	0.37	0.29	0.68	0.37	0.47
26	-	0.30	0.51	0.31	0.47	0.47	0.47	0.34	0.08	0.61	0.35	0.47
27	-	0.36	0.60	0.38	0.35	0.59	0.47	0.16	0.31	0.61	0.54	0.47
28	-	0.42	0.58	0.38	0.39	0.52	0.47	0.17	0.19	0.75	0.44	0.47
29	-	0.47	0.64	0.53	0.31	0.53	0.46	0.23	0.29	0.76	0.42	0.47
30	-		0.54	0.41	0.28	0.50	0.41	0.19	0.22	0.71	0.47	0.47
31	-		0.49		0.31		0.39	0.24		0.71		0.63

**Figure 5. RO Concentrate Sent to the Ocean Outfall
Daily Average (MGD)**



3.1.5 AWPf Non-Production Statement

Not applicable. The Product Water Pump Station was not operating for approximately 28.2 hours beginning on March 3, 2020 and ending on March 4, 2020. That was the only substantial period of non-production since startup on February 6, 2020. During that time, most of the other the processes were still operating.

The AWPf was momentarily shut down on March 15, 2020 due to MF feed strainers going into high differential pressure alarm. M1W maintenance and operations staff opened the inspection ports on the strainer vessels and were able to clear away buildup (organic in nature) on the screens using a hose and returned differential pressures back to operating range. There was a scheduled shut down the following morning in order for a contractor to download an updated program for the ozone system. During the shutdown, operations and maintenance staff removed one of the strainer screens to check for buildup and check clearances on the backwash brushes.

3.2 Date and Time of Sampling and Analyses

Dates and times of sampling and analyses for compliance samples analyzed by M1W's Laboratory, in addition to the analytical methods used were provided in AWPf Quarterly Monitoring Reports. See **Section 11.0** and **Appendix A** and **Appendix B** for additional laboratory information including laboratories utilized, ELAP certificates, analytical methods, contact laboratory QA/QC procedures, and proficiency test documentation.

3.3 Analytical Results

All analytical results of samples collected during the monitoring period of the:

- i. AWPf Influent (3.3.1)
- ii. RO Feed Water (prior to RO) (3.3.3),
- iii. AWPf Recycled Water (3.3.2), and
- iv. Groundwater (3.3.4).

3.3.1 AWPf Influent

AWPf Influent Monitoring

- a. Monitoring is required to determine compliance with water quality conditions and standards and to assess AWPf performance.
- b. The influent sampling station is located before clarified secondary effluent from the Regional Treatment Plant enters the ozone pre-treatment systems of the AWPf. Influent samples must be obtained on the same day that stabilized advanced treated recycled water samples are obtained. The date and time of sampling must be reported with the analytical values determined. Table M-2 constitutes the influent monitoring program.

Table M-2: Influent Monitoring			
Constituents	Units	Type of Sample	Minimum Frequency of Analysis
Ammonia-N	mg/L	Grab	Weekly
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	mg/L	24-hour composite	Weekly
Boron	mg/L	Grab	Weekly
Chloride	mg/L	24-hour composite	Weekly
Nitrate-N	mg/L	24-hour composite	Weekly
Nitrite-N	mg/L	24-hour composite	Weekly
pH	pH units	Metered	Continuous
Sodium	mg/L	24-hour composite	Weekly
Sulfate	mg/L	Grab	Weekly
Total Suspended Solids	mg/L	24-hour composite	Weekly
Total coliform	MPN/100	Grab	Weekly
Total Dissolved Solids	mg/L	24-hour composite	Weekly
Total flow	mgd	Metered	Continuous ¹
Total Kjeldahl Nitrogen-N	mg/L	Grab	Weekly
Total Nitrogen ²	mg/L	Grab	Weekly
Total Organic Carbon (TOC)	mg/L	24-hour composite ⁵	Weekly
Turbidity	NTU	Metered	Continuous ³
UV transmittance	%	Grab	Weekly

¹For those pollutants that are continuously monitored, M1W must report the monthly minimum and maximum, and daily average values.

²Total Nitrogen includes nitrate-N, nitrite-N, ammonia-N, and organic-N.

³ May change to Grab after M1W demonstrates that Grab sampling is adequate.

mg/L = milligrams per liter

MPN/100 = most probable number per 100 milliliters

mgd = million gallons per day

**Table 6. AWPf Influent Monitoring
Weekly Ammonia-N (mg/L)**

Week	Ammonia-N mg/L	Week	Ammonia-N mg/L	Week	Ammonia-N mg/L
1	-	18	41.0	36	41.0
2	-	19	36.3	37	39.8
3	-	20	34.2	38	37.5
4	-	21	28.2	39	37.7
5	-	22	30.4	40	36.9
6	37.8	23	*No Data	41	35.7
7	40.9	24	33.6	42	36.6
8	43.9	25	34.8	43	34.8
9	45.9	26	39.1	44	40.1
10	42.2	27	37.6	45	36.8
11	42.7	28	34.8	46	37.7
12	39.1	29	38.4	47	35.4
13	37.6	30	37.2	48	33.2
14	37.6	31	30.7	49	31.9
15	29.7	32	34.5	50	30.6
16	37.9	33	37.1	51	32.4
17	37.6	34	37.5	52	33.1
		35	39.7	53	27.8

*AWPF Influent NH₃ sample discarded before analysis.

**Figure 6. AWPf Influent Monitoring
Weekly Ammonia-N (mg/L)**

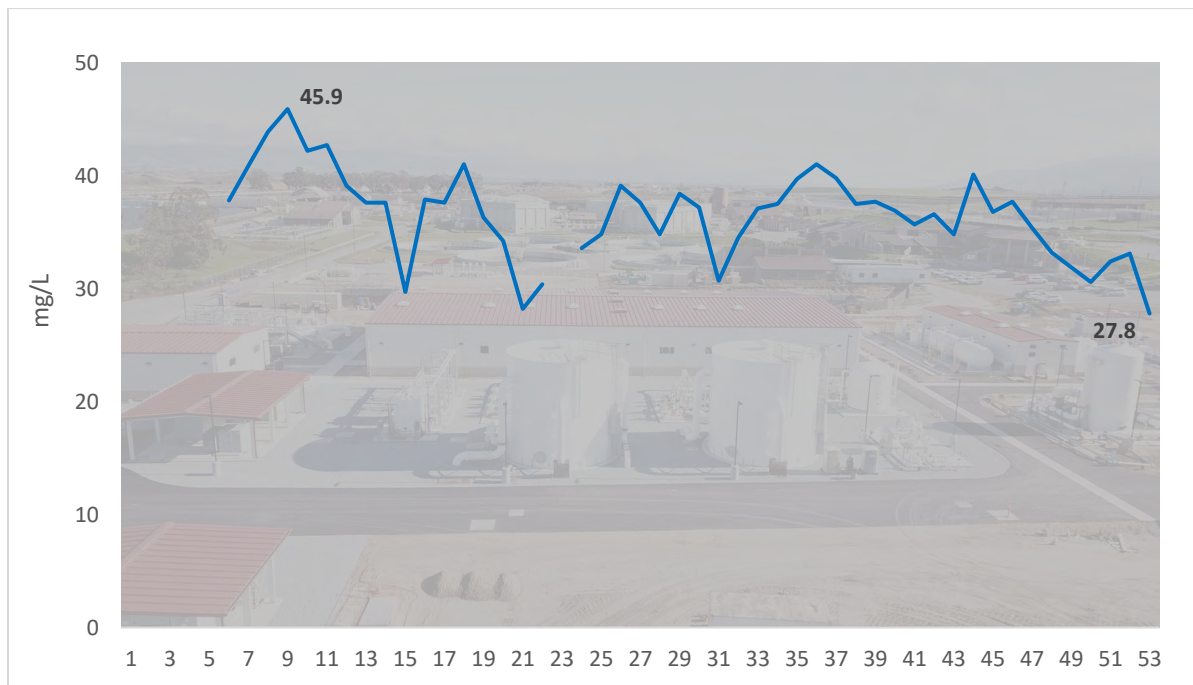


**Table 7. AWPf Influent Monitoring
Weekly CBOD₅ (mg/L)**

Week	CBOD ₅ mg/L	Week	CBOD ₅ mg/L	Week	CBOD ₅ mg/L
1	-	18	9	36	5
2	-	19	3	37	>23*
3	-	20	5	38	12
4	-	21	2	39	9
5	-	22	5	40	4
6	9	23	ND 1	41	6
7	9	24	ND 1	42	16
8	13	25	6	43	7
9	11	26	12	44	4
10	9	27	6	45	9
11	29	28	4	46	4
12	13	29	4	47	7
13	8	30	18	48	16
14	12	31	14	49	8
15	15	32	9	50	11
16	8	33	13	51	10
17	8	34	18	52	7
		35	17	53	5

*AWPF Inf CBOD over-depleted; Result from CBOD Sec Eff 9/8/20 (6mg/L).

**Figure 7. AWPf Influent Monitoring
Weekly CBOD₅ (mg/L)**

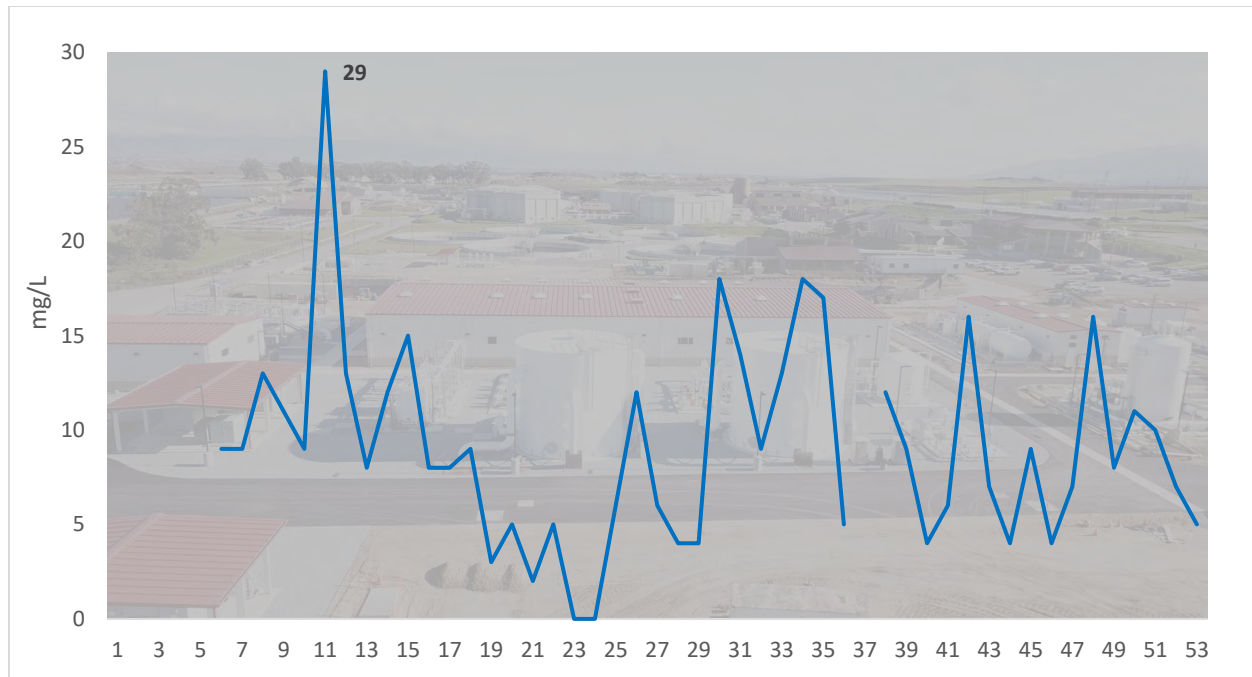


**Table 8. AWPf Influent Monitoring
Weekly Boron (mg/L)**

Week	Boron mg/L	Week	Boron mg/L	Week	Boron mg/L
1	-	18	0.4	36	0.4
2	-	19	0.4	37	0.4
3	-	20	0.4	38	0.4
4	-	21	0.4	39	0.4
5	-	22	0.4	40	0.4
6	0.3	23	0.4	41	0.5
7	0.3	24	0.4	42	0.4
8	0.4	25	0.5	43	0.4
9	0.4	26	0.4	44	0.4
10	0.4	27	0.4	45	0.4
11	0.4	28	0.4	46	0.4
12	0.4	29	0.4	47	0.4
13	0.4	30	0.4	48	0.4
14	0.4	31	0.5	49	0.4
15	0.3	32	0.4	50	DNQ 0.40
16	0.3	33	0.4	51	DNQ 0.38
17	0.4	34	0.4	52	0.4
		35	0.4	53	0.4

**Figure 8. AWPf Influent Monitoring
Weekly Boron (mg/L)**



**Table 9. AWPf Influent Monitoring
Weekly Chloride (mg/L)**

Week	Chloride mg/L	Week	Chloride mg/L	Week	Chloride mg/L
1	-	18	262.0	36	253.0
2	-	19	236.0	37	263.5
3	-	20	224.0	38	254.0
4	-	21	225.0	39	243.0
5	-	22	223.5	40	254.5
6	225.5	23	250.5	41	263.0
7	256.0	24	251.5	42	271.5
8	238.5	25	258.0	43	259.0
9	257.5	26	230.5	44	265.5
10	231.5	27	254.5	45	261.0
11	260.5	28	272.5	46	252.5
12	220.0	29	232.0	47	267.0
13	227.0	30	248.0	48	260.5
14	237.5	31	252.0	49	266.5
15	181.5	32	256.0	50	264.0
16	232.0	33	241.0	51	272.0
17	256.0	34	247.0	52	280.0
		35	246.0	53	270.5

**Figure 9. AWPf Influent Monitoring
Weekly Chloride (mg/L)**

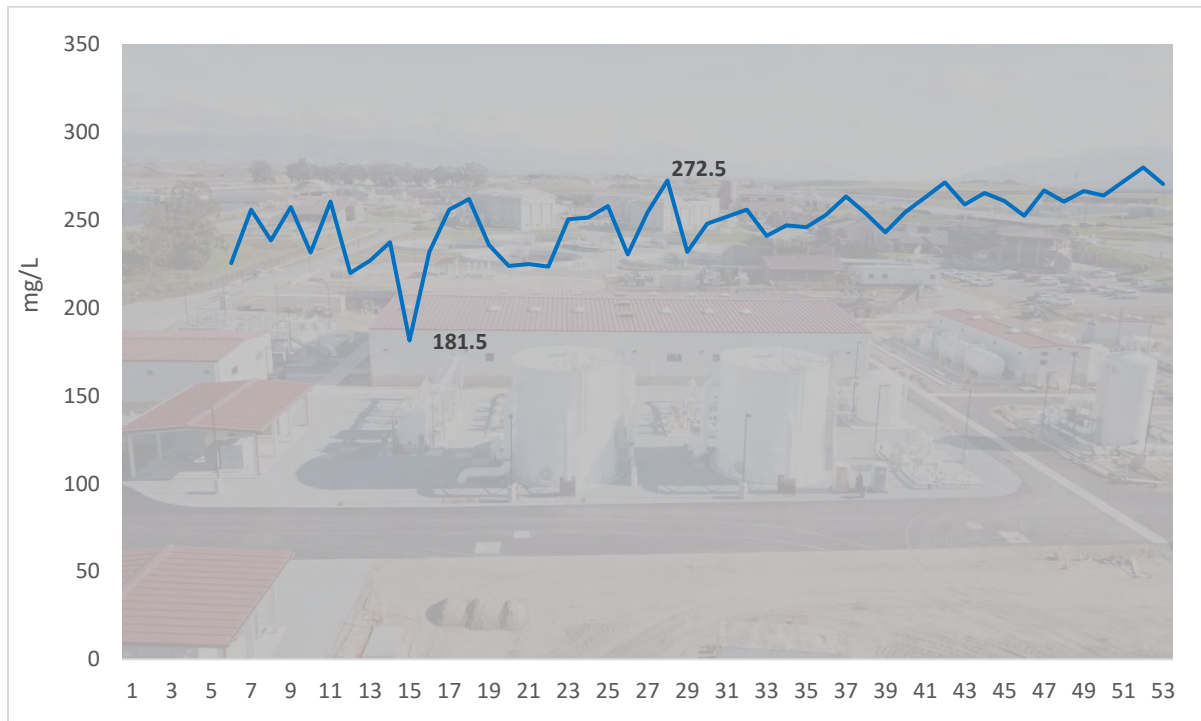


**Table 10. AWPf Influent Monitoring
Weekly Nitrate-N (mg/L)**

Week	Nitrate-N mg/L	Week	Nitrate-N mg/L	Week	Nitrate-N mg/L
1	-	18	ND 0.4	36	2.2
2	-	19	1.4	37	ND 0.4
3	-	20	ND 0.4	38	ND 0.4
4	-	21	1.4	39	2.0
5	-	22	2.3	40	1.9
6	1.8	23	3.4	41	2.8
7	ND 0.4	24	1.0	42	1.6
8	ND 0.4	25	1.0	43	1.8
9	1.2	26	ND 0.4	44	1.3
10	ND 0.4	27	ND 0.4	45	1.7
11	ND 0.4	28	1.1	46	1.5
12	ND 0.4	29	ND 0.4	47	1.9
13	ND 0.4	30	ND 0.4	48	2.7
14	ND 0.4	31	ND 0.4	49	3.6
15	ND 0.4	32	ND 0.4	50	3.9
16	ND 0.4	33	0.2	51	5.6
17	ND 0.4	34	ND 0.4	52	3.5
		35	ND 0.4	53	5.2

**Figure 10. AWPf Influent Monitoring
Weekly Nitrate-N (mg/L)**



**Table 11. APWF Influent Monitoring
Weekly Nitrite-N (mg/L)**

Week	Nitrite-N mg/L	Week	Nitrite-N mg/L	Week	Nitrite-N mg/L
1	-	18	ND 0.4	36	1.4
2	-	19	ND 0.4	37	ND 0.4
3	-	20	ND 0.4	38	ND 0.4
4	-	21	ND 0.4	39	1.3
5	-	22	0.2	40	1.8
6	1.0	23	ND 0.4	41	0.3
7	ND 0.4	24	ND 0.4	42	1.1
8	ND 0.4	25	ND 0.4	43	0.9
9	ND 0.4	26	ND 0.4	44	ND 0.4
10	ND 0.4	27	ND 0.4	45	ND 0.4
11	ND 0.4	28	ND 0.4	46	ND 0.4
12	ND 0.4	29	ND 0.4	47	ND 0.4
13	ND 0.4	30	ND 0.4	48	ND 0.4
14	ND 0.4	31	ND 0.4	49	ND 0.4
15	ND 0.4	32	ND 0.4	50	ND 0.4
16	ND 0.4	33	0.1	51	ND 0.4
17	ND 0.4	34	ND 0.4	52	0.4
		35	ND 0.4	53	0.8

**Figure 11. AWPf Influent Monitoring
Weekly Nitrite-N (mg/L)**

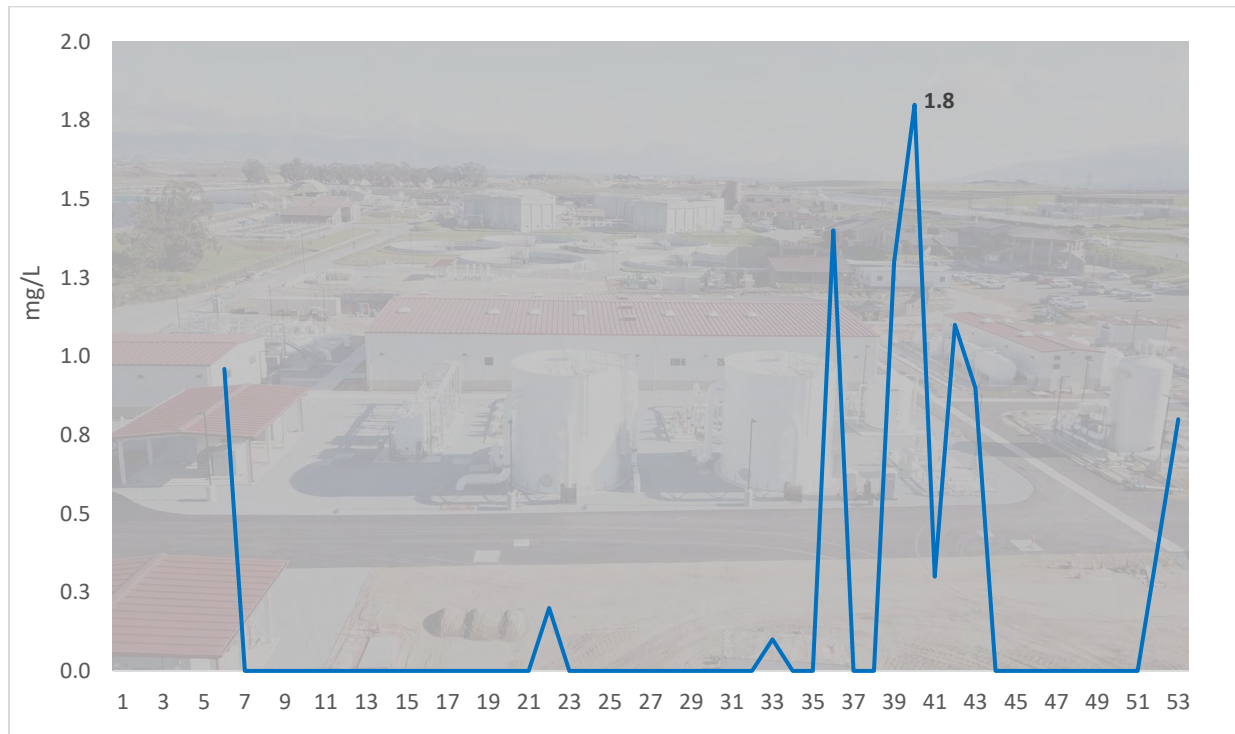


**Table 12. AWPf Influent Monitoring
Daily Average pH**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.4	7.3	7.7
2	-	-	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.4	7.3	8.0
3	-	-	7.8	7.9	7.9	7.9	8.0	7.9	7.8	7.4	7.3	8.2
4	-	-	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.3	7.4	8.2
5	-	-	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.4	7.4	8.3
6	-	7.7	7.8	7.9	7.9	8.0	7.9	7.9	7.8	7.4	7.4	8.2
7	-	7.7	7.8	7.7	7.9	7.9	7.9	7.9	7.8	7.4	7.4	7.9
8	-	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.4	7.4	8.2
9	-	7.8	7.8	7.9	7.8	7.9	7.8	7.9	7.9	7.3	7.4	8.2
10	-	7.8	7.8	7.9	7.8	7.9	7.9	7.9	7.9	7.4	7.3	8.3
11	-	7.8	7.8	7.9	7.8	8.0	7.9	7.9	7.9	7.3	7.3	8.1
12	-	7.8	7.8	7.9	7.8	8.0	7.9	7.9	7.9	7.4	7.3	8.1
13	-	7.8	7.9	7.9	7.8	7.9	7.9	7.9	7.9	7.4	7.3	8.5
14	-	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.3	7.3	8.1
15	-	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.4	7.4	7.3	8.1
16	-	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.4	7.3	7.3	8.3
17	-	7.8	7.8	7.9	7.9	8.0	7.8	7.9	7.4	7.3	7.3	8.0
18	-	7.8	7.8	7.9	7.9	7.9	7.8	7.9	7.4	7.3	7.3	8.1
19	-	7.8	7.8	7.9	7.9	7.9	7.8	7.9	7.4	7.3	7.2	8.3
20	-	7.8	7.8	7.9	7.9	7.9	7.8	7.9	7.4	7.3	7.3	8.1
21	-	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.4	7.3	7.2	7.8
22	-	7.8	7.8	7.9	7.9	7.9	7.8	7.9	7.3	7.4	7.3	7.9
23	-	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.4	7.3	7.3	8.1
24	-	7.8	7.8	7.9	7.9	8.0	7.9	7.8	7.4	7.3	7.3	8.1
25	-	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.4	7.3	7.2	8.4
26	-	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.4	7.3	7.3	8.2
27	-	7.8	7.8	7.9	7.7	7.9	7.9	7.9	7.4	7.3	7.2	8.2
28	-	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.4	7.4	7.3	8.1
29	-	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.4	7.4	7.3	8.3
30	-		7.8	7.9	7.9	8.0	7.9	7.9	7.4	7.4	7.3	8.0
31	-		7.8		7.9		7.8	7.8		7.4		7.9

**Figure 12. AWPf Influent Monitoring
Daily Average pH**

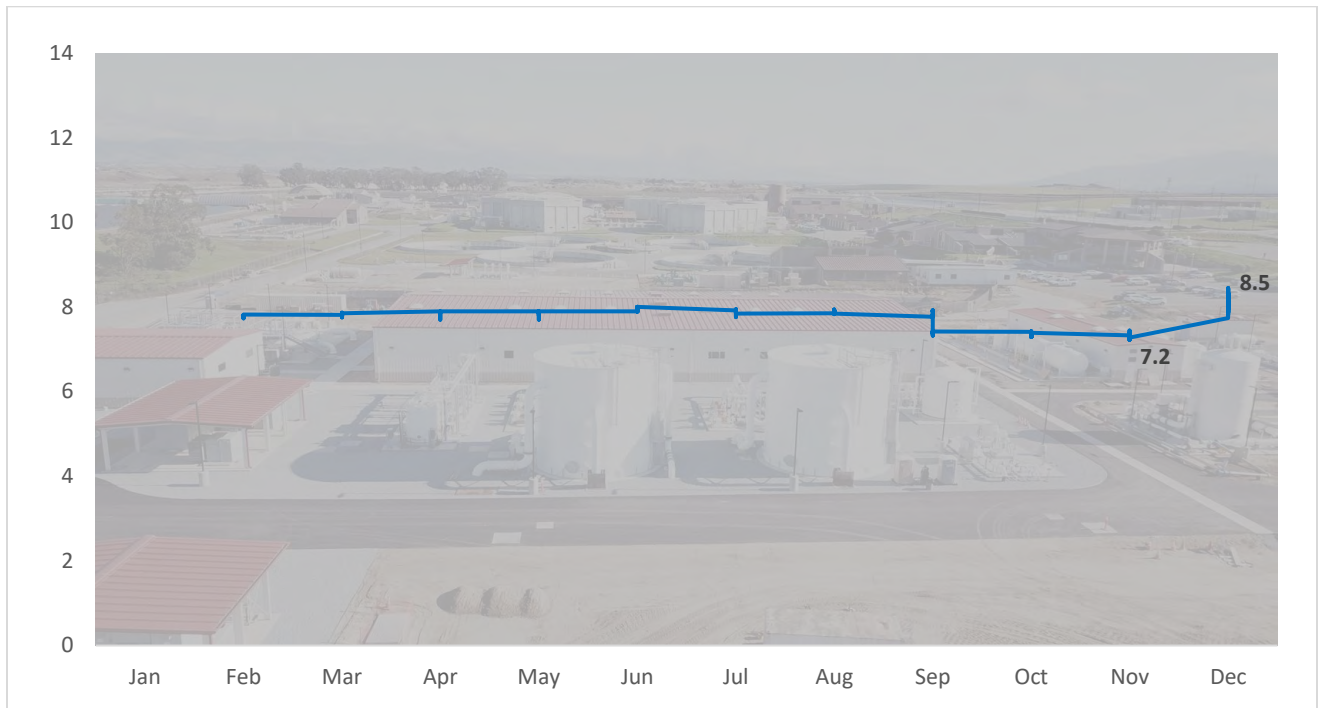


**Table 13. AWPf Influent Monitoring
Monthly Minimum and Maximum pH**

Month	Min	Max
January	-	-
February	7.7	7.8
March	7.8	7.9
April	7.7	7.9
May	7.7	7.9
June	7.9	8.0
July	7.8	8.0
August	7.8	7.9
September	7.3	7.9
October	7.3	7.4
November	7.2	7.4
December	7.7	8.5

Calculated

**Figure 13. AWPf Influent Monitoring
Monthly Minimum and Maximum pH**

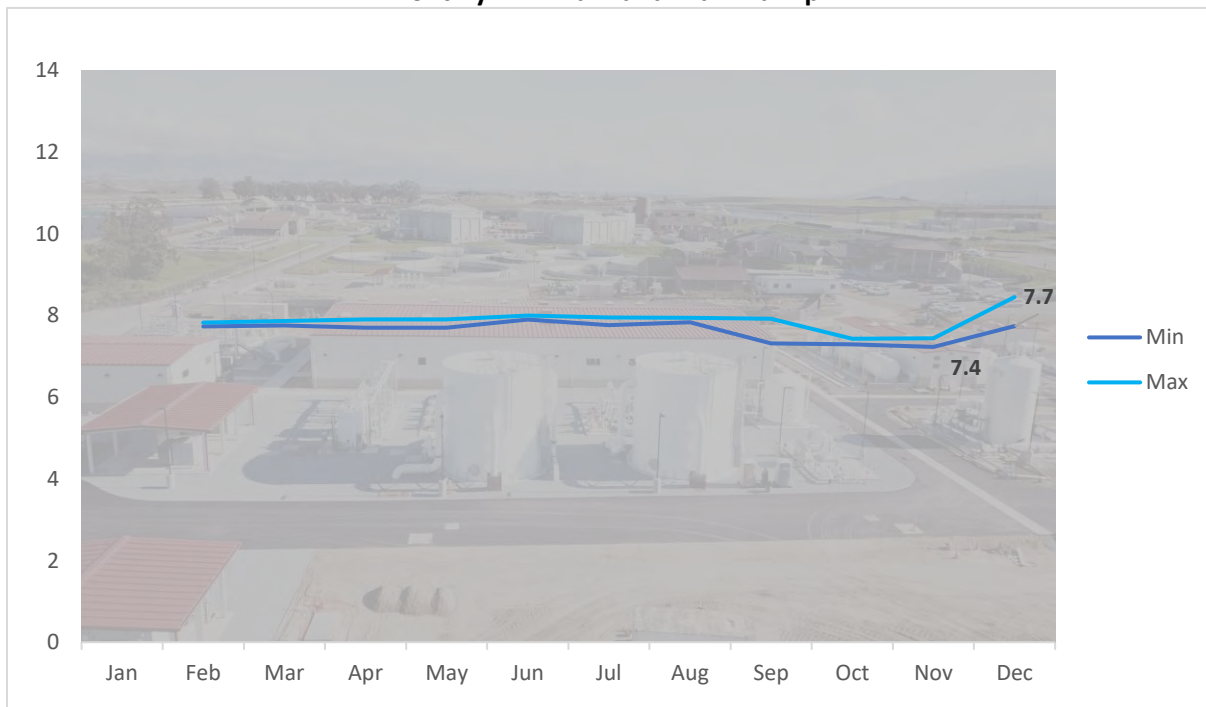


**Table 14. AWPf Influent Monitoring
Weekly Sodium (mg/L)**

Week	Sodium mg/L	Week	Sodium mg/L	Week	Sodium mg/L
1	-	18	165	36	188
2	-	19	175	37	198
3	-	20	187	38	157
4	-	21	193	39	156
5	-	22	162	40	174
6	163	23	156	41	197
7	190	24	175	42	188
8	181	25	170	43	178
9	196	26	151	44	183
10	178	27	171	45	206
11	178	28	186	46	229
12	181	29	172	47	174
13	165	30	180	48	181
14	164	31	191	49	186
15	118	32	171	50	219
16	172	33	173	51	186
17	161	34	164	52	167
		35	190	53	176

**Figure 14. AWPf Influent Monitoring
Weekly Sodium (mg/L)**

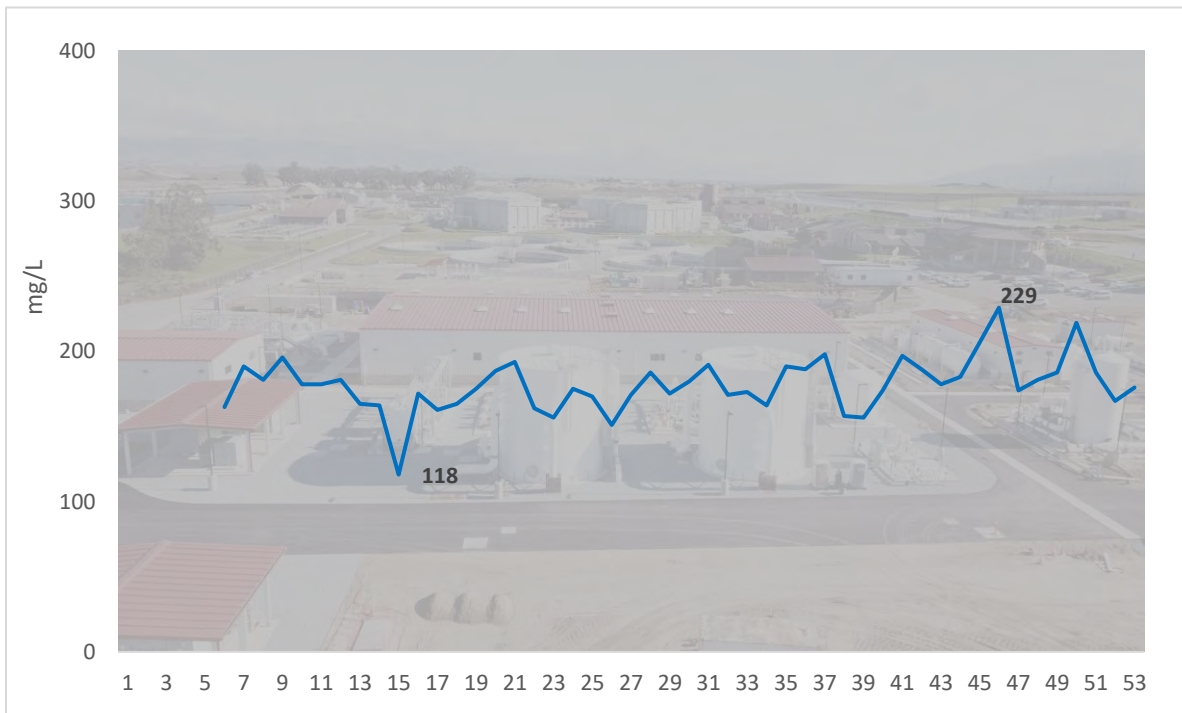


**Table 15. AWPf Influent Monitoring
Weekly Sulfate (mg/L)**

Week	Sulfate mg/L	Week	Sulfate mg/L	Week	Sulfate mg/L
1	-	18	101	36	19
2	-	19	117	37	86
3	-	20	85	38	96
4	-	21	154	39	96
5	-	22	152	40	114
6	100	23	171	41	95
7	99	24	170	42	104
8	96	25	142	43	88
9	109	26	98	44	85
10	103	27	124	45	94
11	98	28	144	46	87
12	106	29	100	47	88
13	99	30	105	48	83
14	109	31	144	49	94
15	106	32	111	50	108
16	109	33	26	51	116
17	115	34	96	52	95
		35	95	53	90

**Figure 15. AWPf Influent Monitoring
Sulfate (mg/L)**

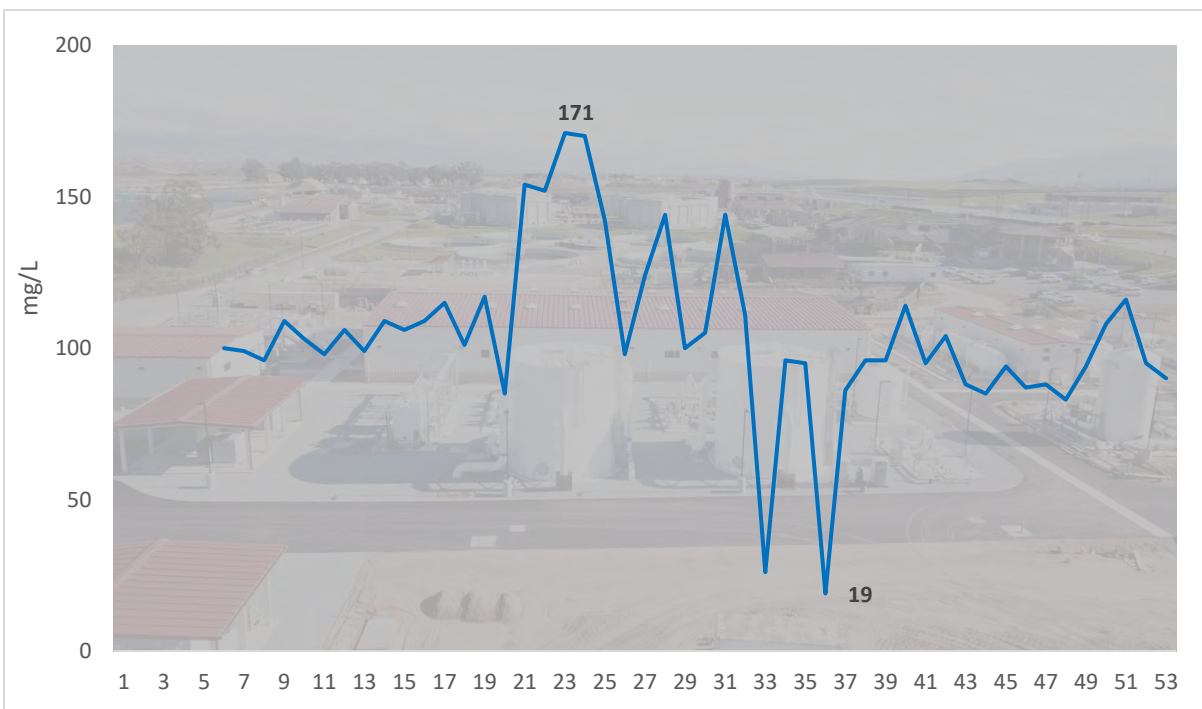


**Table 16. AWPf Influent Monitoring
Weekly Total Suspended Solids (mg/L)**

Week	TSS mg/L	Week	TSS mg/L	Week	TSS mg/L
1	-	18	3.0	36	2.5
2	-	19	ND 1	37	7.6
3	-	20	3.3	38	6.0
4	-	21	1.6	39	2.5
5	-	22	1.1	40	3.2
6	9.5	23	1.6	41	4.9
7	6.7	24	2.9	42	6.2
8	8.0	25	1.4	43	3.6
9	7.2	26	2.7	44	2.6
10	8.5	27	4.1	45	3.6
11	8.2	28	2.3	46	4.6
12	4.5	29	2.4	47	5.5
13	3.3	30	5.2	48	4.3
14	3.8	31	7.7	49	2.8
15	5.1	32	5.0	50	2.4
16	3.6	33	6.0	51	4.4
17	3.2	34	6.0	52	3.3
		35	4.1	53	2.9

**Figure 16. AWPf Influent Monitoring
Weekly Total Suspended Solids (mg/L)**

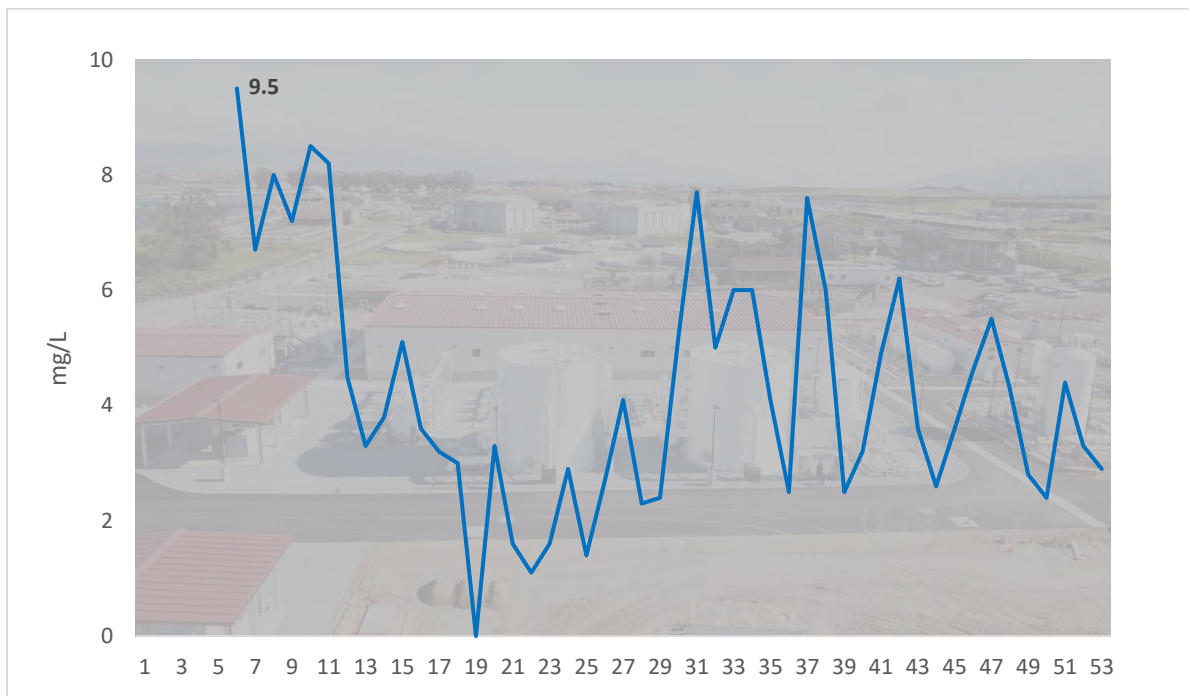


**Table 17. AWPf Influent Monitoring
Weekly Total Coliform (MPN/100mL)**

Week	Total Coliform MPN/100mL	Week	Total Coliform MPN/100mL	Week	Total Coliform MPN/100mL
1	-	18	820,000	36	323,000
2	-	19	288,000	37	1,860,000
3	-	20	134,000	38	1,137,000
4	-	21	161,000	39	749,000
5	-	22	443,000	40	1,198,000
6	401,100	23	256,000	41	2,187,000
7	1,789,000	24	384,000	42	373,000
8	1,010,000	25	1,081,000	43	933,000
9	414,000	26	602,000	44	448,000
10	789,000	27	2,755,000	45	813,000
11	697,000	28	2,755,000	46	613,000
12	389,000	29	2,613,000	47	749,000
13	448,000	30	529,000	48	987,000
14	591,000	31	738,000	49	712,000
15	2,010,000	32	763,000	50	495,000
16	620,000	33	443,000	51	644,000
17	1,190,000	34	359,000	52	285,000
		35	538,000	53	836,000

**Figure 17. AWPf Influent Monitoring
Weekly Total Coliform (MPN/100 mL)**

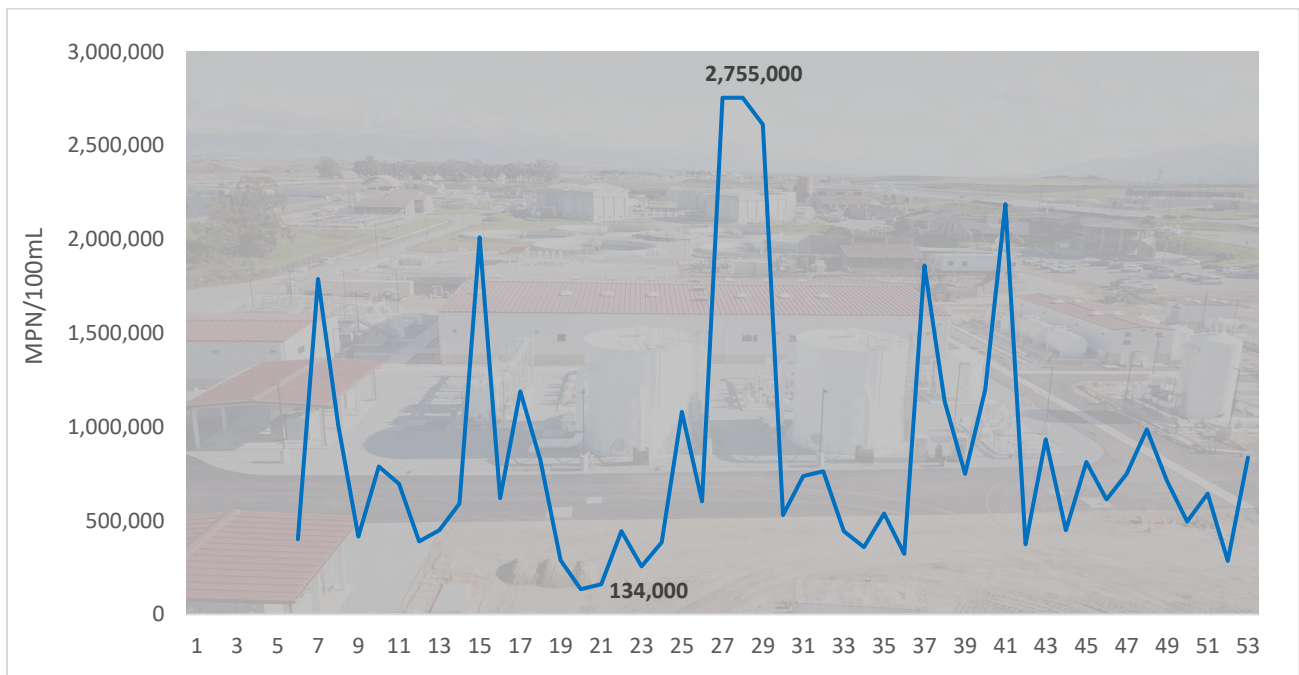
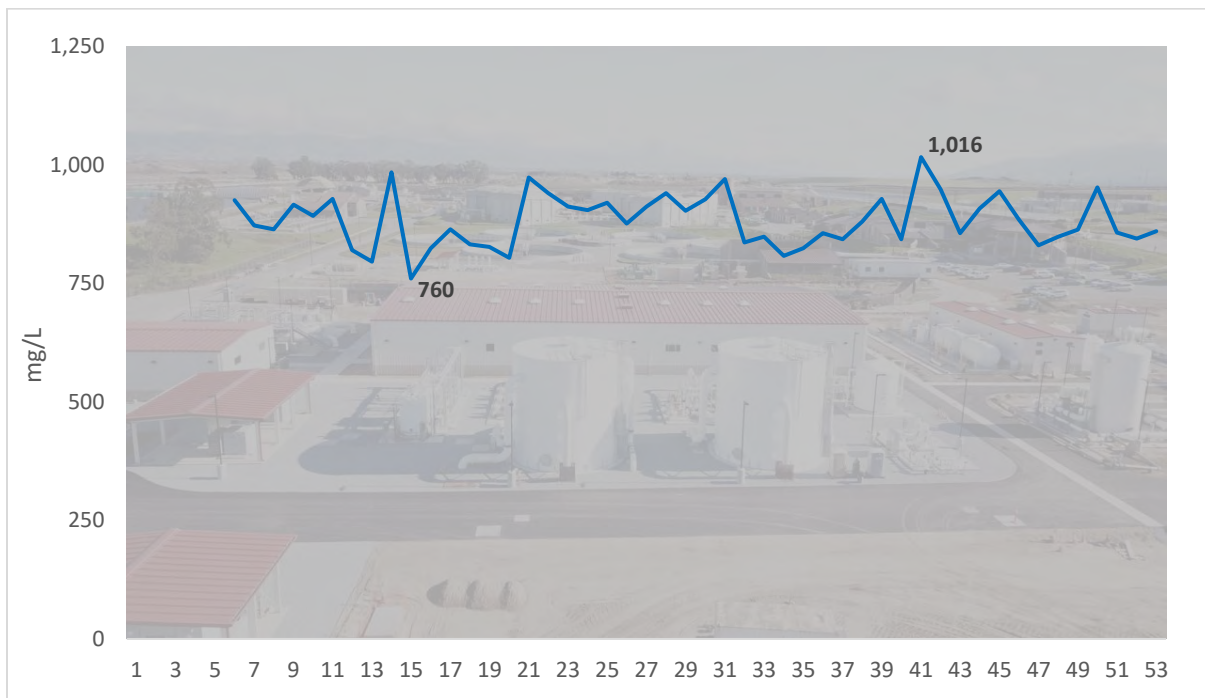


**Table 18. AWPf Influent Monitoring
Weekly Dissolved Solids (mg/L)**

Week	TDS mg/L	Week	TDS mg/L	Week	TDS mg/L
1	-	18	832	36	856
2	-	19	827	37	843
3	-	20	804	38	880
4	-	21	973	39	928
5	-	22	940	40	843
6	925	23	912	41	1,016
7	872	24	904	42	948
8	864	25	920	43	856
9	916	26	876	44	908
10	892	27	912	45	944
11	928	28	940	46	884
12	820	29	903	47	830
13	796	30	927	48	848
14	984	31	970	49	863
15	760	32	836	50	952
16	824	33	848	51	857
17	864	34	808	52	844
		35	824	53	860

**Figure 18. AWPf Influent Monitoring
Weekly Dissolved Solids (mg/L)**



See Table 2 and Figure 2 for AWPf Influent Flow Monitoring
Daily Total Flow (MGD)

**Table 19. AWPf Influent Monitoring
Monthly Minimum and Maximum Flow (MGD)**

Month	Min	Max
January	-	-
February	1.36	5.42
March	0.89	5.82
April	2.03	4.58
May	2.18	3.82
June	2.17	3.92
July	2.82	4.44
August	1.14	4.77
September	0.72	3.21
October	1.04	4.85
November	2.34	5.66
December	2.53	4.05

**Figure 19. AWPf Influent Monitoring
Monthly Minimum and Maximum Flow (MGD)**

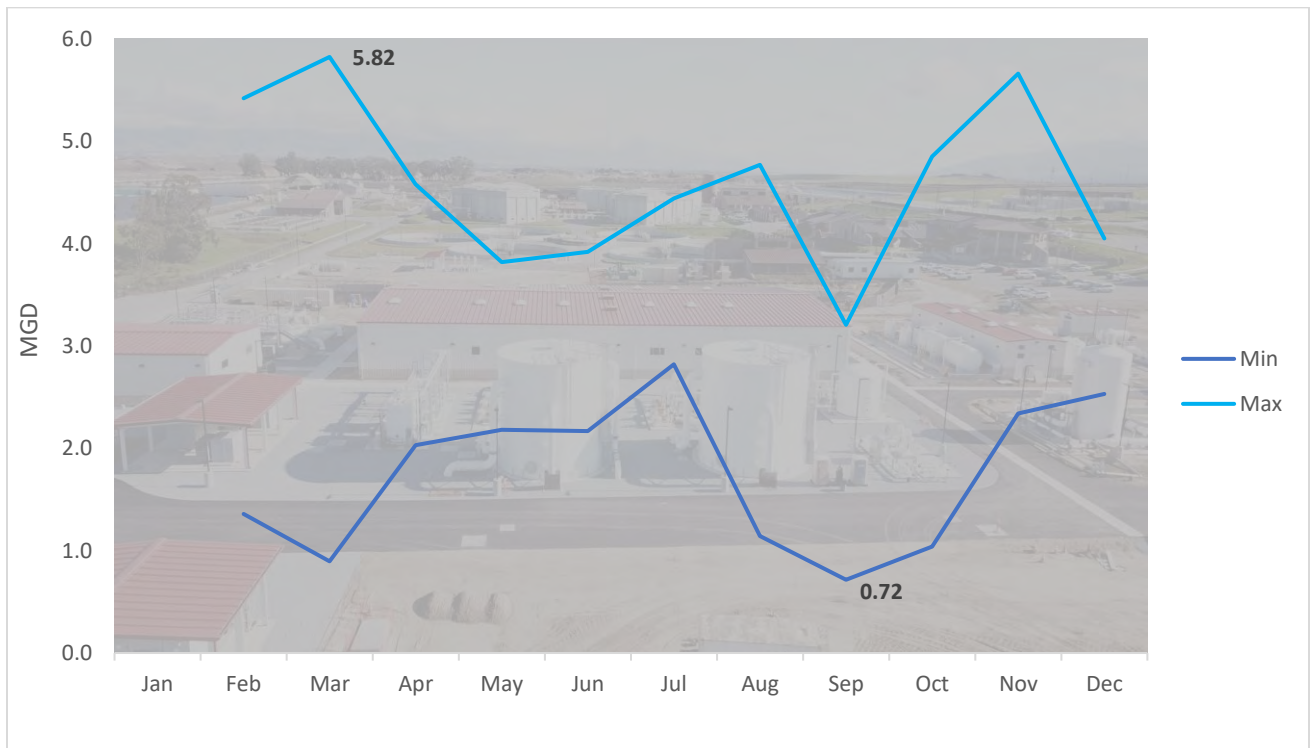


**Table 20. AWPf Influent Monitoring
Weekly Total Kjeldahl Nitrogen-N (mg/L)**

Week	TKN mg/L	Week	TKN mg/L	Week	TKN mg/L
1	-	18	43.9	36	48.4
2	-	19	41.0	37	43.0
3	-	20	38.9	38	42.3
4	-	21	33.8	39	43.6
5	-	22	34.9	40	42.7
6	45.3	23	34.8	41	42.2
7	45.4	24	35.8	42	40.4
8	48.0	25	37.5	43	39.8
9	50.6	26	44.5	44	43.8
10	47.6	27	42.1	45	40.8
11	46.8	28	38.2	46	43.1
12	43.6	29	41.8	47	41.5
13	44.0	30	40.6	48	39.1
14	42.5	31	35.4	49	37.0
15	34.1	32	40.5	50	33.5
16	42.2	33	42.9	51	37.2
17	39.9	34	43.1	52	*No Data
		35	43.5	53	37

*AWPF Influent sample for TKN discarded before analysis.

**Figure 20. AWPf Influent Monitoring
Weekly Total Kjeldahl Nitrogen-N (mg/L)**



**Table 21. AWPf Influent Monitoring
Weekly Total Nitrogen (mg/L)¹**

Week	Total Nitrogen mg/L	Week	Total Nitrogen mg/L	Week	Total Nitrogen mg/L
1	-	18	43.9	36	48.4
2	-	19	41.0	37	43.0
3	-	20	38.9	38	42.3
4	-	21	35.2	39	47.4
5	-	22	36.5	40	45.5
6	48.2	23	36.8	41	42.2
7	45.4	24	35.8	42	43.6
8	48.0	25	39.5	43	43.0
9	51.6	26	44.5	44	43.8
10	48.4	27	42.1	45	43.5
11	46.8	28	39.4	46	44.3
12	43.6	29	41.8	47	44.3
13	44.0	30	41.5	48	43.6
14	42.5	31	37.6	49	40.9
15	34.1	32	41.6	50	48.0
16	42.2	33	43.3	51	42.8
17	39.9	34	43.1	52	*No Data
		35	43.5	53	44

¹Total Nitrogen includes nitrate-N, nitrite-N, ammonia-N and organic-N.

*AWPF Influent sample for TKN discarded before analysis.

**Figure 21. AWPf Influent Monitoring
Weekly Total Nitrogen (mg/L)**



**Table 22. AWPf Influent Monitoring
Weekly Total Organic Carbon (TOC) (mg/L)**

Week	TOC mg/L	Week	TOC mg/L	Week	TOC mg/L
1	-	18	17.6	36	19.1
2	-	19	12.7	37	39.7
3	-	20	8.5	38	24.7
4	-	21	9.6	39	21.0
5	-	22	9.6	40	15.0
6	23.3	23	10.7	41	18.0
7	15.7	24	*No Data	42	20.8
8	16.8	25	10.7	43	15.7
9	13.4	26	14.8	44	16.2
10	12.9	27	13.0	45	16.6
11	19.2	28	18.0	46	21.0
12	20.5	29	18.0	47	17.6
13	17.3	30	28.0	48	21.4
14	24.4	31	23.5	49	17.0
15	21.8	32	18.0	50	17.0
16	17.7	33	20.0	51	16.5
17	17.6	34	24.0	52	18.0
		35	20.0	53	15

* Sample analyzed by contract lab and data rejected due to QC failure

**Figure 22. AWPf Influent Monitoring
Weekly Total Organic Carbon (TOC) (mg/L)**

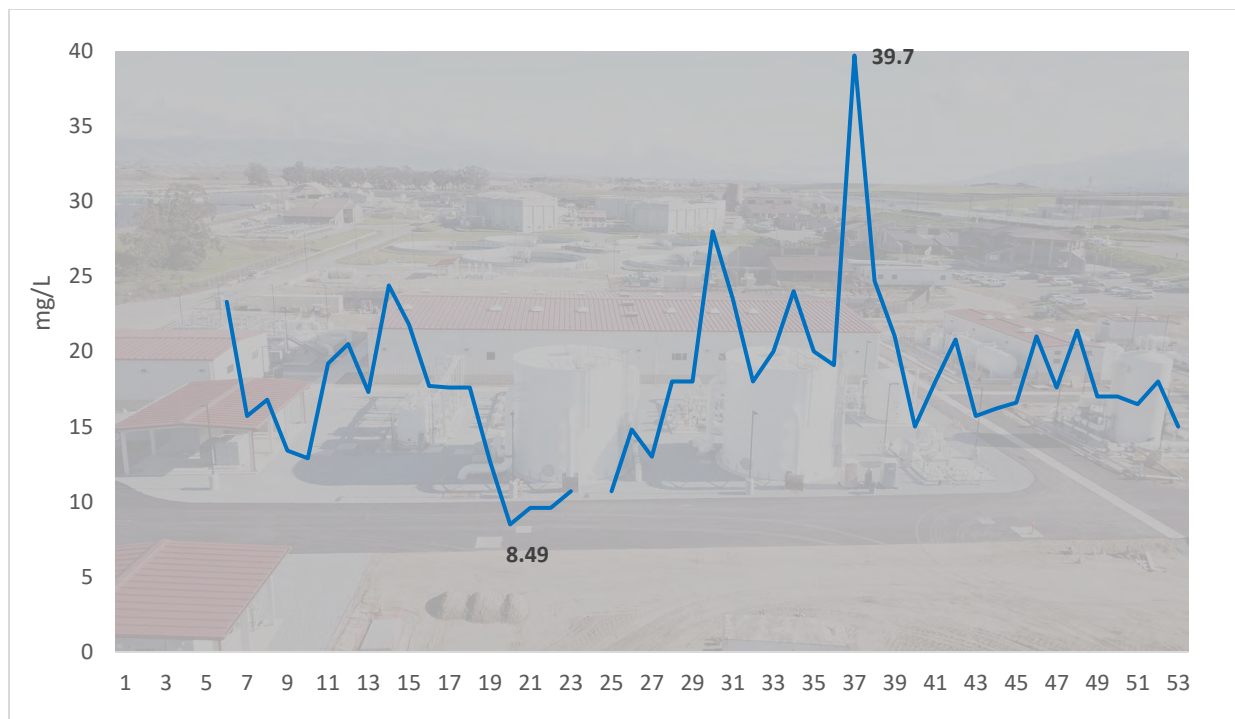


**Table 23. AWPf Influent Monitoring
Daily Average Turbidity (NTU)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	3.3	3.8	6.8	4.6	3.2	3.5	3.6	4.3	2.6	3.7
2	-	-	3.3	2.5	6.6	1.5	3.3	3.0	3.4	3.3	2.9	4.2
3	-	-	3.7	2.8	5.6	5.1	4.8	2.3	3.3	3.8	3.1	4.5
4	-	-	4.2	3.4	5.9	4.4	3.2	3.1	3.5	4.6	3.4	4.4
5	-	-	4.5	3.8	6.8	2.0	2.9	2.9	3.6	3.9	3.7	4.1
6	-	4.3	4.4	4.2	2.5	4.2	2.8	3.1	3.6	4.0	4.8	3.9
7	-	4.3	4.1	4.0	5.4	5.1	3.1	3.3	4.6	3.5	3.4	4.3
8	-	4.2	3.9	3.3	4.7	1.6	4.8	3.4	3.7	3.6	2.5	4.1
9	-	3.8	4.3	4.6	4.1	5.4	3.3	3.4	4.0	4.8	3.9	3.7
10	-	4.0	4.1	5.1	5.8	1.8	3.3	2.9	4.0	3.7	4.8	3.4
11	-	4.7	3.7	4.9	5.1	3.7	3.1	3.1	3.4	3.2	4.7	3.8
12	-	5.4	3.4	4.7	7.4	2.2	2.5	3.0	3.1	3.4	3.7	4.2
13	-	5.2	3.8	4.8	6.1	4.3	2.8	3.1	3.3	3.5	4.6	4.7
14	-	4.3	4.2	5.6	2.3	6.3	3.5	2.9	3.4	3.3	4.4	4.6
15	-	3.9	4.7	5.5	3.3	4.2	3.9	3.2	3.2	3.8	3.5	4.2
16	-	3.4	4.6	3.9	1.7	5.2	3.2	3.0	3.4	2.9	4.4	3.8
17	-	3.5	4.2	4.7	6.0	5.4	2.6	3.1	3.5	3.2	4.3	3.4
18	-	3.3	3.8	6.3	6.5	4.0	2.6	3.1	2.4	3.7	3.7	2.9
19	-	3.3	3.4	6.6	4.4	4.8	3.0	3.3	2.9	3.2	3.7	2.7
20	-	3.3	2.9	7.0	4.8	3.3	2.7	3.0	3.5	4.6	4.0	2.6
21	-	3.2	2.7	4.9	3.0	4.8	3.3	2.9	2.7	4.5	4.5	2.7
22	-	3.2	2.6	6.6	5.5	4.6	3.1	3.1	3.6	3.6	3.8	2.6
23	-	3.2	2.7	4.7	5.8	5.8	3.2	2.5	3.1	2.9	3.8	2.4
24	-	3.1	2.6	5.5	1.6	4.1	3.9	2.9	2.7	3.4	4.2	2.6
25	-	2.9	2.4	4.3	5.1	5.6	3.3	2.9	2.5	3.2	3.5	2.7
26	-	3.0	2.6	4.9	5.8	4.3	2.8	3.4	2.9	3.0	3.8	3.0
27	-	3.3	2.7	7.6	2.8	2.9	3.0	3.4	3.6	3.3	3.9	3.0
28	-	3.5	3.0	2.4	3.8	5.4	3.6	3.4	3.3	3.9	4.1	3.3
29	-	3.5	3.0	5.2	4.1	3.5	3.2	2.7	4.0	3.2	3.7	4.5
30	-		3.3	4.8	1.5	3.0	3.5	3.0	3.8	3.2	3.7	3.5
31	-		4.5		5.8		3.3	2.9		3.2		3.3

**Figure 23. AWPf Influent Monitoring
Daily Average Turbidity (NTU)**

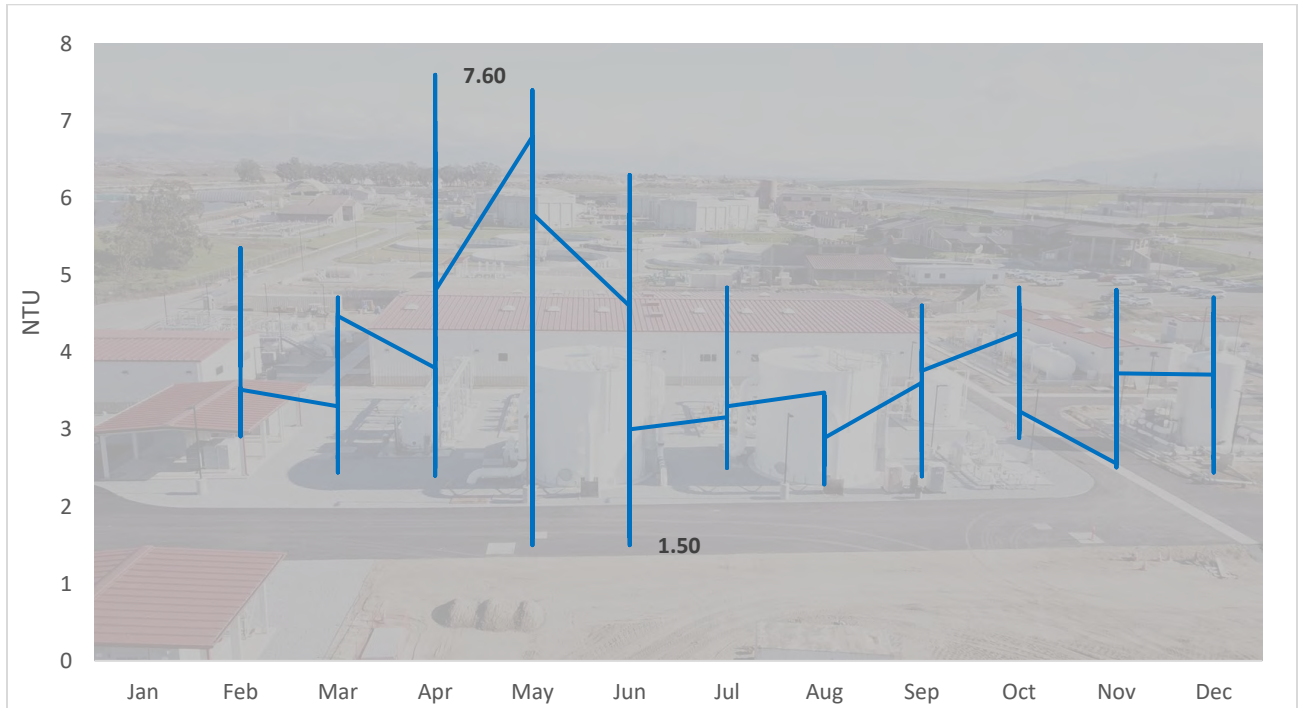


**Table 24. AWPf Influent Monitoring
Monthly Minimum and Maximum Turbidity (NTU)**

Month	Min	Max
January	-	-
February	2.9	5.4
March	2.4	4.7
April	2.4	7.6
May	1.5	7.4
June	1.5	6.3
July	2.5	4.8
August	2.3	3.5
September	2.4	4.6
October	2.9	4.8
November	2.5	4.8
December	2.4	4.7

Calculated

**Figure 24. AWPf Influent Monitoring
Monthly Minimum and Maximum Turbidity (NTU)**

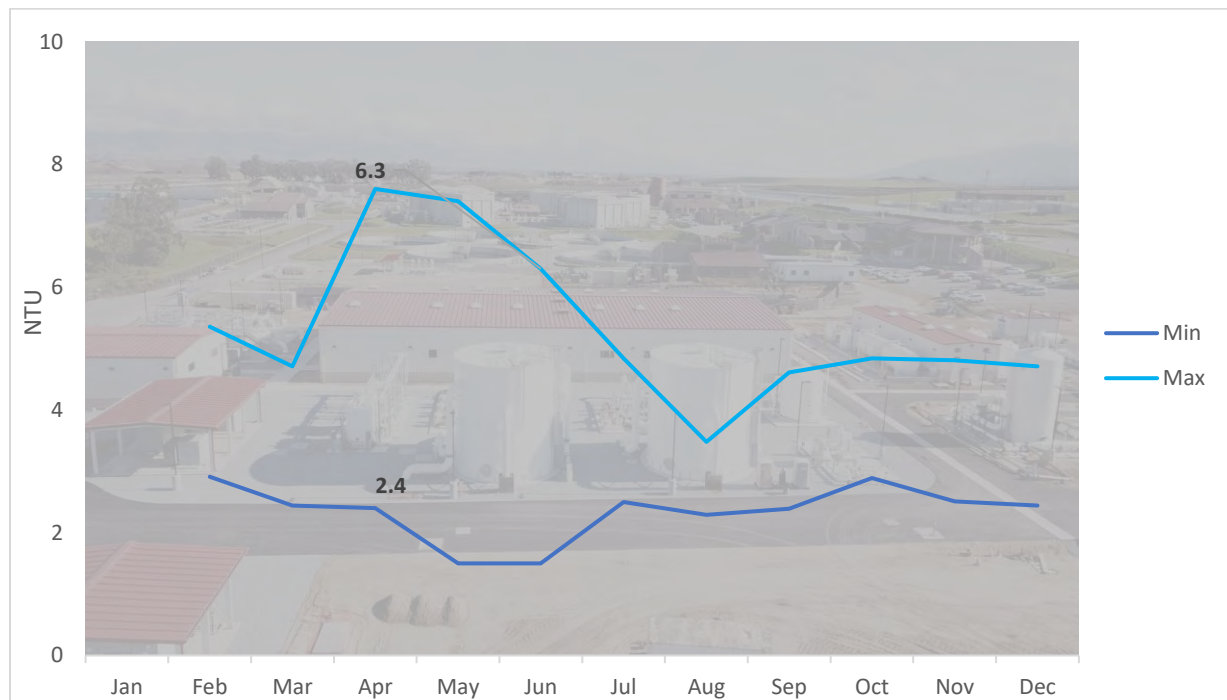
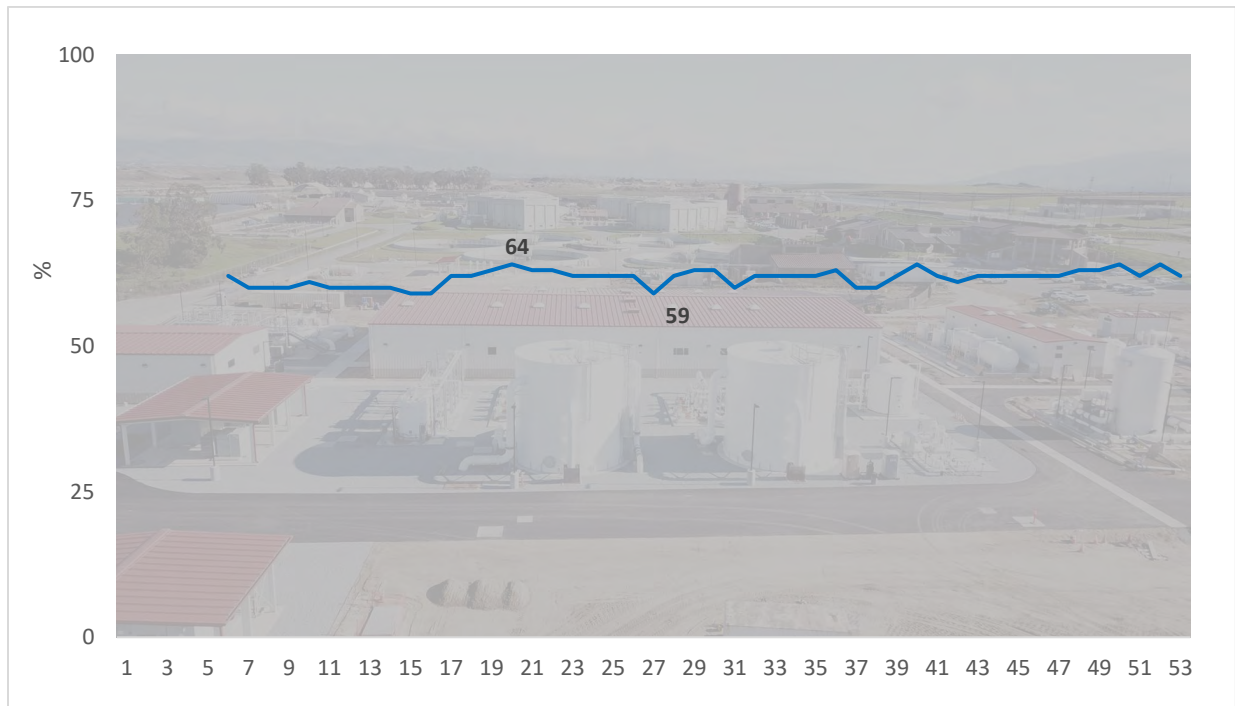


**Table 25. AWPf Influent Monitoring
Weekly UVT (%)**

Week	UVT %	Week	UVT %	Week	UVT %
1	-	18	62	36	63
2	-	19	63	37	60
3	-	20	64	38	60
4	-	21	63	39	62
5	-	22	63	40	64
6	62	23	62	41	62
7	60	24	62	42	61
8	60	25	62	43	62
9	60	26	62	44	62
10	61	27	59	45	62
11	60	28	62	46	62
12	60	29	63	47	62
13	60	30	63	48	63
14	60	31	60	49	63
15	59	32	62	50	64
16	59	33	62	51	62
17	62	34	62	52	64
		35	62	53	62

**Figure 25. AWPf Influent Monitoring
Weekly UVT (%)**



3.3.2 AWPf Recycled Water (Product Water)

Analytical results of samples collected during the monitoring period as outlined in M-3 through M-13c are included herein. Tables M-13a through M-13c have been excluded, as these requirements are not effective until M1W has received Regional Water Board and DDW approval of their submitted Quality Assurance Project Plan (QAPP). The PWM Bioanalytical QAPP is still under review by the Regional Water Board as of the date of this report.

Table M-3: Recycled Water Discharge Limits Monitoring				
Constituent/Parameters	Units	Type of Sample	Minimum Frequency of Analysis	Reference Table Number
Conductivity	umhos/cm mmho/cm	Metered	Continuous ¹	M-3
Total chlorine residual	mg/L	Metered	Continuous	M-3
Total recycled water flow	mgd	Metered	Continuous	M-3
UV dose for each reactor	mJ/cm ²	Metered	Continuous	NA
UV Transmittance ²	%	Metered	Continuous	NA
pH	pH units	Metered	Continuous	M-3
Arsenic	µg/L	Grab	Monthly	M-3
Boron	µg/L	Grab	Monthly	M-3
Chloride	mg/L	Grab	Monthly	M-3
Chromium - Total	µg/L	Grab	Monthly	M-3
Total nitrogen ³	mg/L	Grab	At least two samples per week at least 3 days apart	M-3
Nitrate-N	mg/L	Grab	Weekly	M-3
Total Kjeldahl Nitrogen-N	mg/L	Grab	Weekly	M-3
Sodium	mg/L	Grab	Monthly	M-3
Sulfate	mg/L	Grab	Monthly	M-3
Total Dissolved Solids - TDS	mg/L	Grab	Monthly	M-3
Total coliform	MPN/100 mL	Grab	Daily	M-3
Total Organic Carbon	mg/L	24-hour composite ⁴	Weekly	M-3
Turbidity	NTU	Metered	Continuous	M-3
Inorganics with Primary MCLs	µg/L	Grab	Monthly	M-4
Constituent/Parameters with Secondary MCLs	Various	Grab	Monthly	M-5
Radioactivity	pCi/L	Grab	Monthly	M-6
Regulated organic chemicals	µg/L	Grab	Monthly	M-7
Disinfection byproducts	µg/L	Grab	Monthly	M-8
General physical	various	Grab	Quarterly	M-9
General minerals	µg/L	Grab	Quarterly	M-9
Constituents with Notification Levels	µg/L	Grab	Monthly	M-10
Remaining Priority Pollutants	µg/L	Grab	Quarterly	M-11
Constituents of Emerging Concern (CECs)	ng/L	Grab	Varies	M-12
Surrogates	various	Varies	Varies	M-13
Lead and Copper	mg/L	Grab	Quarterly	M-3

For those constituents that are continuously monitored, M1W must report the daily minimum, maximum, and average values.

¹ Samples must be collected at the influent point to the UV system.

² If no problem is detected, analysis of nitrogen can be reduced to weekly after 12 months of data collection.

³ May change to Grab after M1W demonstrates that Grab sampling is adequate.

NA = not applicable

umhos/cm = micro mhos per centimeter

mhos = mhos per centimeter

mJ/cm² = milli joule per centimeter squared

µg/L = micrograms per liter

NTU = nephelometric turbidity unit

pCi/L = picoCuries per liter

ng/L = nanograms per liter

**Table 26. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Conductivity (uS/cm)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	131.88	126.00	110.00	159.00	142.00	135.00	196.00	147.76	244.89	190.35
2	-	-	115.20	138.00	132.00	125.00	133.00	137.00	205.00	152.79	243.28	190.77
3	-	-	98.97	144.00	120.00	118.00	135.00	148.00	199.00	147.64	235.21	217.87
4	-	-	103.51	148.00	117.00	113.00	127.00	144.00	183.00	148.23	225.58	225.83
5	-	-	97.11	140.00	146.00	137.00	130.00	137.00	180.00	148.08	219.66	252.16
6	-	109.32	105.06	128.00	143.00	131.00	126.00	147.00	191.00	132.07	220.14	231.10
7	-	133.51	101.75	105.00	132.00	131.00	124.00	137.00	192.00	111.75	214.21	213.59
8	-	155.01	100.79	130.00	147.00	128.00	121.00	132.00	189.00	138.54	213.86	233.52
9	-	158.39	100.46	119.00	136.00	132.00	123.00	140.00	169.00	247.98	184.06	258.65
10	-	154.67	111.42	135.00	147.00	132.00	128.00	140.00	185.00	237.76	208.93	260.31
11	-	154.44	123.77	132.00	135.00	132.00	129.00	128.00	201.00	224.36	209.65	267.26
12	-	112.34	115.43	130.00	130.00	129.36	129.00	125.00	197.00	257.07	240.05	277.10
13	-	121.32	119.89	128.00	144.00	130.16	130.00	122.00	198.00	244.49	276.66	280.14
14	-	126.47	126.49	130.00	130.55	134.00	131.00	158.00	196.00	241.58	329.37	277.17
15	-	119.43	117.78	144.00	149.00	134.00	144.00	200.00	191.00	244.95	328.10	270.96
16	-	119.07	118.34	132.55	121.00	134.00	145.00	202.00	184.00	271.78	327.89	260.99
17	-	120.51	116.40	142.00	134.40	129.00	145.00	195.00	172.00	274.91	322.11	249.12
18	-	118.33	123.14	126.00	139.00	129.00	146.00	204.00	168.00	257.91	325.11	284.91
19	-	121.11	126.20	126.00	138.00	127.68	147.00	174.00	169.00	222.89	322.14	272.71
20	-	123.45	124.62	125.00	129.00	124.81	147.17	190.00	167.00	223.44	341.93	276.46
21	-	123.90	127.98	115.00	131.00	128.00	114.00	190.00	177.00	197.02	308.89	321.13
22	-	115.50	125.58	127.00	131.00	119.42	123.00	199.00	172.00	236.42	260.39	258.71
23	-	113.30	124.23	116.00	130.00	127.40	124.00	198.00	152.00	333.24	251.54	257.46
24	-	117.74	112.35	129.00	130.00	132.80	123.00	197.00	113.00	341.44	244.64	249.47
25	-	129.81	127.22	117.00	130.00	126.77	133.00	198.00	134.00	346.63	219.58	235.20
26	-	111.82	126.18	131.00	133.00	127.00	133.00	200.00	148.00	340.28	249.61	231.48
27	-	108.99	140.32	134.00	119.00	143.00	133.00	200.00	147.00	270.01	237.54	231.88
28	-	113.73	129.09	116.00	132.00	126.00	143.00	200.00	144.00	238.69	222.95	233.17
29	-	135.27	132.60	134.00	127.00	131.04	147.00	183.00	145.00	217.74	227.82	246.49
30	-		125.67	118.00	119.00	124.70	139.00	199.00	148.00	205.39	221.12	266.23
31	-		130.51		160.00		143.00	200.00		218.68		264.35

Figure 26. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Conductivity (uS/cm)

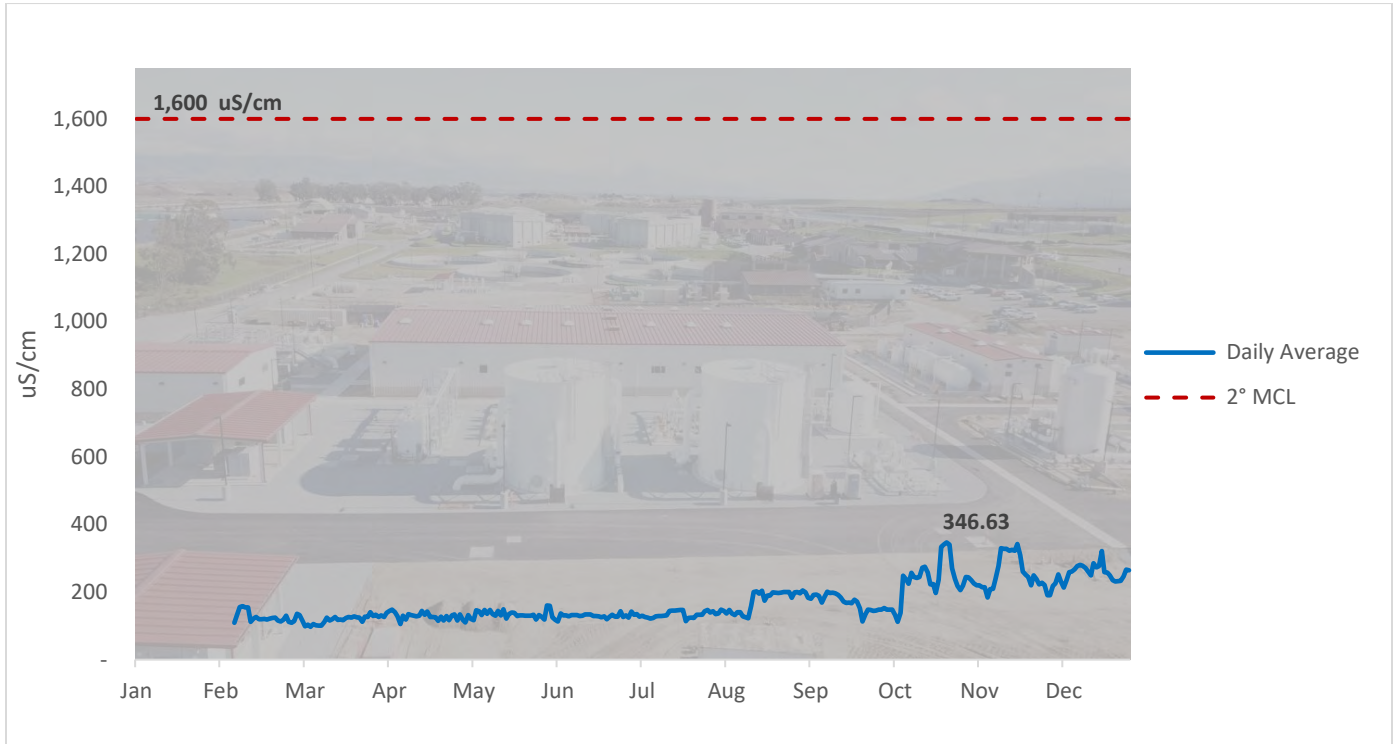


**Table 27. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Conductivity (uS/cm)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	128.39	134.00	95.00	128.00	142.00	119.00	185.00	142.12	222.25	180.28
2	-	-	98.76	139.00	129.00	115.00	133.00	131.00	191.00	136.92	215.04	188.82
3	-	-	87.81	152.00	115.00	115.00	135.00	145.00	183.00	145.99	178.73	207.90
4	-	-	102.76	148.00	96.00	109.00	127.00	131.00	181.00	136.06	196.41	234.10
5	-	-	92.68	141.00	92.00	130.00	130.00	129.00	176.00	114.48	182.19	207.54
6	-	107.76	101.04	136.00	130.00	130.00	126.00	138.00	166.00	92.78	127.77	202.34
7	-	105.93	101.04	124.00	131.00	128.00	124.00	120.00	180.00	104.77	108.78	210.34
8	-	153.16	99.51	130.00	122.00	123.00	121.00	120.00	183.00	227.91	167.99	247.49
9	-	154.78	98.58	133.00	135.00	128.00	122.00	127.00	159.00	208.36	153.95	254.31
10	-	150.03	101.48	135.00	119.00	123.00	128.00	114.00	156.00	186.73	145.78	255.54
11	-	128.34	99.07	134.00	117.00	112.00	129.00	120.00	194.00	217.02	119.02	224.84
12	-	106.32	113.01	131.00	128.00	119.29	129.00	120.00	165.00	227.30	221.64	274.52
13	-	105.72	115.11	130.00	123.00	128.18	130.00	95.00	196.00	211.49	207.02	229.62
14	-	116.69	115.67	141.00	122.79	131.00	131.00	179.00	189.00	204.91	281.00	253.89
15	-	113.47	95.85	143.00	117.00	131.00	144.00	199.00	181.00	230.84	304.62	244.21
16	-	115.38	109.73	100.24	117.00	127.00	145.00	128.00	173.00	248.41	282.79	226.26
17	-	117.62	109.77	142.00	130.14	126.00	145.00	177.00	148.00	216.10	272.90	111.33
18	-	98.47	120.25	127.00	135.00	126.00	146.00	162.00	164.00	197.18	292.34	256.31
19	-	114.90	126.81	126.00	132.00	125.16	147.00	110.00	165.00	188.64	296.19	259.96
20	-	113.74	115.64	125.00	128.00	107.00	146.83	177.00	163.00	186.57	246.93	257.39
21	-	99.48	126.92	124.00	108.00	127.00	121.00	197.00	164.00	186.47	252.00	224.55
22	-	113.83	124.02	128.00	128.00	94.04	125.00	187.00	119.00	298.04	243.17	226.09
23	-	112.47	121.13	137.00	127.00	103.23	110.00	190.00	112.00	302.09	174.90	233.45
24	-	112.47	109.09	129.00	127.00	107.76	133.00	131.00	117.00	258.84	196.80	231.80
25	-	112.58	109.09	130.00	129.00	111.74	120.00	194.00	147.00	326.01	205.37	226.69
26	-	100.91	118.46	132.00	115.00	117.00	123.00	201.00	145.00	208.38	227.54	227.11
27	-	100.36	130.26	135.00	105.00	124.00	123.00	147.00	145.00	174.26	203.56	229.97
28	-	98.97	121.49	141.00	125.00	122.00	135.00	105.00	131.00	172.15	209.38	230.85
29	-	133.73	125.33	141.00	120.00	120.95	131.00	180.00	130.00	194.02	199.59	254.88
30	-		121.84	121.00	120.00	96.61	135.00	191.00	142.00	192.70	177.27	257.84
31	-		125.47		158.00		134.00	197.00		201.34		215.90

Figure 27. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Conductivity (uS/cm)

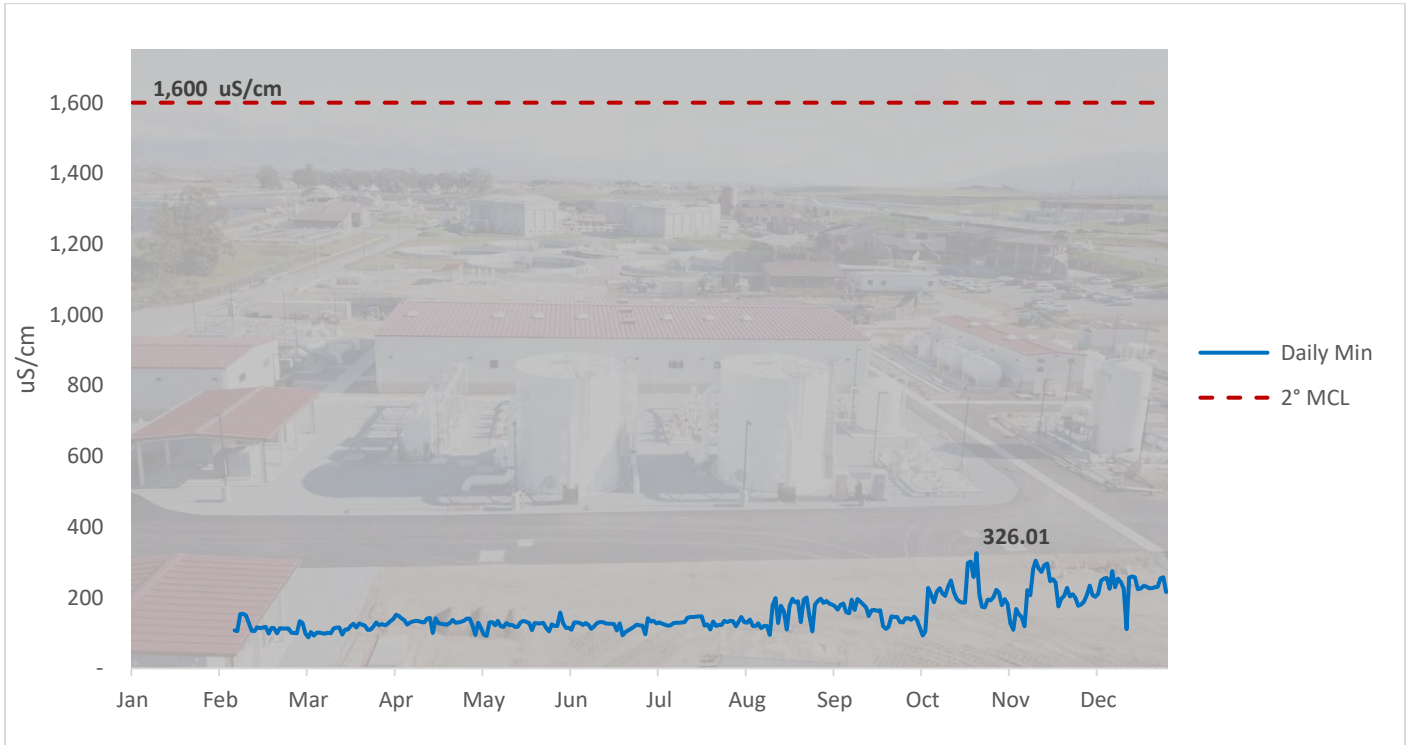


**Table 28. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Conductivity (uS/cm)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	135.06	126.00	129.00	192.00	142.00	137.00	212.00	166.50	266.70	269.28
2	-	-	134.10	138.00	132.00	128.00	133.00	150.00	210.00	161.67	251.11	289.94
3	-	-	119.84	144.00	131.00	119.00	135.00	150.00	210.00	149.88	247.17	316.28
4	-	-	104.27	148.00	143.00	137.00	127.00	151.00	187.00	150.28	235.33	282.60
5	-	-	104.27	140.00	147.00	137.00	130.00	149.00	183.00	165.61	256.87	287.94
6	-	113.24	111.12	128.00	142.00	131.00	126.00	150.00	194.00	136.60	218.91	216.17
7	-	153.18	103.02	105.00	146.00	131.00	124.00	148.00	197.00	162.64	234.41	259.63
8	-	157.06	102.47	130.00	146.00	131.00	121.00	146.00	196.00	263.37	204.11	268.78
9	-	161.07	100.93	119.00	144.00	132.00	123.00	148.00	198.00	273.24	227.79	266.54
10	-	163.48	118.08	135.00	148.00	132.00	128.00	148.00	207.00	244.11	243.36	279.00
11	-	171.68	145.02	132.00	136.00	133.00	129.00	147.00	206.00	296.36	304.36	288.35
12	-	123.65	116.50	130.00	142.00	152.00	129.00	138.00	201.00	264.03	343.17	288.33
13	-	137.32	125.04	128.00	146.00	132.00	130.00	127.00	203.00	276.95	397.48	284.94
14	-	137.71	144.88	130.00	147.71	134.00	131.00	200.00	201.00	310.46	373.93	277.58
15	-	123.64	135.54	144.00	148.00	134.00	144.00	218.00	200.00	332.58	334.08	280.92
16	-	128.24	131.94	141.16	130.00	134.00	145.00	225.00	200.00	303.44	343.18	317.97
17	-	128.24	120.61	142.00	138.26	129.00	145.00	203.00	174.00	495.71	385.83	397.98
18	-	130.30	126.81	126.00	143.00	130.00	146.00	228.00	174.00	243.45	338.12	311.65
19	-	129.61	135.48	126.00	139.00	133.00	147.00	191.00	172.00	246.52	377.94	295.40
20	-	126.79	136.73	125.00	132.00	131.00	147.51	204.00	168.00	206.88	390.86	271.74
21	-	141.84	136.73	115.00	132.00	128.00	126.00	200.00	184.00	325.68	287.06	435.91
22	-	138.94	127.37	127.00	131.00	129.00	125.00	201.00	181.00	369.72	256.82	284.41
23	-	114.23	127.63	116.00	130.00	151.56	129.00	200.00	185.00	396.81	262.24	295.70
24	-	127.90	122.99	129.00	130.00	147.62	133.00	202.00	128.00	359.43	277.56	241.70
25	-	138.69	128.73	117.00	132.00	157.00	136.00	203.00	155.00	355.81	461.58	238.36
26	-	113.64	131.09	131.00	132.00	141.00	137.00	219.00	158.00	335.75	251.52	238.18
27	-	125.13	154.19	134.00	153.00	143.00	135.00	211.00	149.00	543.15	444.83	238.69
28	-	134.67	147.89	116.00	132.00	135.00	153.00	203.00	158.00	372.57	245.17	299.90
29	-	143.80	135.25	134.00	128.00	141.00	153.00	203.00	148.00	255.23	259.92	275.39
30	-		133.70	118.00	161.00	134.00	148.00	205.00	159.00	245.24	201.43	271.92
31	-		135.56		161.00		157.00	205.00		258.51		274.11

Figure 28. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Conductivity (uS/cm)

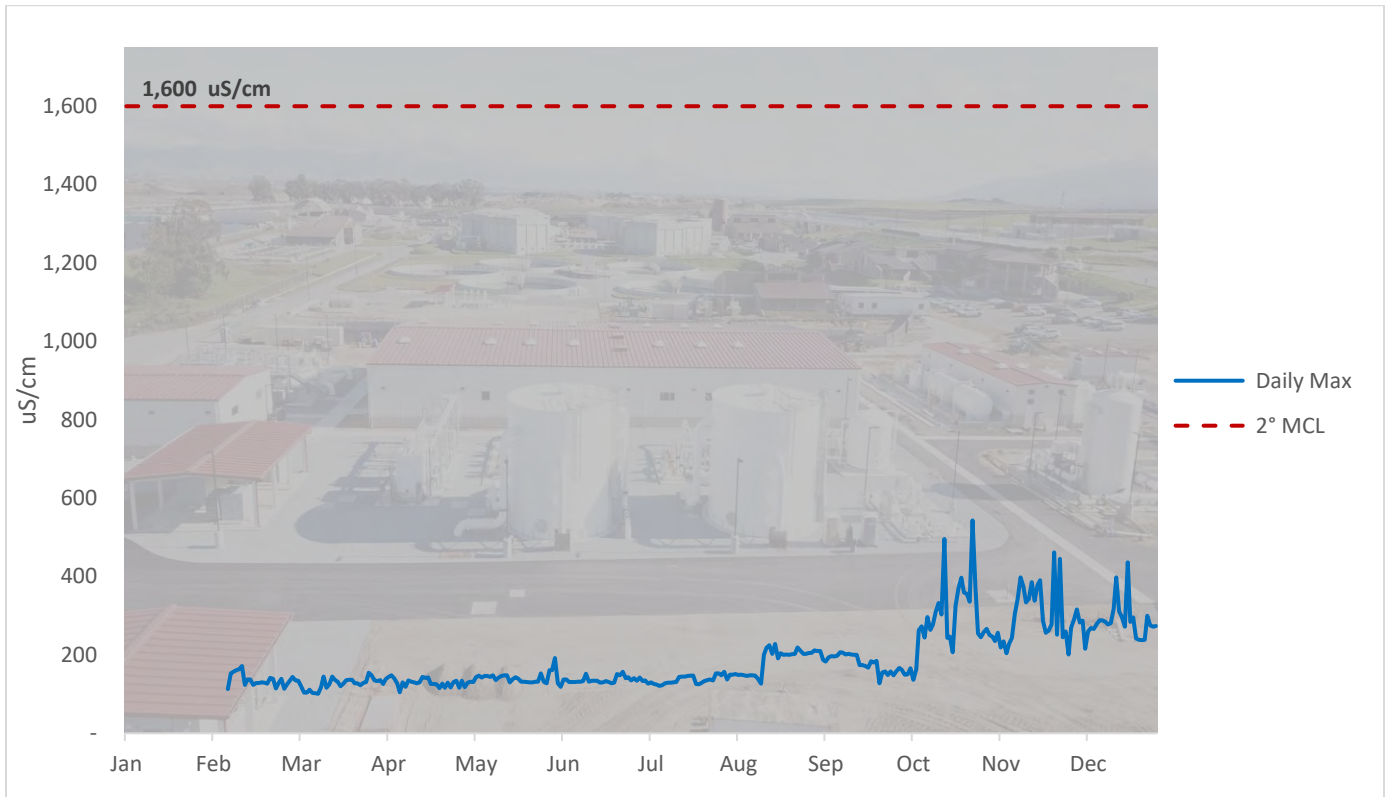


**Table 29. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Total Chlorine Residual (mg/L)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	1.30	1.72	0.71	1.20	1.60	1.90	6.20	4.79	4.00	2.01
2	-	-	1.61	1.20	1.20	1.50	1.60	1.80	6.30	4.45	4.05	1.86
3	-	-	1.78	1.00	1.40	1.50	1.60	1.80	5.60	3.78	3.99	2.19
4	-	-	3.23	1.30	1.40	1.70	1.70	1.90	5.10	3.77	4.00	2.12
5	-	-	4.00	1.40	1.10	1.57	1.70	1.90	5.10	4.66	3.67	2.16
6	-	1.84	1.97	1.40	1.20	1.75	1.70	1.80	5.00	4.65	2.67	2.12
7	-	1.66	1.69	1.20	1.30	1.58	1.70	1.90	5.00	3.74	2.72	2.05
8	-	1.56	1.64	1.50	1.20	5.40	1.70	1.90	5.10	4.24	2.73	2.10
9	-	1.66	1.53	1.50	1.20	1.24	1.70	1.90	4.80	4.25	2.67	2.11
10	-	1.83	1.34	1.40	1.36	0.20	1.70	1.20	5.00	4.06	2.75	2.12
11	-	1.74	1.20	1.40	1.29	0.20	1.60	6.20	5.10	3.88	3.14	1.92
12	-	2.16	1.25	1.50	1.20	0.20	1.60	5.20	5.10	4.09	3.05	1.80
13	-	1.66	1.02	1.50	1.00	0.60	1.70	5.10	5.10	4.06	3.50	1.83
14	-	2.00	1.09	1.50	0.80	0.40	1.60	5.00	5.10	4.05	3.90	1.79
15	-	1.73	1.05	1.65	0.90	0.40	1.60	5.10	4.60	4.05	3.87	1.98
16	-	1.63	1.47	2.40	0.90	0.40	1.50	5.30	4.20	4.09	3.86	2.33
17	-	1.69	1.14	6.60	0.90	1.70	1.50	5.30	3.80	3.99	2.74	2.42
18	-	1.41	1.07	3.60	1.30	1.20	1.50	5.20	3.80	4.13	1.97	2.41
19	-	1.58	1.03	1.40	1.30	1.08	1.60	5.40	3.80	4.06	2.19	2.49
20	-	1.89	1.08	1.50	1.30	1.10	3.10	5.40	3.80	4.10	1.87	2.42
21	-	1.84	1.54	1.60	1.40	0.90	2.00	5.20	2.80	4.01	1.85	2.90
22	-	1.59	1.09	1.30	1.40	0.90	1.80	5.30	3.20	4.07	1.83	3.50
23	-	1.55	1.09	1.60	1.40	1.50	1.80	5.20	3.80	4.08	2.15	3.17
24	-	1.49	1.46	1.40	1.40	1.50	1.80	5.30	3.50	4.03	2.39	3.08
25	-	1.33	4.77	3.30	1.50	1.60	1.90	5.80	3.60	4.10	2.04	3.14
26	-	1.60	2.81	1.67	1.40	1.60	2.00	6.00	3.90	4.06	2.03	3.13
27	-	1.69	1.18	1.30	1.60	1.60	2.00	6.00	3.90	3.91	2.20	3.12
28	-	1.65	1.27	1.60	1.50	1.70	1.80	6.20	3.80	3.95	2.15	3.12
29	-	1.34	1.27	1.20	1.50	1.60	1.70	6.10	3.90	4.10	2.11	3.16
30	-		1.30	1.50	1.60	1.60	1.80	6.20	3.90	4.03	2.47	2.95
31	-		1.24		1.20		1.70	6.10		3.97		2.65

Figure 29. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Total Chlorine Residual (mg/L)

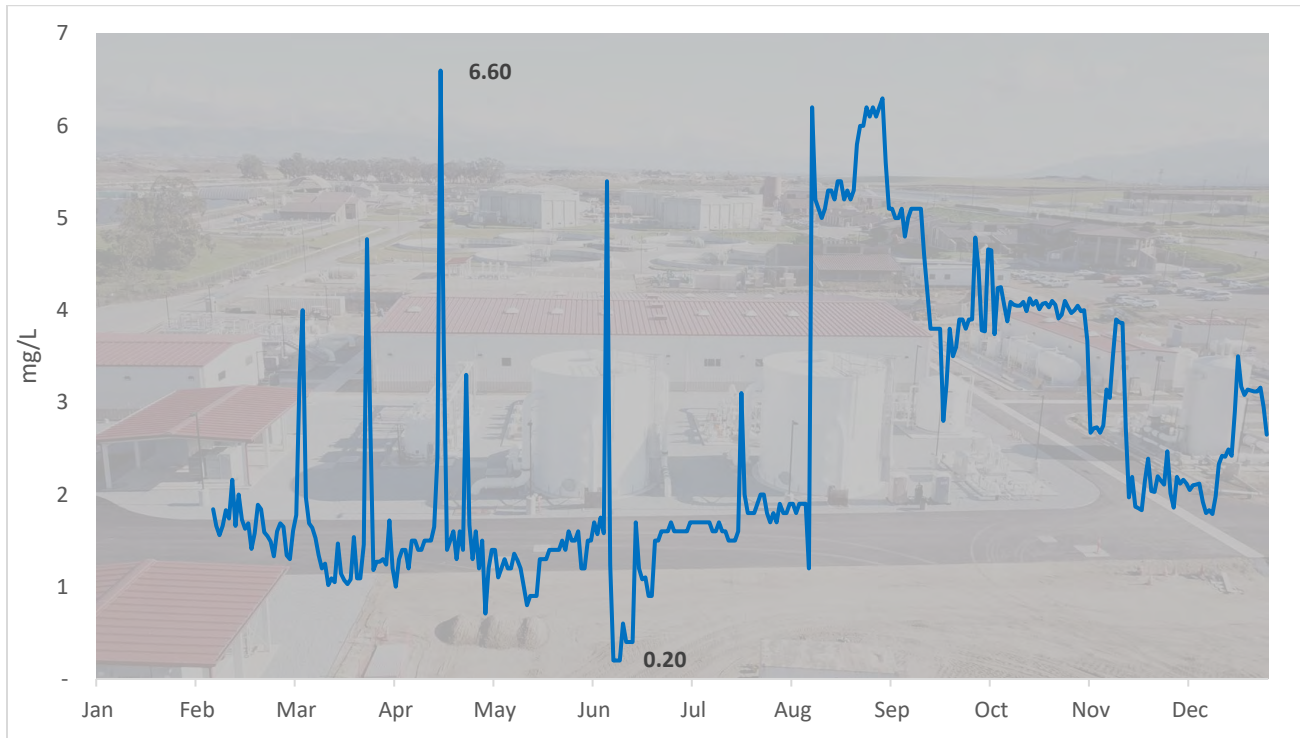


**Table 30. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Total Chlorine Residual (mg/L)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	1.22	1.10	0.30	1.00	1.60	1.80	3.60	3.81	3.68	1.39
2	-	-	1.30	1.00	1.10	1.50	1.60	1.60	4.70	3.87	3.72	1.53
3	-	-	1.29	1.00	1.30	1.50	1.60	1.60	5.00	3.71	3.78	1.97
4	-	-	1.55	1.00	1.10	1.70	1.70	1.70	5.10	2.78	3.67	2.03
5	-	-	1.87	1.30	1.10	1.20	1.70	1.70	4.50	2.38	2.59	2.07
6	-	1.50	1.53	1.20	1.20	1.46	1.70	1.70	4.30	2.56	2.43	2.09
7	-	1.33	1.67	1.20	1.20	1.40	1.60	1.60	4.40	2.79	2.51	1.86
8	-	1.51	1.61	1.40	1.10	4.47	1.70	1.10	4.60	2.30	2.48	1.92
9	-	1.58	1.53	0.80	1.10	0.20	1.70	1.70	1.60	3.62	2.13	1.90
10	-	1.60	1.03	1.30	0.90	0.20	1.70	0.40	4.10	3.13	2.12	1.88
11	-	1.20	1.05	1.40	1.01	0.20	1.60	3.85	4.30	2.53	3.02	1.77
12	-	1.91	1.12	1.40	1.00	0.20	1.60	0.60	4.90	3.74	2.91	1.70
13	-	1.14	0.89	1.40	0.90	0.40	1.70	2.30	4.50	3.82	3.02	1.77
14	-	1.31	0.88	1.30	0.40	0.40	1.60	4.00	4.50	3.46	3.56	1.57
15	-	1.58	0.82	0.70	0.80	0.30	1.60	4.66	3.80	3.42	3.58	1.48
16	-	1.19	0.85	1.10	0.90	0.30	1.50	4.70	3.30	3.62	3.50	1.88
17	-	1.35	0.88	1.40	0.80	1.00	1.50	2.30	3.40	2.07	1.81	1.55
18	-	1.01	0.99	1.50	1.10	1.00	1.50	3.70	3.10	3.71	1.73	1.74
19	-	1.29	0.95	1.40	1.10	0.15	1.60	3.30	3.70	3.81	1.95	2.29
20	-	1.09	0.95	1.40	1.20	0.90	3.10	5.20	3.10	3.78	1.31	2.25
21	-	1.26	1.03	1.40	1.30	0.80	1.60	4.50	1.30	3.77	1.77	1.67
22	-	1.23	1.04	1.40	1.30	0.80	1.70	5.20	0.60	3.73	1.75	2.54
23	-	1.48	1.05	1.30	1.20	1.30	1.30	4.90	3.40	3.50	1.62	2.82
24	-	1.23	1.01	1.30	1.40	1.00	1.20	5.00	0.80	3.62	1.96	2.04
25	-	1.18	1.31	1.40	1.30	1.30	1.70	5.10	2.50	3.64	1.96	2.03
26	-	1.25	1.15	1.40	1.40	1.50	1.70	1.00	3.30	3.89	1.96	2.86
27	-	1.39	0.86	1.40	1.40	1.60	1.90	5.40	3.00	2.64	1.64	2.83
28	-	1.28	1.20	1.10	1.40	1.40	1.50	5.50	2.90	3.05	1.88	2.71
29	-	1.13	1.19	1.10	1.50	1.40	1.50	5.20	3.50	3.93	2.00	3.05
30	-		1.11	0.30	1.10	1.40	1.20	4.80	2.90	3.04	1.79	2.61
31	-		1.11		1.10		1.10	5.30		3.58		2.38

**Figure 30. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Total Chlorine Residual (mg/L)**

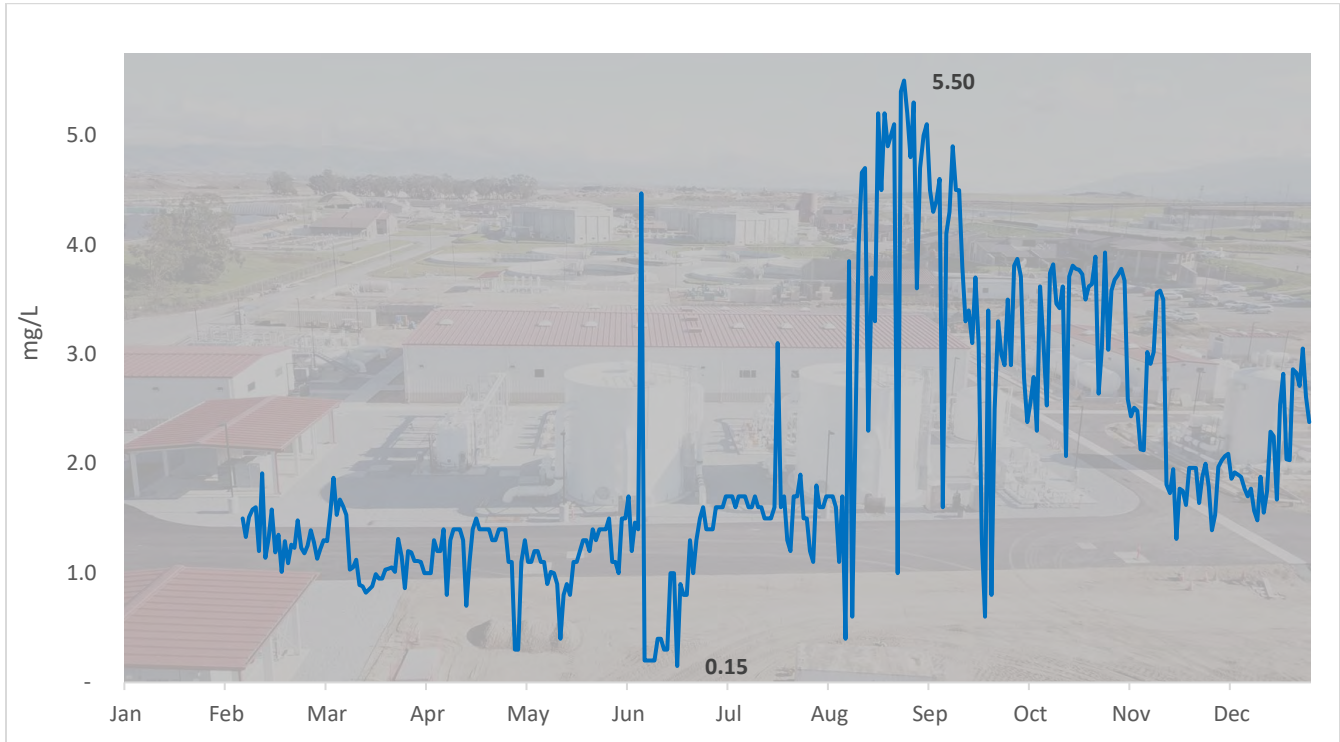


**Table 31. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Total Chlorine Residual (mg/L)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	1.40	2.04	1.10	1.50	1.60	2.00	6.40	6.74	4.28	3.71
2	-	-	1.80	1.80	1.30	1.50	1.60	1.90	6.40	5.88	4.25	2.44
3	-	-	1.83	1.20	1.50	1.70	1.60	1.90	6.30	3.91	4.11	2.67
4	-	-	4.44	1.40	1.50	1.70	1.70	2.00	5.20	3.80	4.46	2.43
5	-	-	5.35	1.40	1.70	1.73	1.70	2.00	5.20	5.66	4.46	2.46
6	-	2.39	3.14	1.50	1.30	1.90	1.70	2.00	5.10	5.10	2.83	2.20
7	-	2.03	1.71	1.50	1.30	1.86	1.70	2.10	5.10	4.83	2.84	2.23
8	-	1.60	1.69	1.80	1.40	5.50	1.70	2.00	5.30	4.75	2.84	2.47
9	-	1.69	1.61	1.60	1.20	1.88	1.70	2.00	5.30	4.90	3.25	2.31
10	-	4.38	1.53	1.40	1.97	0.20	1.70	1.96	5.30	4.37	3.30	2.47
11	-	2.37	1.30	1.40	1.66	0.20	1.60	7.70	5.20	4.20	3.36	2.65
12	-	2.19	1.37	1.60	1.20	1.10	1.60	5.60	5.20	4.40	3.19	1.86
13	-	2.19	1.13	1.60	1.10	0.60	1.70	5.30	5.20	4.26	4.00	1.86
14	-	4.89	1.15	1.60	1.80	0.40	1.60	5.70	5.20	4.54	4.03	1.98
15	-	2.23	1.36	2.43	1.10	0.40	1.60	5.98	5.10	4.51	4.34	2.35
16	-	8.92	1.87	6.70	1.00	2.20	1.50	5.50	5.00	4.48	4.64	2.80
17	-	1.94	1.47	5.90	1.20	2.90	1.50	5.40	3.90	4.51	4.25	2.55
18	-	1.68	1.12	3.70	1.30	1.20	1.50	5.60	4.10	4.49	2.70	2.63
19	-	1.85	1.09	1.50	1.30	1.99	1.60	5.90	3.80	4.54	2.66	2.61
20	-	2.88	1.52	1.60	1.40	1.10	3.10	5.70	3.80	4.51	2.48	2.49
21	-	3.33	2.11	1.70	1.50	0.90	3.20	5.30	3.90	4.28	2.06	4.03
22	-	1.76	1.12	1.60	1.40	1.50	1.80	5.30	4.00	4.35	1.99	3.95
23	-	1.63	1.10	1.90	1.40	1.90	1.90	5.30	4.20	4.34	2.68	3.32
24	-	1.84	1.42	6.00	1.50	1.60	1.80	5.60	3.90	4.16	3.16	3.24
25	-	1.55	6.08	5.40	1.40	1.70	2.00	6.10	4.00	4.27	2.25	3.22
26	-	1.77	4.77	2.05	1.60	1.70	2.00	6.10	4.00	4.21	2.23	3.20
27	-	1.83	1.55	1.60	1.60	1.70	2.20	6.10	3.90	4.24	2.44	3.19
28	-	3.30	1.40	1.60	1.50	1.60	2.00	6.30	4.00	4.37	2.44	3.20
29	-	1.41	1.36	1.50	1.50	1.90	2.00	6.30	4.20	4.55	2.46	3.36
30	-		1.57	1.70	1.60	2.20	2.30	6.30	4.10	4.38	3.20	3.17
31	-		4.52		1.20		1.90	6.30		4.16		2.80

Figure 31. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Total Chlorine Residual (mg/L)

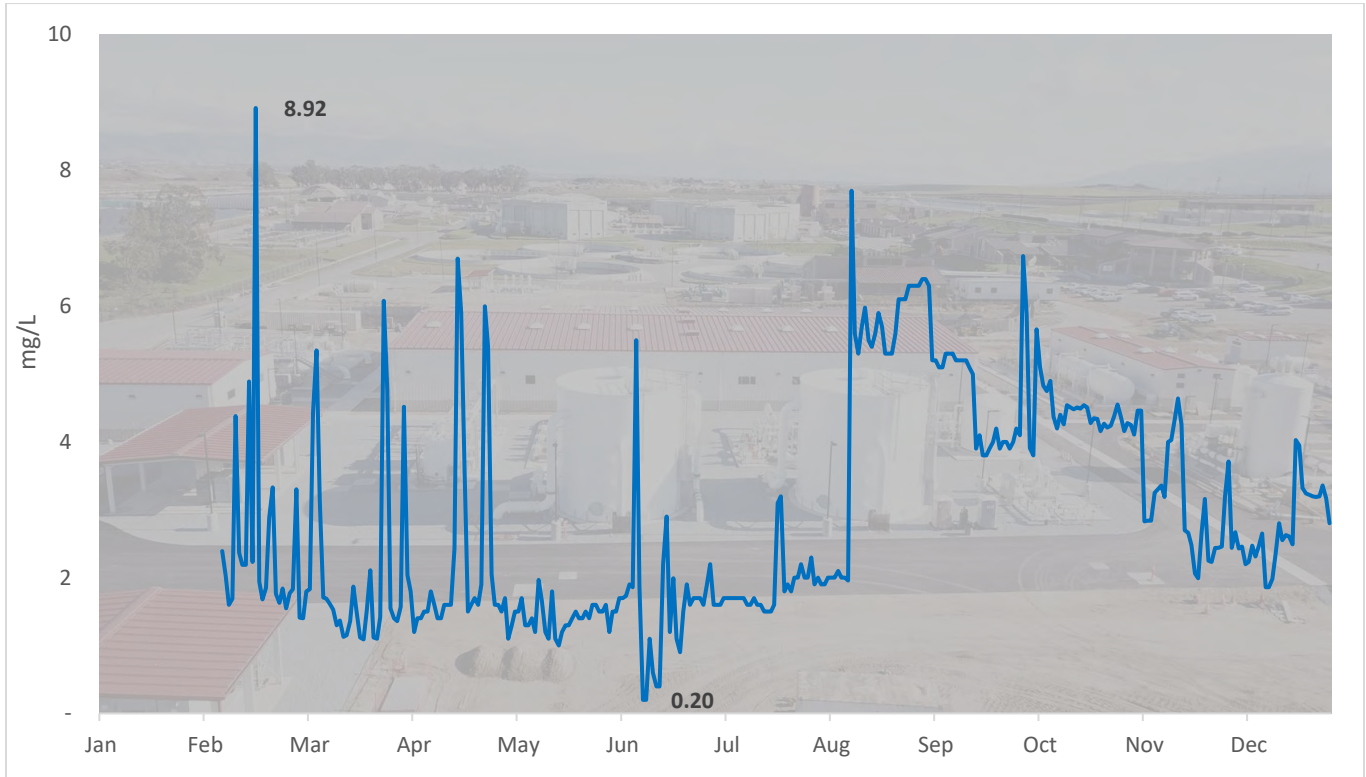


**Table 32. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Total Recycled Water Flow (MGD)²**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.99	1.03	0.96	0.78	0.96	1.02	0.88	0.81	0.94	0.87
2	-	-	0.90	1.10	0.88	0.83	0.94	1.08	0.77	0.78	0.96	0.86
3	-	-	1.11	1.07	0.99	0.90	0.94	1.07	0.73	0.79	1.06	0.86
4	-	-	0.97	0.98	1.04	0.96	0.97	1.03	0.79	1.00	0.97	0.83
5	-	-	0.96	1.01	0.98	0.93	0.99	1.08	0.79	1.01	1.02	0.85
6	-	0.99	0.96	1.17	1.13	0.91	0.98	1.02	0.80	0.91	0.96	0.86
7	-	1.06	0.96	1.19	0.98	0.93	0.99	1.00	0.77	0.82	0.99	0.85
8	-	1.04	0.96	1.08	1.02	0.95	0.96	1.03	0.76	0.86	0.97	0.89
9	-	1.02	1.05	1.07	1.00	0.90	0.99	1.04	0.79	0.96	1.01	0.85
10	-	0.99	0.97	0.94	0.94	0.95	0.97	1.01	0.79	0.88	1.02	0.86
11	-	0.85	0.86	0.91	1.02	0.94	0.96	1.04	0.75	0.88	0.99	0.83
12	-	0.94	1.04	0.92	0.90	0.92	1.03	0.99	0.85	0.88	0.92	0.84
13	-	1.15	1.12	1.01	1.06	0.94	1.01	1.01	0.72	0.93	0.88	0.82
14	-	1.15	1.07	0.98	0.93	0.91	1.04	0.98	0.82	0.94	0.88	0.82
15	-	1.08	1.10	1.03	0.88	0.93	1.01	0.99	0.81	0.90	0.86	0.89
16	-	1.03	1.18	1.00	0.93	0.94	1.05	1.20	0.66	0.88	0.86	0.93
17	-	1.06	1.09	0.96	0.96	0.94	0.98	1.24	0.64	0.92	0.91	0.94
18	-	0.97	1.12	0.97	0.95	0.91	0.98	1.18	0.63	0.90	0.87	0.85
19	-	1.19	1.15	0.91	0.99	0.92	0.98	1.09	0.64	0.95	0.94	0.86
20	-	1.11	1.18	0.87	0.96	0.93	0.97	0.92	0.66	0.91	0.77	0.94
21	-	1.00	1.15	0.85	0.96	0.93	0.97	0.89	0.67	0.98	0.75	0.97
22	-	0.98	1.17	0.87	0.96	0.92	0.96	0.91	0.78	0.94	0.84	0.90
23	-	1.09	1.02	0.88	0.95	0.97	0.99	0.97	0.86	0.91	0.87	0.92
24	-	1.33	1.02	0.79	0.94	0.96	0.97	0.92	0.85	0.92	0.85	0.92
25	-	1.25	1.00	0.81	0.88	1.00	0.96	0.90	0.77	0.94	0.85	0.86
26	-	1.30	1.04	0.87	0.87	0.99	1.01	1.04	0.79	0.96	0.92	0.84
27	-	1.31	1.00	0.97	0.82	0.97	0.99	0.95	0.81	0.98	0.83	0.85
28	-	1.17	1.09	0.93	0.84	1.04	0.97	0.93	0.80	0.98	0.82	0.87
29	-	0.98	1.01	0.86	0.80	0.98	0.98	0.91	0.82	0.95	0.85	0.87
30	-		1.06	0.98	0.77	1.06	1.01	0.94	0.82	0.92	0.90	0.96
31	-		1.03		0.81		0.97	0.93		0.96		0.97

² Values based on average product water flowrate (GPM).

Figure 32. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Total Recycled Water Flow (MGD)



**Table 33. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Total Recycled Water Flow (MGD)³**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.00	0.01	0.13	0.13	0.13	0.13	0.12	0.00	0.12	0.12
2	-	-	0.00	0.13	0.13	0.12	0.13	0.13	0.13	0.12	0.12	0.12
3	-	-	0.00	0.13	0.12	0.01	0.13	0.13	0.13	0.00	0.12	0.12
4	-	-	0.13	0.13	0.01	0.13	0.12	0.12	0.00	0.00	0.12	0.12
5	-	-	0.13	0.00	0.13	0.14	0.12	0.11	0.00	0.00	0.12	0.12
6	-	0.00	0.13	0.00	0.13	0.00	0.13	0.11	0.00	0.00	0.12	0.12
7	-	0.13	0.12	0.31	0.13	0.12	0.13	0.12	0.13	0.00	0.12	0.12
8	-	0.13	0.12	0.13	0.13	0.12	0.13	0.13	0.00	0.01	0.12	0.12
9	-	0.12	0.13	0.13	0.12	0.13	0.13	0.00	0.00	0.00	0.12	0.11
10	-	0.13	0.13	0.12	0.13	0.13	0.12	0.13	0.00	0.12	0.00	0.12
11	-	0.13	0.13	0.13	0.13	0.12	0.13	0.13	0.12	0.12	0.12	0.12
12	-	0.00	0.13	0.13	0.00	0.13	0.13	0.13	0.01	0.12	0.12	0.12
13	-	0.01	0.13	0.13	0.00	0.13	0.11	0.00	0.13	0.12	0.12	0.11
14	-	0.00	0.13	0.00	0.13	0.13	0.00	0.00	0.00	0.11	0.11	0.11
15	-	0.00	0.00	0.00	0.13	0.13	0.05	0.12	0.12	0.12	0.12	0.11
16	-	0.00	0.13	0.12	0.12	0.12	0.13	0.00	0.00	0.12	0.00	0.00
17	-	0.13	0.13	0.13	0.13	0.12	0.13	0.00	0.00	0.12	0.12	0.12
18	-	0.13	0.13	0.12	0.13	0.00	0.11	0.00	0.13	0.12	0.12	0.12
19	-	0.12	0.13	0.12	0.13	0.13	0.12	0.00	0.00	0.12	0.12	0.12
20	-	0.13	0.12	0.12	0.12	0.13	0.00	0.00	0.00	0.12	0.12	0.00
21	-	0.13	0.13	0.12	0.12	0.13	0.10	0.13	0.12	0.12	0.12	0.12
22	-	0.14	0.12	0.13	0.12	0.00	0.12	0.13	0.12	0.12	0.12	0.12
23	-	0.00	0.12	0.13	0.12	0.00	0.13	0.12	0.00	0.12	0.12	0.11
24	-	0.00	0.13	0.13	0.12	0.11	0.12	0.04	0.00	0.12	0.12	0.12
25	-	0.00	0.00	0.12	0.12	0.12	0.08	0.00	0.12	0.12	0.12	0.11
26	-	0.00	0.13	0.12	0.13	0.13	0.12	0.00	0.00	0.00	0.12	0.11
27	-	0.00	0.13	0.12	0.12	0.13	0.10	0.00	0.12	0.00	0.12	0.11
28	-	0.00	0.13	0.00	0.13	0.13	0.12	0.00	0.00	0.12	0.12	0.00
29	-	0.13	0.13	0.13	0.13	0.12	0.13	0.01	0.00	0.13	0.12	0.12
30	-		0.00	0.12	0.13	0.00	0.12	0.00	0.00	0.11	0.00	0.12
31	-		0.00		0.13		0.12	0.13		0.12		0.12

³ Values based on minimum product water flowrate (GPM).

**Figure 33. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Total Recycled Water Flow (MGD)**



**Table 34. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Total Recycled Water Flow (MGD)⁴**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	2.87	2.10	2.04	2.02	2.03	2.02	2.05	2.05	1.98	2.06
2	-	-	2.05	2.08	2.04	2.03	2.02	2.03	2.06	1.99	1.99	1.99
3	-	-	2.36	2.05	2.05	2.03	2.04	2.04	2.02	1.99	3.26	2.07
4	-	-	2.60	2.05	2.09	2.03	2.09	2.04	2.02	2.31	2.18	1.99
5	-	-	2.07	2.26	2.04	2.04	2.08	2.03	2.00	2.23	2.62	1.99
6	-	2.18	2.06	2.28	2.57	2.03	2.03	2.02	2.05	2.01	1.98	2.01
7	-	2.10	2.07	2.13	2.05	2.02	2.11	2.02	1.98	2.02	1.98	2.08
8	-	2.11	2.06	2.09	2.06	2.02	2.07	2.04	2.05	2.04	1.99	2.73
9	-	2.08	2.08	2.06	2.04	2.02	2.05	2.25	2.05	2.04	2.25	2.07
10	-	2.39	2.07	2.06	2.04	2.02	2.04	2.10	2.45	2.08	3.23	2.17
11	-	2.23	2.07	2.05	2.15	2.06	2.03	2.08	2.02	2.02	2.29	1.99
12	-	2.22	2.13	2.22	2.04	2.02	2.41	2.03	2.24	2.08	1.99	1.99
13	-	2.22	2.42	2.25	2.10	2.02	10.06	2.06	2.07	2.09	1.99	2.12
14	-	2.28	2.29	2.27	2.07	2.02	2.31	2.14	2.01	2.00	1.98	2.28
15	-	2.19	2.27	2.11	2.03	2.11	2.14	2.01	2.00	2.08	2.08	2.26
16	-	2.83	2.67	2.08	2.04	2.02	2.44	3.74	1.36	1.98	2.03	2.37
17	-	2.25	2.08	2.06	2.10	2.03	2.03	2.35	1.41	1.99	2.10	3.88
18	-	2.23	2.13	2.06	2.06	2.23	2.03	5.55	1.35	2.33	1.99	2.00
19	-	2.26	2.08	2.13	2.17	2.22	2.07	2.29	1.35	2.01	2.80	2.00
20	-	2.26	2.07	2.04	2.24	2.02	2.16	2.06	1.38	2.01	1.99	3.16
21	-	2.06	2.07	2.04	2.03	2.03	2.02	2.02	1.42	2.02	1.98	2.07
22	-	2.06	2.07	2.09	2.03	2.06	2.03	2.01	1.98	2.48	2.01	2.09
23	-	2.34	2.06	2.04	2.03	2.11	2.02	2.03	2.77	1.98	2.06	2.80
24	-	5.12	2.07	2.04	2.04	2.07	2.02	2.10	2.05	1.98	2.08	3.36
25	-	7.82	2.11	2.05	2.04	2.89	2.03	2.01	1.99	3.13	2.69	1.99
26	-	2.82	2.09	2.04	2.07	2.03	2.04	2.22	1.99	2.79	2.47	2.00
27	-	12.18	2.07	2.59	2.08	2.01	2.13	2.04	2.08	2.03	1.99	2.01
28	-	3.49	2.06	2.15	2.10	2.21	2.03	2.01	2.02	3.14	1.99	2.15
29	-	2.07	2.07	2.16	2.09	2.03	2.21	2.06	2.05	3.17	1.99	3.81
30	-		2.19	2.47	2.02	2.37	2.03	2.12	2.05	1.99	2.88	3.31
31	-		2.10		2.03		2.03	2.07		1.98		3.71

⁴ Values based on maximum product water flowrate (GPM).

**Figure 34. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Total Recycled Water Flow (MGD)**

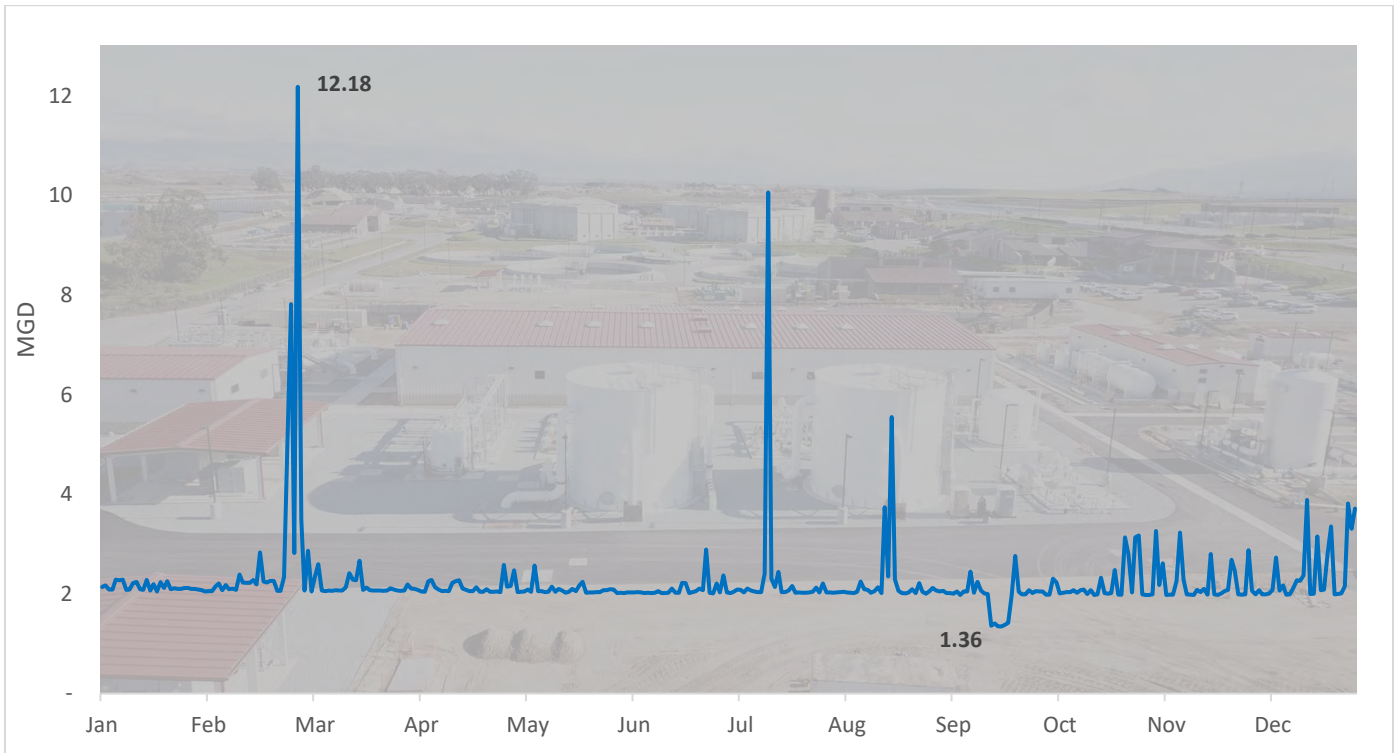


**Table 35. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 1 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	3,912	3,930	3,960	3,521	4,035	3,605	3,286	2,912	3,181
2	-	-	-	3,749	4,093	3,937	-	-	3,889	-	2,918	-
3	-	-	3,942	3,848	3,824	3,037	4,198	-	-	-	2,880	3,380
4	-	-	4,252	-	3,468	-	4,151	3,493	-	-	2,824	-
5	-	-	4,224	3,660	3,322	3,769	4,153	2,931	-	2,324	3,343	-
6	-	2,341	4,220	3,470	-	3,807	4,153	-	3,518	3,796	2,867	-
7	-	-	4,207	3,604	3,585	3,747	4,102	-	3,373	3,961	2,927	-
8	-	-	4,187	3,891	3,480	3,806	4,067	-	-	3,161	2,913	-
9	-	-	4,144	3,930	3,593	3,747	3,768	3,891	3,926	3,623	2,956	-
10	-	-	4,046	4,643	3,731	3,933	-	3,623	4,287	4,047	2,897	-
11	-	2,671	4,169	5,274	3,600	4,121	-	-	-	3,782	-	-
12	-	3,984	3,170	5,250	3,338	4,180	-	3,685	-	-	-	-
13	-	3,818	3,168	4,435	3,464	4,162	-	3,629	-	-	-	-
14	-	4,649	3,560	3,537	3,487	4,168	-	-	-	2,339	-	3,460
15	-	4,033	3,232	3,461	-	4,179	-	-	3,377	2,041	-	3,388
16	-	4,437	-	3,799	4,096	4,108	-	-	3,783	3,066	3,205	3,238
17	-	3,861	-	4,121	4,068	4,150	-	-	3,898	2,807	3,376	3,196
18	-	4,200	3,172	4,091	3,830	3,618	-	3,516	-	2,849	3,088	3,145
19	-	3,588	3,150	3,915	3,690	4,065	-	3,916	-	3,048	3,139	3,155
20	-	3,756	2,816	3,823	3,730	4,095	-	3,958	-	3,039	3,106	3,164
21	-	-	2,818	3,874	3,816	3,990	-	-	-	2,852	3,159	3,089
22	-	-	2,810	3,003	3,784	3,695	-	4,222	2,954	2,664	-	2,987
23	-	4,387	3,428	2,999	3,759	3,739	4,244	4,038	3,164	2,811	-	3,117
24	-	4,372	3,568	-	3,818	3,649	3,625	-	3,496	2,944	3,151	3,163
25	-	4,395	3,781	4,207	3,701	3,848	-	-	-	2,845	3,087	3,147
26	-	3,724	3,798	4,000	3,082	3,811	3,929	-	-	2,761	-	3,137
27	-	-	3,789	3,721	-	3,936	3,727	3,869	-	2,748	-	3,127
28	-	-	3,767	3,707	3,528	3,806	3,429	-	3,513	2,124	-	3,156
29	-	-	3,885	-	3,993	3,628	4,127	-	3,011	2,771	3,170	-
30	-		4,018	3,822	3,994	3,744	4,152	-	2,799	2,759	3,126	-
31	-		3,886		3,979		4,187	3,905		2,815		2,992

Figure 35. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 1 (mJ/cm²)

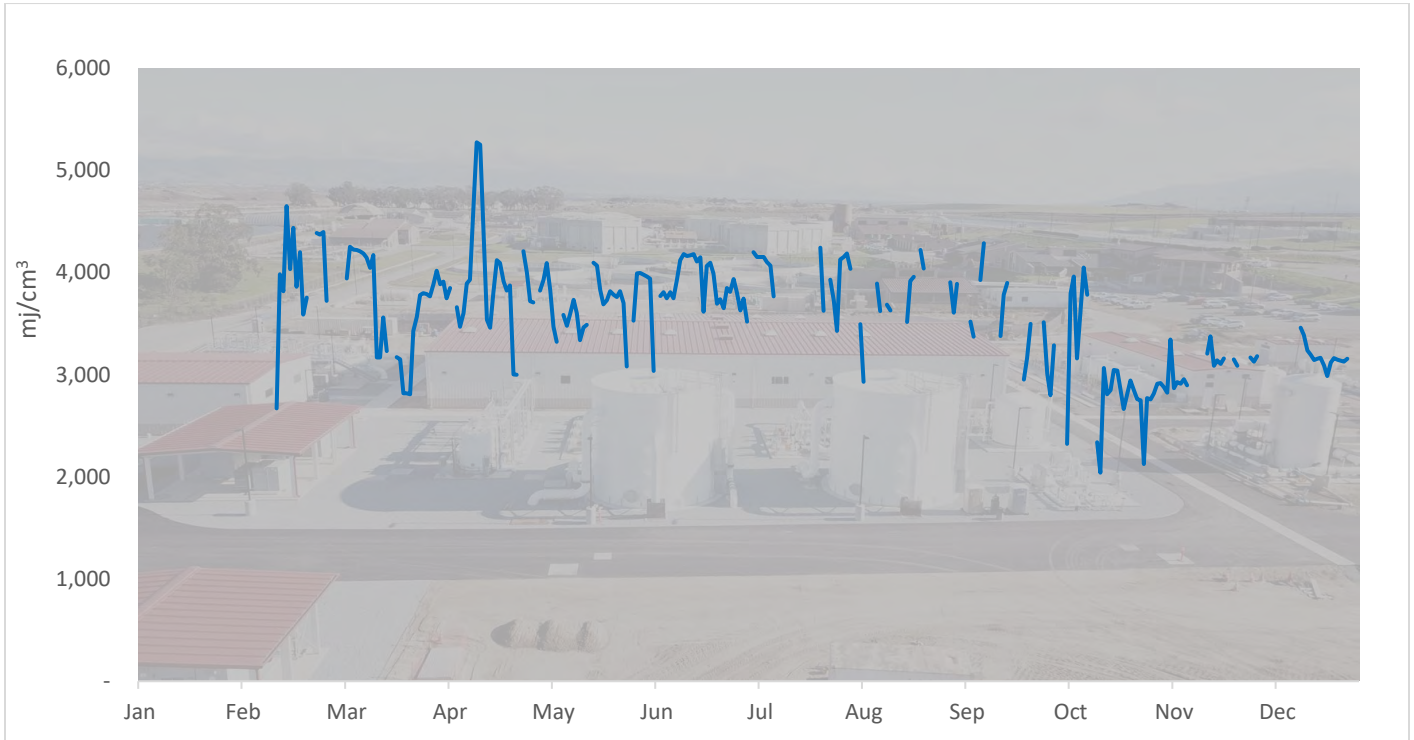


**Table 36. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 1 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	3,748	2,199	4,095	3,745	3,286	2,759	2,404
2	-	-	-	2,163	2,123	3,736	3,597	3,989	3,802	-	2,782	-
3	-	-	-	-	-	3,726	-	-	2,884	-	2,777	3,058
4	-	-	-	3,717	2,073	2,750	3,376	-	-	-	2,785	-
5	-	-	3,988	-	2,012	-	2,481	3,787	-	2,324	2,800	-
6	-	-	3,940	1,343	3,228	3,653	4,082	3,673	-	2,313	2,783	-
7	-	-	4,015	-	-	3,672	4,011	-	3,321	2,405	2,744	-
8	-	-	4,010	-	3,829	2,477	3,968	-	1,352	3,161	2,714	-
9	-	-	4,001	3,703	-	3,656	3,934	-	-	2,403	2,778	-
10	-	-	-	3,676	-	3,660	3,015	3,927	1,715	2,400	2,666	-
11	-	-	2,545	4,026	-	3,657	-	4,014	4,189	3,007	-	-
12	-	-	-	4,970	-	3,067	-	-	-	-	-	-
13	-	-	-	5,007	-	4,048	-	3,694	-	-	-	-
14	-	-	-	-	-	4,061	-	4,056	-	2,339	-	3,276
15	-	-	-	-	2,000	4,032	-	-	-	2,041	-	3,252
16	-	-	1,600	-	3,713	4,046	-	-	1,080	3,066	2,997	2,438
17	-	-	-	-	3,713	3,693	-	-	3,744	2,807	2,010	2,766
18	-	-	-	-	3,708	3,182	-	-	3,728	2,849	2,763	2,841
19	-	-	2,541	-	2,428	3,634	-	3,972	-	3,048	2,868	3,061
20	-	-	-	1,171	2,529	3,054	-	3,098	-	3,039	2,949	3,067
21	-	-	2,687	-	2,232	3,947	-	2,915	-	2,852	3,218	1,484
22	-	-	2,713	-	2,525	3,704	-	-	-	2,664	-	2,800
23	-	-	2,686	-	3,628	2,596	-	4,037	2,346	2,811	-	2,791
24	-	4,202	-	-	2,501	2,882	3,989	1,392	1,543	2,944	2,858	3,048
25	-	-	-	-	3,678	2,914	3,799	-	3,927	2,845	3,032	3,031
26	-	2,199	2,321	-	2,201	3,583	-	-	-	2,761	-	3,046
27	-	-	3,634	-	2,019	3,803	2,947	-	-	2,748	-	3,025
28	-	-	-	-	-	3,877	2,618	3,194	-	2,124	-	3,044
29	-	-	-	-	3,747	3,605	3,907	-	-	2,771	3,046	-
30	-	-	-	-	3,799	3,620	3,022	-	-	2,759	2,991	-
31	-	-	1,987	-	3,627	-	3,190	3,745	-	2,815	-	2,797

Figure 36. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 1 (mJ/cm²)



**Table 37. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 1 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	6,501	5,938	4,796	5,261	4,764	5,973	6,161	4,199	-
2	-	-	-	6,485	5,075	6,525	-	-	6,083	-	5,391	5,990
3	-	-	6,540	5,829	5,878	6,514	5,384	-	-	-	5,360	-
4	-	-	5,129	-	6,474	-	5,399	5,359	-	6,189	6,488	-
5	-	-	5,115	6,486	5,350	6,483	5,303	5,074	-	5,648	2,934	-
6	-	6,459	5,119	6,446	-	6,505	4,541	-	5,748	6,320	4,724	-
7	-	-	5,130	6,219	6,475	6,489	4,555	-	6,529	6,145	4,560	-
8	-	-	5,073	6,482	6,526	4,987	4,467	-	-	6,414	4,971	-
9	-	-	6,458	5,889	6,500	6,500	5,649	5,026	6,396	6,496	4,165	-
10	-	-	5,738	6,305	6,417	6,500	-	5,409	5,684	6,517	-	-
11	-	6,493	5,205	6,328	5,135	6,523	-	-	-	-	-	-
12	-	6,540	6,475	6,322	5,243	4,609	-	6,052	-	-	-	-
13	-	6,488	6,527	6,258	6,489	4,565	-	5,124	-	5,884	-	5,220
14	-	6,482	6,537	6,509	6,464	4,577	-	-	-	6,118	-	3,700
15	-	6,514	4,964	6,532	-	4,586	-	-	6,447	4,457	6,477	6,204
16	-	4,622	-	5,588	6,513	4,567	-	-	5,459	5,388	6,350	6,188
17	-	6,512	-	4,740	5,297	4,583	-	-	5,685	3,177	4,308	5,762
18	-	6,531	6,435	4,710	4,458	6,113	-	5,751	-	4,831	6,438	3,487
19	-	6,518	5,663	5,031	5,675	5,577	-	5,789	-	3,330	3,394	3,491
20	-	6,494	3,121	6,495	6,501	4,490	-	4,858	-	6,458	5,985	6,291
21	-	-	3,120	5,090	4,457	4,494	-	-	-	4,937	-	3,976
22	-	-	3,138	6,504	4,344	6,106	-	6,109	6,377	5,070	-	4,311
23	-	6,500	6,068	6,518	6,477	5,736	6,009	6,312	5,315	3,276	5,651	3,524
24	-	6,446	6,451	-	4,413	5,803	5,766	-	6,288	3,081	5,337	3,484
25	-	6,036	6,454	6,477	6,355	5,329	-	-	-	4,631	-	3,469
26	-	4,707	5,696	6,453	6,506	5,209	5,613	-	-	5,407	6,306	3,418
27	-	-	6,494	5,659	-	5,219	6,494	5,685	-	5,711	-	4,847
28	-	-	5,727	6,505	6,500	6,104	5,476	-	5,970	4,772	5,728	-
29	-	-	6,481	-	4,818	6,409	5,343	-	6,086	4,316	3,445	-
30	-		6,494	6,514	5,098	6,532	5,693	-	5,667	3,124	5,209	4,902
31	-		6,533		4,829		4,289	6,337		3,013		-

Figure 37. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV dose for Reactor 1 (mJ/cm²)

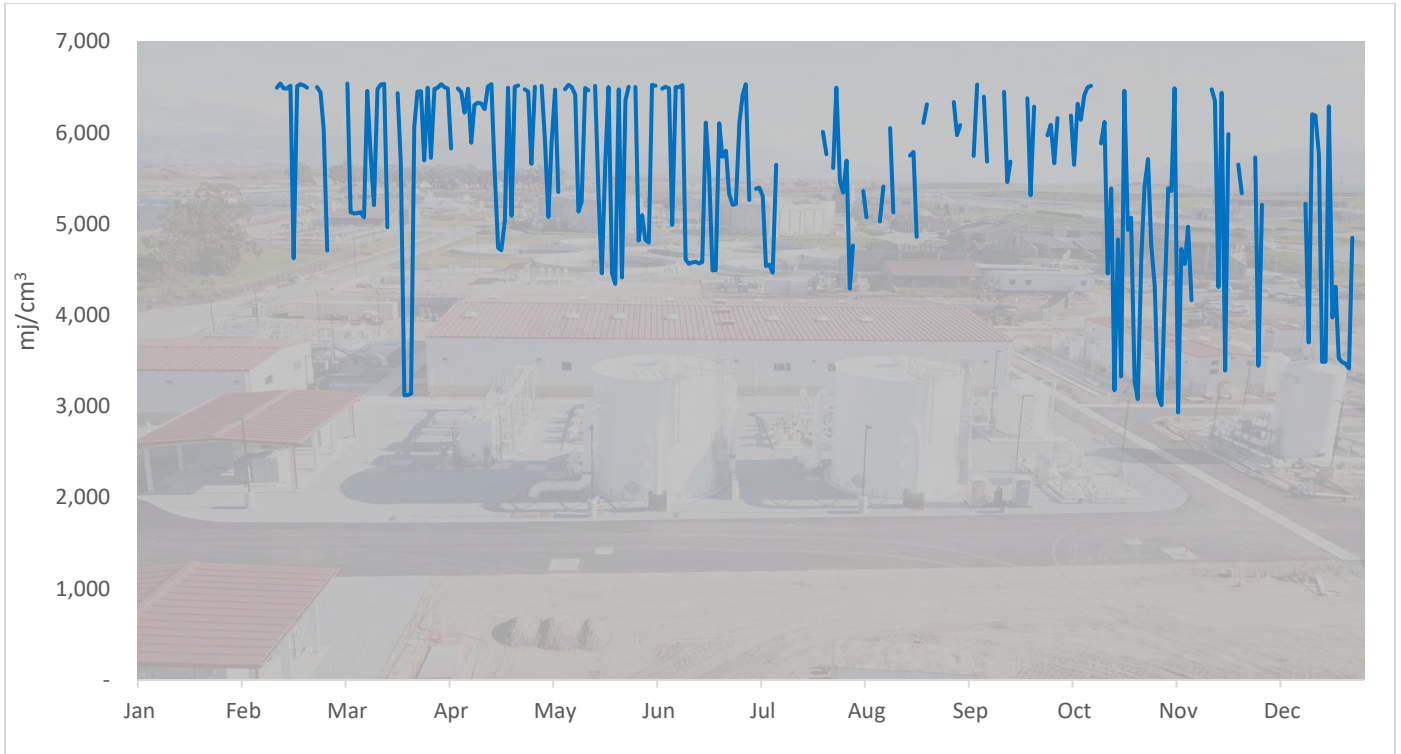


**Table 38. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 2 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	3,945	-	-	-	-	1,461	3,166	2,907	3,577
2	-	-	-	3,835	-	3,593	-	-	1,871	2,799	-	3,665
3	-	-	3,338	3,960	-	3,314	-	-	-	-	2,945	3,468
4	-	-	2,702	4,024	3,211	3,536	-	-	-	-	2,930	3,505
5	-	-	-	3,981	3,505	-	-	2,038	-	2,416	3,486	3,396
6	-	4,216	-	3,131	3,408	-	-	3,648	1,340	2,275	2,912	3,216
7	-	4,344	-	3,882	-	3,201	-	3,383	2,021	2,417	2,949	3,233
8	-	4,314	-	4,086	-	3,641	-	3,900	1,924	2,824	2,932	3,282
9	-	4,307	4,294	3,990	-	2,781	1,262	3,213	1,817	2,393	3,060	3,261
10	-	3,847	4,175	4,697	-	2,704	-	4,121	-	2,415	2,983	3,371
11	-	4,207	4,285	5,272	-	-	-	2,514	-	2,419	2,929	3,439
12	-	4,508	3,971	5,195	-	-	-	1,983	-	1,995	2,970	3,415
13	-	2,910	3,273	4,417	2,916	-	-	1,395	-	2,559	2,966	3,415
14	-	-	3,557	3,294	2,947	-	-	-	-	2,412	2,974	3,546
15	-	2,520	3,426	3,001	-	-	-	-	-	2,934	2,941	3,555
16	-	-	3,270	2,908	-	-	-	-	3,085	-	3,348	3,351
17	-	3,016	3,417	-	-	-	-	-	2,917	-	3,338	3,322
18	-	3,337	3,408	-	-	-	-	1,341	3,843	-	3,226	3,249
19	-	3,148	3,228	-	3,406	-	-	2,748	3,271	-	3,149	3,341
20	-	3,878	2,881	3,651	3,708	-	-	1,639	3,521	-	3,287	3,361
21	-	4,247	2,882	3,568	3,529	-	-	-	3,722	-	3,383	3,258
22	-	4,249	2,871	3,501	-	-	1,312	3,917	2,086	-	3,193	3,096
23	-	4,224	3,808	3,598	3,271	-	3,565	1,230	1,935	-	3,248	3,290
24	-	-	3,770	-	-	-	3,261	-	1,919	-	3,015	3,369
25	-	-	3,909	-	-	-	-	-	3,300	-	3,417	3,357
26	-	3,030	3,817	-	3,233	-	1,348	-	2,230	-	3,081	3,346
27	-	-	3,934	-	3,557	-	1,253	-	2,476	-	3,557	3,344
28	-	-	3,889	-	3,420	-	1,210	2,064	1,585	2,265	3,236	3,377
29	-	-	3,875	-	-	-	-	-	2,997	2,899	3,348	3,332
30	-	-	4,226	-	-	-	-	-	1,311	2,900	3,295	3,343
31	-	-	4,019	-	-	-	-	2,857	-	2,905	-	3,096

Figure 38. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for reactor 2 (mJ/cm²)

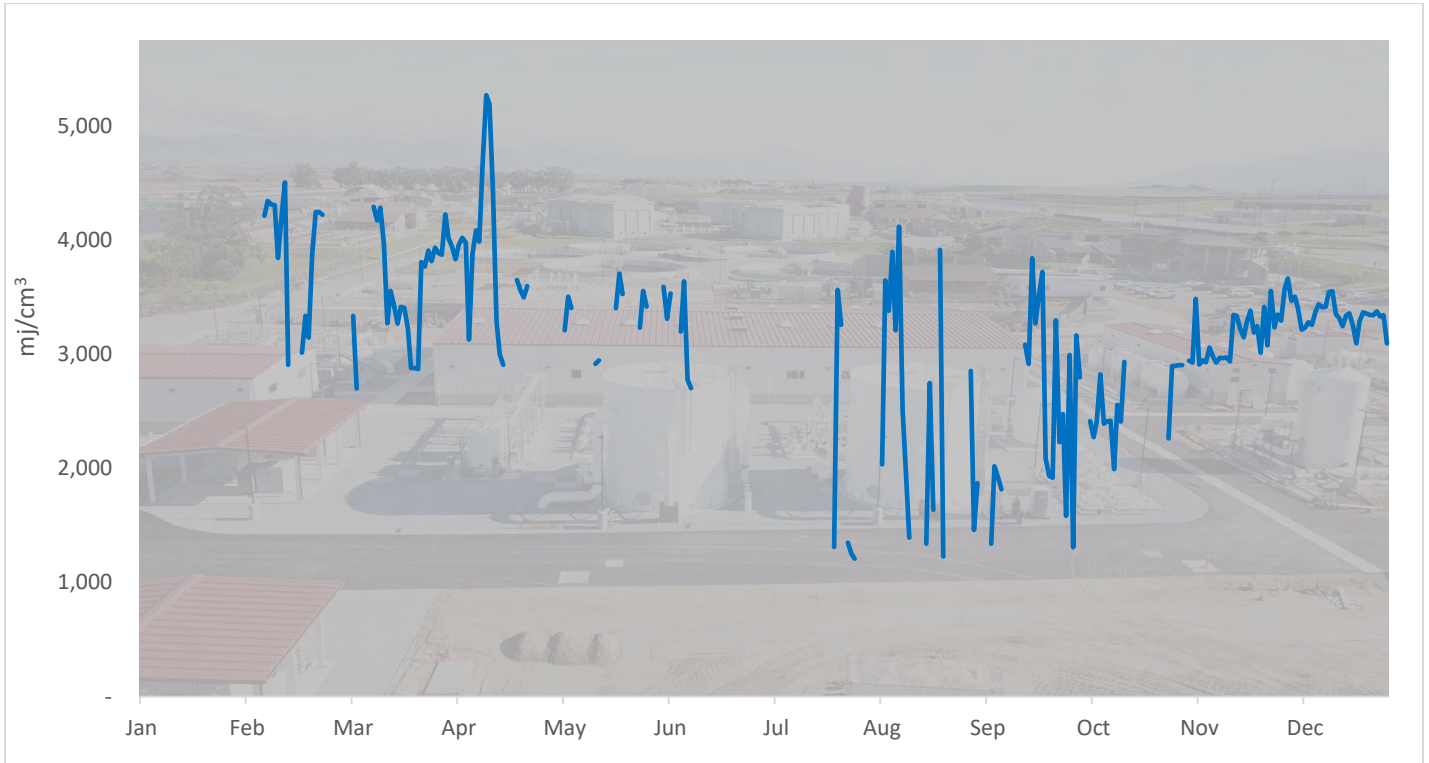


**Table 39. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 2 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	2,786	3,166	2,822	3,185
2	-	-	-	3,752	-	3,140	-	-	3,774	2,799	-	3,190
3	-	-	-	-	-	2,415	-	-	2,908	-	2,812	3,084
4	-	-	-	3,863	2,804	3,168	-	-	-	-	2,834	3,105
5	-	-	-	-	3,298	-	-	2,538	-	2,416	2,826	3,196
6	-	-	-	3,870	2,552	-	-	3,064	-	2,275	2,906	3,189
7	-	-	-	-	-	-	-	2,909	-	2,417	2,902	3,182
8	-	4,128	-	-	-	3,076	-	3,562	2,803	2,824	2,888	3,181
9	-	4,122	-	2,850	-	-	-	1,438	3,179	2,393	2,906	3,209
10	-	4,103	-	3,892	-	6,484	-	3,681	2,981	2,415	2,878	3,208
11	-	-	2,657	4,164	-	6,391	-	2,812	-	2,419	2,855	3,374
12	-	-	-	5,060	-	-	-	2,759	-	1,995	2,869	3,366
13	-	-	-	5,072	-	-	-	3,124	-	2,559	2,906	3,362
14	-	-	-	-	-	-	-	-	-	2,412	2,916	3,375
15	-	-	-	-	2,973	-	-	-	-	2,934	2,914	3,481
16	-	-	-	-	-	-	-	-	2,417	-	2,919	2,905
17	-	-	2,727	-	-	-	-	-	2,176	-	3,124	3,213
18	-	-	2,719	-	-	-	-	2,927	2,762	-	2,900	2,958
19	-	-	2,674	-	2,964	-	-	2,895	3,793	-	3,100	3,287
20	-	-	-	-	2,843	-	-	3,689	3,821	-	3,204	3,325
21	-	-	2,845	-	3,592	-	-	-	4,078	-	3,167	2,904
22	-	-	2,859	-	-	-	-	2,002	2,184	-	3,154	2,904
23	-	-	2,807	-	3,446	-	-	-	2,179	-	3,030	2,930
24	-	-	-	2,853	-	-	3,264	2,643	3,253	-	2,596	3,309
25	-	-	-	-	-	-	3,756	-	3,277	-	3,032	3,307
26	-	-	3,664	-	2,846	-	-	-	3,274	-	3,023	3,309
27	-	-	3,821	-	3,376	-	2,864	-	3,284	-	2,911	3,310
28	-	-	-	-	3,243	-	2,693	5,166	3,281	2,265	2,909	3,320
29	-	-	-	-	-	-	-	-	2,993	2,899	3,264	2,829
30	-	-	-	-	-	-	-	-	3,321	2,900	3,198	3,258
31	-	-	3,384	-	-	-	-	2,786	-	2,905	-	2,903

Figure 39. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 2 (mJ/cm²)



**Table 40. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 2 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	6,433	-	-	-	-	4,639	6,024	4,639	6,497
2	-	-	-	4,438	-	6,502	-	-	5,654	-	4,887	6,503
3	-	-	6,489	5,813	-	6,487	-	-	-	-	3,939	6,478
4	-	-	6,508	4,664	6,466	6,457	-	-	-	6,274	6,473	6,099
5	-	-	-	6,471	5,232	-	-	5,413	-	6,372	2,968	3,288
6	-	6,499	-	6,487	6,536	-	-	5,776	5,776	6,499	4,849	4,178
7	-	5,133	-	6,474	-	6,513	-	6,433	6,024	6,315	4,489	3,597
8	-	5,027	-	6,372	-	6,497	-	5,148	6,392	6,352	4,920	3,567
9	-	5,028	6,529	6,080	-	6,500	5,305	6,538	6,148	6,483	4,454	3,769
10	-	6,513	6,020	6,387	-	6,500	-	5,479	-	6,519	4,802	3,813
11	-	6,513	5,993	6,319	-	-	-	5,625	-	4,991	4,768	3,760
12	-	5,075	6,253	6,200	-	-	-	5,717	-	5,666	3,116	3,757
13	-	6,480	6,527	6,197	6,517	-	-	5,635	-	6,412	3,213	5,230
14	-	-	6,531	6,526	6,520	-	-	-	-	5,421	3,021	3,901
15	-	6,497	6,490	6,498	-	-	-	-	6,282	-	6,444	5,565
16	-	-	6,506	5,367	-	-	-	-	6,334	-	5,281	6,432
17	-	6,501	6,427	-	-	-	-	-	6,312	-	4,452	6,404
18	-	6,507	6,346	-	-	-	-	5,757	4,324	-	6,358	3,670
19	-	6,511	5,732	-	6,468	-	-	5,692	5,811	-	3,589	3,690
20	-	6,465	3,182	6,529	6,499	-	-	6,379	6,372	-	6,150	6,515
21	-	6,499	3,211	6,448	6,519	-	-	-	4,915	-	3,273	4,306
22	-	4,942	3,186	6,497	-	-	5,669	4,398	6,391	-	3,592	4,333
23	-	5,714	6,424	6,516	6,520	-	6,223	5,234	6,168	-	6,462	3,729
24	-	-	6,511	-	-	-	4,970	-	6,464	-	5,610	3,706
25	-	-	6,494	-	-	-	-	-	3,773	-	3,433	3,714
26	-	6,474	6,465	-	6,512	-	5,394	-	4,663	3,267	6,412	3,662
27	-	-	6,345	-	4,393	-	5,270	-	6,311	6,454	5,782	5,504
28	-	-	5,809	-	5,379	-	5,358	6,354	6,062	5,058	6,404	5,732
29	-	-	6,475	-	-	-	-	-	6,289	4,260	3,614	3,710
30	-		6,463	-	-	-	-	-	6,184	3,111	6,511	4,249
31	-		6,473		-		-	5,751		5,023		-

Figure 40. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 2 (mJ/cm²)

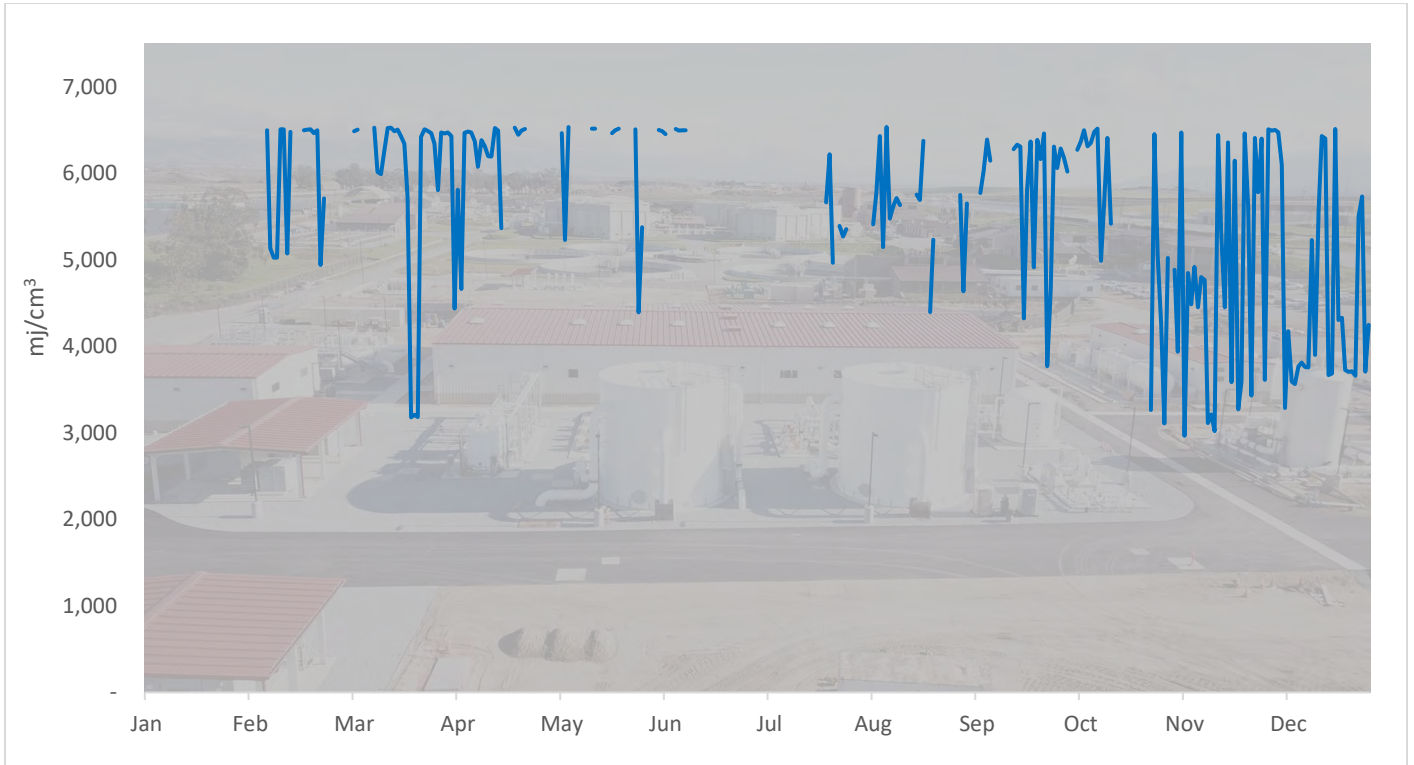


**Table 41. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 3 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	4,401	4,171	3,777	-	4,277	3,627	-	-	3,172	3,384
2	-	-	4,426	4,027	3,831	3,370	4,562	3,686	-	2,890	3,064	3,419
3	-	-	3,054	4,166	-	3,464	4,362	3,922	-	3,191	3,080	4,166
4	-	-	-	4,202	3,585	3,570	3,231	3,999	-	3,176	3,099	-
5	-	-	-	4,116	3,363	3,729	3,009	3,539	-	3,225	3,489	-
6	-	-	-	3,438	-	3,749	-	3,555	-	2,415	-	-
7	-	-	-	3,830	3,304	3,660	-	2,235	2,690	2,417	-	3,082
8	-	-	-	4,162	3,418	3,814	-	3,372	2,669	3,246	-	3,291
9	-	-	2,420	4,137	3,598	3,722	3,270	3,308	2,374	-	3,120	3,262
10	-	2,941	2,616	-	3,354	3,931	4,053	-	2,362	-	3,064	3,367
11	-	2,776	-	-	-	3,871	4,071	3,358	-	3,259	2,750	3,436
12	-	3,883	3,463	-	3,510	4,222	4,062	3,686	-	2,694	2,976	3,409
13	-	3,600	3,212	3,892	3,522	4,204	4,059	3,373	-	2,665	2,986	3,407
14	-	4,516	3,271	3,380	3,469	4,206	3,629	3,099	-	-	3,004	3,586
15	-	2,510	3,386	3,600	3,593	4,218	3,688	3,761	2,457	2,532	2,964	3,537
16	-	-	3,349	3,874	4,019	4,136	4,093	3,755	-	3,125	2,963	3,342
17	-	3,610	3,520	4,123	4,050	4,184	4,085	2,704	-	3,079	-	3,410
18	-	4,103	3,548	4,080	4,060	2,530	4,081	2,421	-	2,904	-	3,340
19	-	3,668	3,408	3,758	3,820	3,726	3,676	2,457	-	3,111	-	3,323
20	-	3,041	3,052	3,417	3,802	4,132	2,777	-	-	3,112	-	3,332
21	-	4,371	3,053	-	3,449	4,019	2,388	-	-	2,906	-	3,202
22	-	4,391	3,044	3,748	-	2,802	-	-	2,625	2,839	-	2,995
23	-	4,231	3,778	3,837	-	2,674	2,575	2,739	-	2,909	-	2,933
24	-	4,232	3,833	3,981	3,507	2,856	3,096	-	2,107	3,084	-	-
25	-	4,318	4,092	4,089	3,830	3,946	-	2,310	-	2,909	-	-
26	-	3,480	3,992	3,664	3,801	4,069	2,548	-	-	2,894	-	-
27	-	4,100	4,102	3,454	3,433	4,051	2,626	-	-	2,888	3,380	-
28	-	4,075	4,104	3,364	-	3,986	2,488	-	2,648	2,901	3,204	3,157
29	-	4,067	4,006	3,614	-	3,123	2,576	-	-	-	-	3,297
30	-	-	3,936	3,777	-	3,211	2,923	-	2,206	-	-	3,343
31	-	-	4,085	-	-	-	-	-	-	-	-	3,113

Figure 41. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 3 (mJ/cm²)

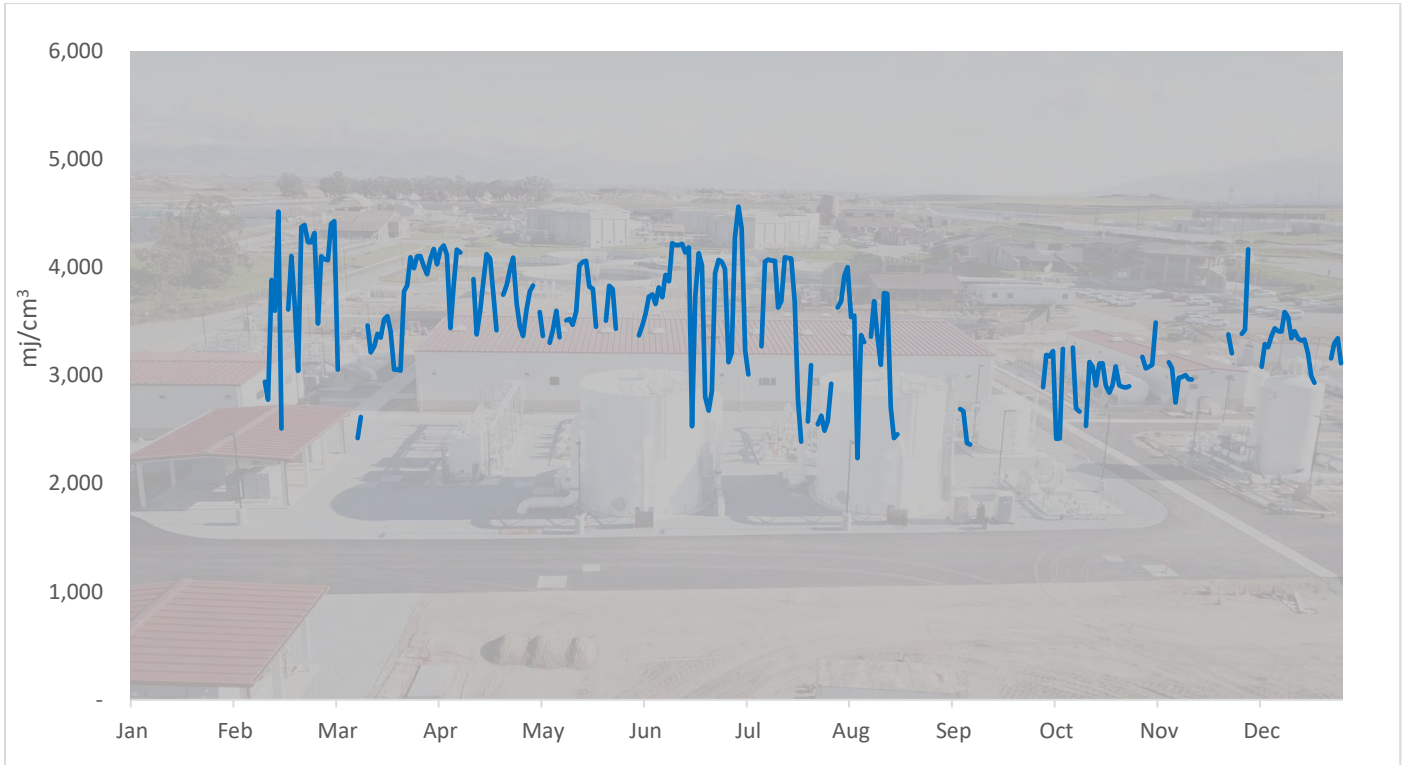


**Table 42. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Daily Minimum UV Dose for Reactor 3 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	3,885	-	-	-	3,702	-	-	-	2,906	3,156
2	-	-	-	3,339	3,704	-	3,697	3,620	-	2,890	2,905	3,186
3	-	-	-	-	-	3,115	4,467	3,645	-	3,191	2,907	3,048
4	-	-	-	4,091	3,461	2,578	3,904	3,626	-	3,176	2,904	-
5	-	-	-	-	2,715	3,516	3,740	3,592	-	3,225	2,906	-
6	-	-	-	3,381	-	3,204	3,658	3,576	-	2,415	-	-
7	-	-	-	-	3,296	3,090	-	3,778	-	2,417	-	3,209
8	-	-	-	-	3,319	2,680	-	-	3,043	3,246	-	3,194
9	-	-	-	2,833	-	3,730	-	3,457	3,872	-	3,071	3,213
10	-	-	-	4,112	-	3,729	3,308	-	4,333	-	2,902	3,215
11	-	-	-	-	-	3,784	3,986	3,952	3,391	3,259	2,646	3,373
12	-	-	-	-	-	3,299	4,010	3,501	-	2,694	2,886	3,371
13	-	-	-	-	-	4,142	4,000	3,656	-	2,665	2,907	3,359
14	-	-	-	-	-	4,150	3,959	3,667	-	-	2,939	3,364
15	-	-	-	-	3,149	4,136	3,766	3,740	-	2,532	2,930	3,479
16	-	-	1,600	-	3,623	4,136	3,679	3,687	2,413	3,125	2,943	2,902
17	-	-	-	-	3,153	4,046	4,011	3,972	-	3,079	-	3,209
18	-	-	-	-	3,780	3,694	4,051	3,472	-	2,904	-	3,084
19	-	-	2,706	-	2,524	3,252	4,039	3,476	-	3,111	-	3,273
20	-	-	-	2,917	3,187	3,318	4,013	3,410	-	3,112	-	3,289
21	-	-	3,007	-	3,005	4,050	-	-	-	2,906	-	2,875
22	-	-	3,031	-	-	3,831	-	-	-	2,839	-	2,885
23	-	-	2,985	-	-	3,092	-	-	2,406	2,909	-	2,909
24	-	-	-	3,801	3,122	2,811	-	3,613	-	3,084	-	-
25	-	-	-	-	3,764	2,745	3,383	-	-	2,909	-	-
26	-	-	3,378	-	2,759	3,676	-	-	-	2,894	-	-
27	-	-	3,871	-	2,890	3,932	3,409	-	-	2,888	2,952	-
28	-	-	-	-	-	3,750	3,330	-	-	2,901	2,947	3,150
29	-	3,866	-	-	-	3,529	3,420	-	3,190	-	-	3,174
30	-	-	-	-	-	3,583	3,687	-	-	-	-	3,260
31	-	-	3,718	-	-	-	3,420	-	-	-	-	2,907

Figure 42. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 3 (mJ/cm²)

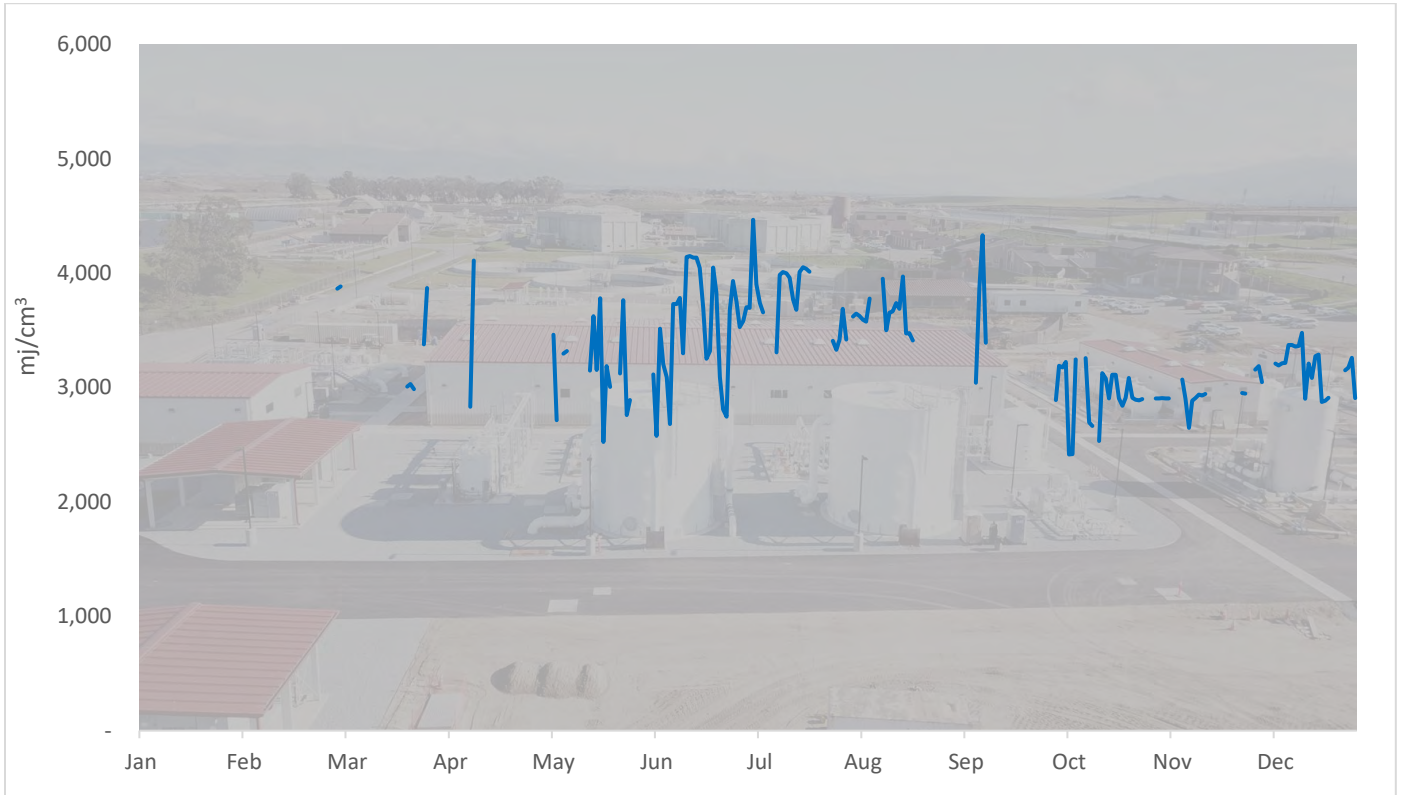


**Table 43. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 3 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	6,164	6,507	4,620	-	5,106	5,583	-	6,135	5,210	5,451
2	-	-	5,842	4,663	-	6,502	5,066	4,004	-	3,718	5,304	6,326
3	-	-	6,488	6,065	6,506	6,494	4,992	5,061	-	5,643	5,578	-
4	-	-	-	4,866	6,486	6,498	6,080	4,861	-	5,791	6,489	5,881
5	-	-	-	5,227	-	4,452	5,736	5,893	-	5,790	-	-
6	-	6,473	-	6,494	6,475	6,527	-	5,952	-	5,578	-	5,457
7	-	-	-	6,503	6,477	6,467	-	5,107	5,999	6,043	-	3,588
8	-	-	-	6,500	4,658	5,358	-	5,509	6,496	-	5,751	3,579
9	-	-	6,518	6,283	6,394	6,500	5,730	6,530	6,328	-	4,968	3,760
10	-	6,507	6,498	-	-	6,500	4,468	-	6,519	5,941	5,252	3,765
11	-	6,492	-	-	6,503	6,500	4,470	5,834	-	6,120	4,489	3,737
12	-	6,501	6,430	-	5,255	4,653	4,449	6,451	-	5,896	3,124	3,742
13	-	6,506	6,532	6,530	6,503	4,587	4,463	5,610	-	-	3,211	6,423
14	-	6,486	6,540	6,515	6,495	4,611	5,691	6,439	-	6,243	3,033	3,871
15	-	6,435	6,498	6,491	6,469	4,617	5,850	5,529	6,070	5,512	6,163	4,888
16	-	-	6,514	5,785	6,389	4,577	4,514	6,151	-	5,805	-	6,472
17	-	6,493	6,418	4,757	5,294	4,614	4,520	6,116	-	3,188	-	5,322
18	-	6,538	6,287	4,685	4,431	6,443	4,491	5,805	-	5,573	-	3,682
19	-	6,507	6,117	6,301	5,524	5,503	5,903	5,418	-	3,360	-	3,660
20	-	6,511	3,387	6,529	6,468	4,497	5,724	-	-	6,393	-	5,465
21	-	6,427	3,354	-	-	4,526	5,877	-	-	5,758	-	5,671
22	-	5,070	3,391	6,451	-	6,092	-	-	6,081	5,912	-	5,105
23	-	6,429	6,482	6,475	6,490	6,466	6,437	6,371	-	3,257	-	-
24	-	6,501	6,533	4,841	4,380	5,909	5,373	-	5,375	3,177	-	-
25	-	5,993	6,434	6,491	6,369	4,729	-	5,681	-	5,592	-	-
26	-	6,513	6,491	6,490	6,513	5,126	5,659	-	-	5,855	6,083	-
27	-	5,536	6,512	6,420	-	4,593	5,625	-	-	6,320	5,890	5,784
28	-	4,726	6,022	6,509	-	6,308	5,572	-	5,654	-	-	4,881
29	-	4,707	6,503	6,423	-	5,949	5,699	-	-	-	-	3,700
30	-	-	6,513	6,508	-	6,536	5,712	-	6,175	-	5,392	4,142
31	-	-	6,495	-	-	-	-	-	-	5,158	-	3,324

Figure 43. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 3 (mJ/cm²)



**Table 44. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Daily Average UV Dose for Reactor 4 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	4,289	3,867	-	2,936	-
2	-	-	-	4,036	-	3,330	-	3,989	3,792	3,009	2,967	-
3	-	-	3,258	-	-	3,590	-	4,231	4,297	3,329	2,997	3,487
4	-	-	2,517	-	3,566	3,711	-	4,322	4,230	2,099	2,966	-
5	-	-	-	-	-	3,492	4,188	4,254	4,197	2,463	3,441	3,386
6	-	4,605	-	-	3,524	-	4,501	4,376	4,434	2,377	2,914	3,336
7	-	4,743	-	-	3,503	3,427	4,442	4,323	4,280	2,290	2,927	3,407
8	-	4,713	-	-	3,655	3,957	4,417	4,313	4,188	3,392	2,931	3,528
9	-	4,697	4,662	-	-	2,759	4,365	4,254	3,994	1,185	3,085	3,503
10	-	4,309	4,505	-	-	2,678	4,499	4,413	4,564	2,403	2,984	3,617
11	-	4,664	4,696	-	-	-	4,518	4,391	4,428	2,428	2,944	3,696
12	-	4,433	4,352	-	-	-	4,513	4,460	4,435	2,867	3,028	3,668
13	-	3,290	3,836	-	2,978	-	4,503	4,130	4,341	2,836	3,141	3,658
14	-	-	3,414	-	3,640	-	4,396	4,258	3,479	2,142	3,169	3,577
15	-	4,473	3,803	-	-	-	4,381	4,257	3,330	1,525	3,122	-
16	-	4,618	3,759	-	-	-	4,540	4,054	4,499	3,342	3,441	-
17	-	4,191	3,957	-	-	-	4,531	4,198	3,404	2,418	3,317	3,525
18	-	2,781	3,908	-	-	-	4,530	3,745	4,077	2,921	3,186	3,337
19	-	3,191	3,970	-	-	-	4,313	4,148	3,941	3,307	3,308	-
20	-	2,999	3,469	4,121	2,807	-	3,851	4,232	4,418	3,311	-	-
21	-	-	3,473	3,968	2,821	-	2,598	4,232	3,911	2,935	3,492	3,380
22	-	-	3,456	3,716	-	3,116	-	4,312	3,162	2,715	3,237	3,212
23	-	4,619	4,056	-	-	-	4,314	4,156	3,491	2,911	3,273	3,430
24	-	4,708	4,275	-	-	-	4,216	4,265	3,404	3,269	3,275	3,495
25	-	4,747	4,696	-	-	-	4,049	3,610	3,427	3,066	3,347	3,483
26	-	2,917	4,675	3,511	3,137	-	4,086	3,766	3,312	2,829	-	3,471
27	-	-	4,704	-	-	-	3,934	3,743	2,107	1,828	3,306	3,462
28	-	-	4,525	-	3,051	3,844	3,686	3,847	3,450	3,428	3,338	3,443
29	-	-	4,082	-	-	2,927	4,041	4,118	-	2,820	3,383	3,423
30	-	-	3,964	-	-	-	4,315	3,817	-	2,793	3,281	-
31	-	-	4,047	-	-	-	4,454	3,951	-	2,944	-	-

Figure 44. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 4 (mJ/cm²)

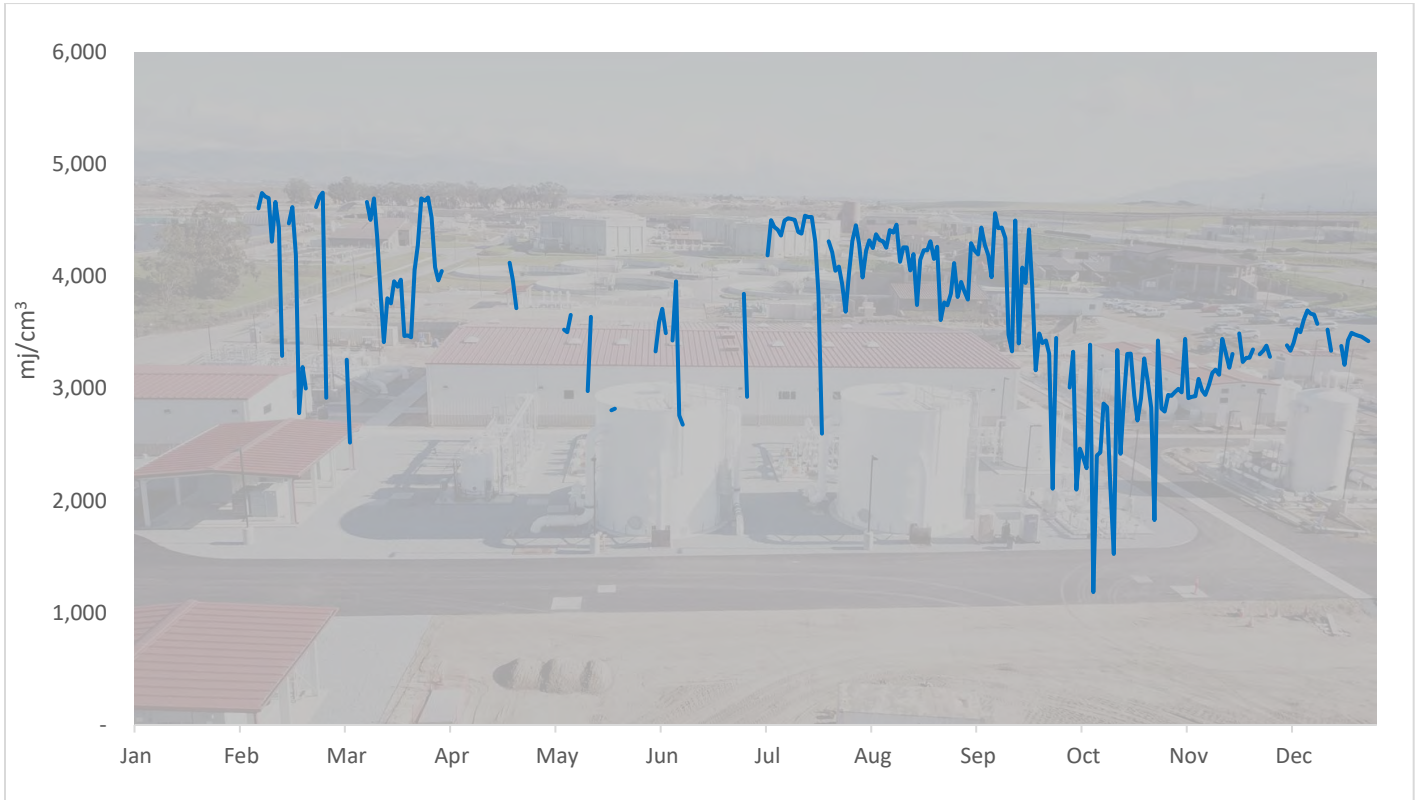


**Table 45. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 4 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	4,342	3,810	-	2,827	-
2	-	-	-	-	-	3,437	-	3,203	2,569	3,009	2,813	-
3	-	-	-	-	-	2,618	-	3,869	2,407	3,329	2,824	1,032
4	-	-	-	-	-	2,144	-	3,874	3,830	2,099	2,727	-
5	-	-	-	-	3,307	3,251	-	3,408	2,958	2,463	2,005	3,261
6	-	-	-	-	-	-	3,155	3,428	2,005	2,377	2,815	3,248
7	-	-	-	-	2,221	2,110	4,364	4,046	2,012	2,291	2,751	3,246
8	-	4,489	-	-	2,024	-	4,284	2,874	2,008	3,392	2,801	3,376
9	-	4,437	-	-	-	6,500	4,242	3,397	1,379	1,185	2,811	3,376
10	-	4,460	-	-	-	6,500	3,132	3,042	2,007	2,403	-	3,401
11	-	-	3,124	-	-	-	4,371	3,268	1,009	2,428	-	3,569
12	-	-	-	-	-	-	4,380	3,271	4,251	2,867	-	3,563
13	-	-	-	-	-	-	4,371	3,107	4,277	2,836	-	3,537
14	-	-	-	-	-	-	4,247	3,190	4,214	2,142	-	3,560
15	-	-	-	-	2,369	-	2,267	4,223	2,365	1,525	-	-
16	-	-	-	-	-	-	4,377	2,596	1,327	3,342	-	-
17	-	-	-	-	-	-	3,953	2,006	-	2,418	2,332	3,249
18	-	-	-	-	-	-	4,423	3,161	3,980	2,921	2,850	2,978
19	-	-	2,462	-	-	-	4,338	1,930	3,974	3,307	3,196	-
20	-	-	-	-	-	-	3,337	2,165	1,154	3,311	3,286	-
21	-	-	3,311	-	2,252	-	-	2,013	4,393	2,935	2,395	3,299
22	-	-	3,317	-	-	3,403	-	4,207	3,019	2,715	-	2,833
23	-	-	3,271	-	-	-	-	4,084	2,105	2,911	-	3,056
24	-	-	-	-	-	-	4,318	2,031	2,764	3,269	-	3,363
25	-	-	-	-	-	-	3,032	3,813	2,923	3,066	3,054	3,365
26	-	-	2,596	-	3,678	-	3,895	3,460	3,299	2,829	3,049	3,379
27	-	-	2,005	-	-	-	3,027	2,017	1,835	1,828	3,077	3,354
28	-	-	-	-	3,539	-	2,515	2,326	-	2,024	-	2,566
29	-	-	-	-	-	-	3,070	2,012	2,596	2,820	-	3,283
30	-	-	-	-	-	-	3,101	3,742	-	2,793	-	-
31	-	-	2,066	-	-	-	3,205	3,418	-	2,944	-	-

Figure 45. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 4 (mJ/cm²)



**Table 46. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Daily Maximum UV Dose for Reactor 4 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	5,422	6,171	6,412	4,587	6,186
2	-	-	-	6,451	-	6,538	-	4,293	6,438	3,897	4,638	6,481
3	-	-	6,530	-	-	6,504	-	5,480	5,041	5,264	4,517	6,494
4	-	-	6,491	-	6,495	5,008	-	5,232	5,022	6,441	6,478	5,816
5	-	-	-	-	-	5,458	5,892	5,983	6,029	6,491	2,993	3,439
6	-	6,511	-	-	6,492	-	4,949	5,644	6,225	6,268	4,739	4,599
7	-	5,574	-	-	6,531	6,462	4,950	5,695	6,489	5,824	4,480	3,865
8	-	5,500	-	-	6,531	6,462	4,876	5,643	6,489	5,312	4,808	3,833
9	-	5,491	6,481	-	-	6,486	5,877	6,515	6,428	6,234	-	4,036
10	-	6,512	6,503	-	-	6,479	4,952	6,227	6,428	4,767	-	4,064
11	-	6,474	6,106	-	-	-	4,981	5,590	5,050	6,401	-	4,036
12	-	6,438	6,192	-	-	-	4,954	6,541	6,001	6,239	-	4,029
13	-	6,528	6,510	-	6,531	-	4,950	6,505	5,722	6,409	-	5,438
14	-	-	6,522	-	6,525	-	6,453	5,590	6,453	6,105	-	-
15	-	6,483	6,522	-	-	-	6,278	6,089	6,409	4,696	-	-
16	-	4,853	6,480	-	-	-	5,040	6,435	6,456	5,349	6,454	6,389
17	-	6,489	6,531	-	-	-	5,038	6,440	6,237	3,444	5,095	6,444
18	-	6,507	6,525	-	-	-	4,980	6,443	4,520	5,174	5,953	-
19	-	6,471	6,527	-	-	-	6,336	6,323	5,254	3,614	3,742	-
20	-	6,482	3,835	6,512	6,530	-	6,467	6,323	6,343	6,470	5,294	5,431
21	-	-	3,890	6,541	6,450	-	5,698	5,009	5,133	5,430	-	4,636
22	-	-	3,851	5,946	-	5,150	-	6,378	6,336	5,587	-	4,566
23	-	6,517	6,540	-	-	-	6,472	6,421	5,394	3,533	-	3,858
24	-	6,479	6,495	-	-	-	4,438	5,783	6,471	3,432	5,983	3,849
25	-	5,657	6,454	-	-	-	4,178	6,391	3,880	4,576	3,527	3,879
26	-	6,513	6,442	6,492	6,532	-	5,497	6,403	4,867	5,776	4,844	3,793
27	-	-	5,671	-	-	-	6,404	5,660	6,271	6,513	-	5,158
28	-	-	6,502	-	6,472	6,524	6,499	6,521	6,450	5,751	-	5,281
29	-	-	6,495	-	-	6,420	6,090	6,268	-	5,363	-	-
30	-	-	6,474	-	-	-	6,158	5,833	-	3,287	-	-
31	-	-	6,474	-	-	-	4,553	6,368	-	3,542	-	-

Figure 46. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 4 (mJ/cm²)



**Table 47. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 5 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	4,228	4,017	-	-	4,479	4,051	-	3,392	2,967	3,344
2	-	-	-	3,895	-	3,417	4,834	4,048	-	2,852	2,997	3,235
3	-	-	3,800	4,081	3,879	3,154	4,690	4,199	-	-	2,966	3,370
4	-	-	4,099	4,221	3,654	-	-	4,264	-	-	3,324	3,382
5	-	-	4,076	4,104	3,905	-	3,848	4,234	-	2,759	2,914	3,320
6	-	3,178	4,076	3,501	3,873	-	-	4,329	4,074	2,258	2,937	3,319
7	-	-	4,066	3,743	3,780	3,294	-	4,208	-	2,419	2,931	3,304
8	-	-	4,053	4,078	3,876	-	-	4,187	3,695	2,753	3,085	-
9	-	-	3,966	4,102	3,732	2,629	3,779	4,263	3,803	2,393	2,984	-
10	-	2,602	3,051	4,637	3,841	2,690	-	4,261	-	2,416	2,944	-
11	-	2,608	-	5,245	3,801	3,811	-	3,991	-	2,417	3,028	-
12	-	3,225	-	5,261	3,786	-	-	4,211	-	-	3,141	-
13	-	3,561	3,382	4,398	3,714	-	-	3,695	-	-	3,169	3,575
14	-	4,627	3,388	3,795	3,761	-	-	-	1,576	2,417	3,122	-
15	-	1,930	3,581	3,482	4,135	-	-	-	-	2,220	3,441	3,263
16	-	-	-	3,807	4,163	-	-	-	2,679	3,319	3,304	3,273
17	-	3,704	-	4,116	4,118	3,668	-	3,453	-	3,251	3,186	3,213
18	-	4,190	2,713	4,097	3,831	3,521	-	3,897	-	2,917	3,304	-
19	-	3,577	-	4,002	3,805	3,960	-	4,120	-	3,304	-	-
20	-	2,879	-	3,922	3,732	-	-	4,359	-	3,312	3,492	3,164
21	-	4,377	-	4,004	3,849	-	-	4,435	-	2,911	3,237	-
22	-	4,365	-	3,909	3,861	3,818	-	4,402	3,143	2,884	3,273	-
23	-	4,365	-	3,935	3,786	3,815	4,173	4,064	3,193	2,916	3,275	-
24	-	-	3,012	-	-	3,969	4,064	1,286	3,768	3,257	3,259	-
25	-	-	3,115	-	-	4,153	4,067	-	-	3,043	-	-
26	-	3,520	2,472	2,175	-	4,273	3,981	2,349	-	2,903	3,306	-
27	-	4,270	-	3,650	-	4,267	4,077	-	3,481	2,526	3,338	-
28	-	4,346	-	3,779	2,189	4,165	4,056	3,474	3,487	2,149	3,383	3,307
29	-	4,334	3,743	3,605	-	4,133	3,910	-	3,727	2,905	3,281	3,449
30	-	-	4,067	3,748	-	3,697	4,181	4,029	3,004	2,901	3,344	3,448
31	-	-	4,027	-	-	-	-	3,627	-	2,915	-	3,113

Figure 47. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 5 (mJ/cm²)

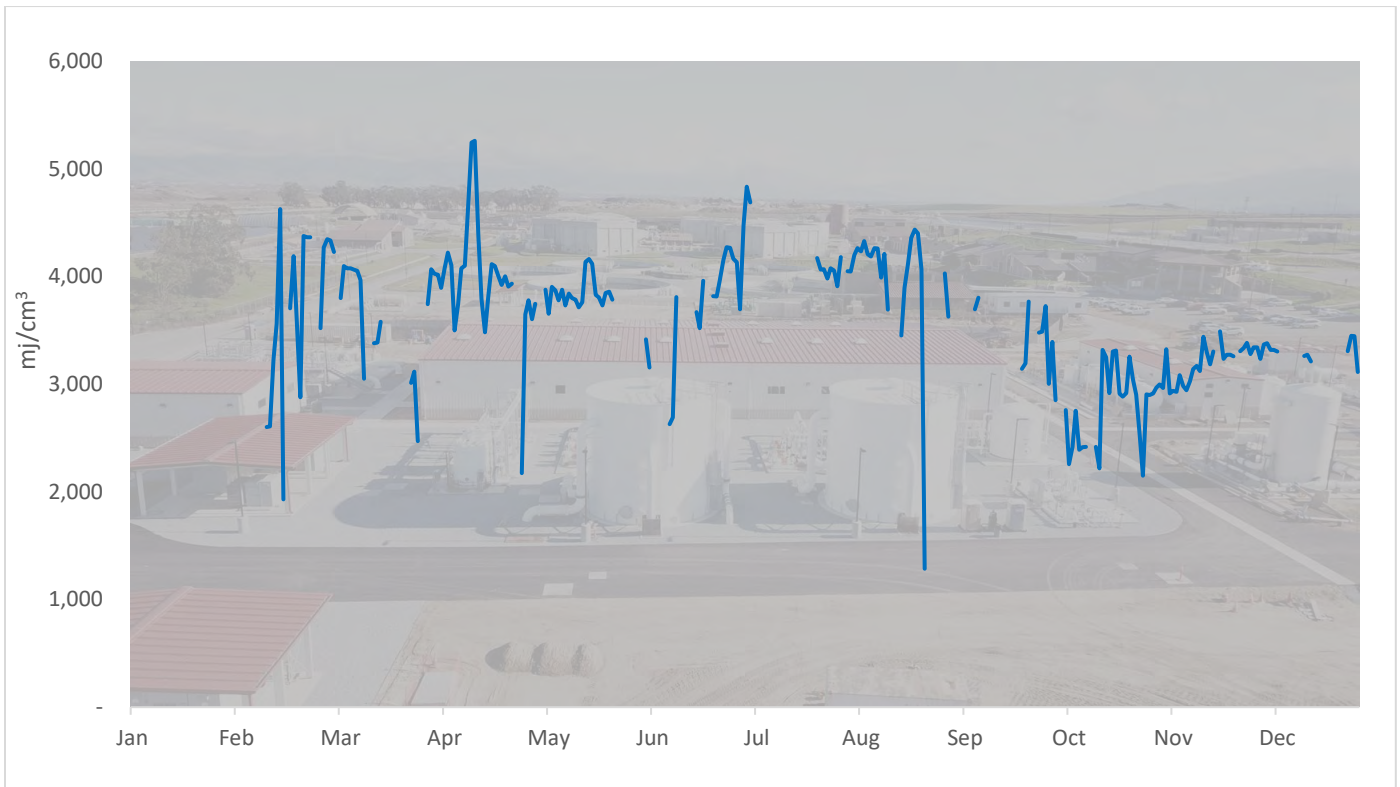


**Table 48. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 5 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	4,127	-	-	-	1,952	-	2,644	3,392	2,906	2,657
2	-	-	-	2,768	-	-	3,866	2,848	-	2,852	2,904	3,242
3	-	-	-	-	-	3,335	4,738	3,991	-	-	2,904	2,767
4	-	-	-	3,920	3,681	2,736	4,080	3,977	-	-	2,900	3,312
5	-	-	3,822	-	3,102	-	-	3,031	-	2,759	2,886	3,240
6	-	-	3,826	3,058	3,631	-	2,840	3,583	-	2,258	2,904	3,225
7	-	-	3,868	-	2,852	-	-	4,163	3,070	2,419	2,902	3,210
8	-	-	3,874	-	2,728	3,224	-	3,091	-	2,753	2,900	-
9	-	-	3,857	3,937	-	-	-	4,110	3,709	2,393	2,904	-
10	-	-	-	4,028	-	6,400	2,798	2,013	2,771	2,416	2,879	-
11	-	-	-	4,203	-	6,487	-	3,011	-	2,417	2,646	-
12	-	-	-	5,030	-	3,818	-	2,869	-	-	2,899	-
13	-	-	-	5,126	-	-	-	3,057	-	-	2,964	-
14	-	-	-	-	-	-	-	2,975	-	2,418	3,096	2,819
15	-	-	-	-	2,825	-	-	-	-	2,220	3,080	-
16	-	-	-	-	2,562	-	-	-	-	3,319	3,094	2,575
17	-	-	-	-	2,875	-	-	-	-	3,251	3,272	3,192
18	-	-	-	-	3,827	3,046	-	2,820	-	2,917	2,461	2,914
19	-	-	2,635	-	2,713	4,086	-	2,473	-	3,304	3,150	-
20	-	-	-	2,985	3,157	3,379	-	2,723	-	3,312	-	-
21	-	-	-	-	3,195	-	-	3,713	-	2,911	3,225	2,583
22	-	-	-	-	3,655	-	-	4,357	-	2,884	3,191	-
23	-	-	-	-	3,788	2,713	2,797	4,338	2,183	2,916	3,064	-
24	-	-	-	2,794	3,629	2,270	2,790	2,931	3,303	3,257	2,768	-
25	-	-	-	-	-	2,185	4,002	-	3,103	3,043	3,322	-
26	-	-	3,069	-	-	3,856	3,983	-	-	2,903	-	-
27	-	-	-	-	-	4,106	2,508	-	-	2,526	2,535	-
28	-	-	-	-	-	3,943	2,692	-	3,399	2,149	3,089	3,394
29	-	4,135	-	-	-	3,640	2,560	2,046	3,278	2,905	3,277	3,284
30	-	-	-	-	-	3,665	3,046	-	3,309	2,901	3,182	3,359
31	-	-	3,509	-	-	-	-	3,269	-	2,915	-	2,906

Figure 48. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 5 (mJ/cm²)

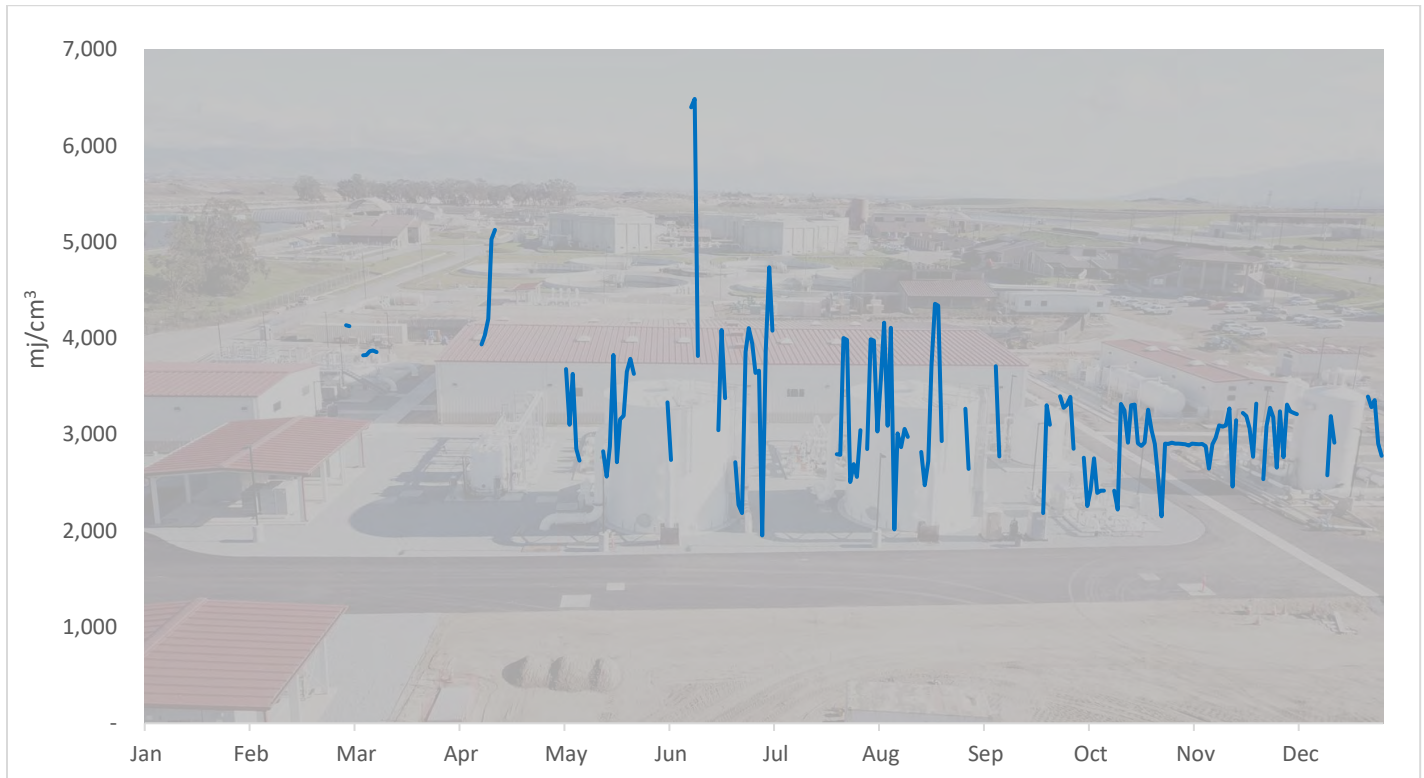


**Table 49. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Daily Maximum UV Dose for Reactor 5 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	5,522	6,528	-	-	5,343	5,843	-	6,324	4,587	6,512
2	-	-	-	6,469	-	6,486	5,386	4,390	-	-	4,708	6,104
3	-	-	6,515	5,894	6,478	6,464	5,565	5,524	-	-	4,810	6,518
4	-	-	4,997	4,900	6,512	-	-	6,240	-	6,095	6,529	6,172
5	-	-	4,964	5,680	5,705	-	6,384	6,036	-	6,338	3,021	3,419
6	-	6,524	4,957	6,511	6,469	-	-	5,586	5,106	6,326	4,837	4,503
7	-	-	4,994	6,510	6,526	6,508	-	6,312	-	6,485	4,533	-
8	-	-	4,922	6,485	4,811	-	-	5,562	6,504	6,479	5,161	-
9	-	-	6,538	6,130	6,527	6,479	6,256	6,380	5,662	6,467	4,458	-
10	-	6,509	6,493	6,386	6,516	6,476	-	6,233	-	6,489	4,738	-
11	-	6,517	-	6,336	5,263	6,278	-	6,287	-	-	4,752	-
12	-	6,515	-	6,302	6,532	-	-	6,323	-	-	3,308	-
13	-	6,528	6,496	6,338	6,525	-	-	6,422	-	6,327	3,411	5,942
14	-	6,477	6,415	6,510	6,536	-	-	-	4,599	6,225	3,210	-
15	-	6,465	6,451	6,485	6,367	-	-	-	-	4,716	6,442	6,165
16	-	-	-	5,791	6,522	-	-	-	6,353	6,316	6,124	6,493
17	-	6,533	-	4,755	5,406	6,134	-	6,374	-	3,439	6,249	6,441
18	-	6,495	6,509	4,756	5,936	6,499	-	6,492	-	5,253	5,582	-
19	-	6,518	-	6,368	6,491	6,072	-	6,496	-	3,585	-	-
20	-	6,378	-	6,063	4,501	-	-	6,276	-	6,516	6,464	6,328
21	-	6,463	-	6,489	6,464	-	-	5,061	-	5,485	3,340	-
22	-	5,120	-	6,476	4,490	6,437	-	6,003	6,237	5,588	3,620	-
23	-	5,389	-	6,523	6,521	6,497	6,347	6,160	6,152	3,435	6,454	-
24	-	-	6,480	-	-	6,281	5,997	3,759	6,388	3,400	5,559	-
25	-	-	6,508	-	-	4,848	4,193	-	-	4,704	-	-
26	-	6,517	6,510	6,500	-	5,342	4,732	5,189	-	6,305	6,197	-
27	-	5,710	-	6,479	-	4,838	6,366	-	6,233	6,243	6,217	6,207
28	-	5,072	-	6,510	6,500	5,676	6,165	5,189	6,303	5,765	6,371	5,255
29	-	5,079	6,533	6,523	-	6,348	6,400	-	6,398	4,545	3,616	3,835
30	-		6,515	5,774	-	6,546	6,389	6,063	5,791	3,200	6,216	4,300
31	-		6,528		-		-	6,317		3,456		4,299

Figure 49. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 5 (mJ/cm²)

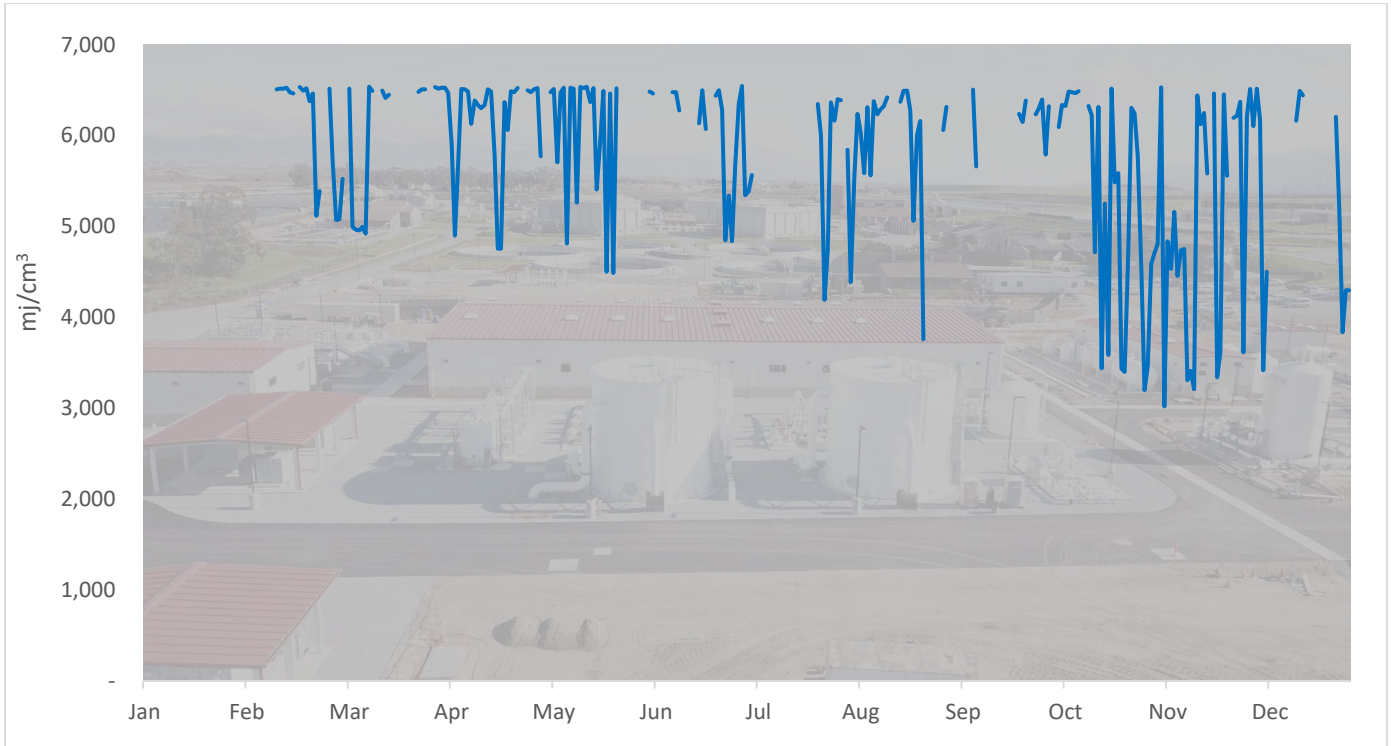


**Table 50. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 6 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	4,338	-	4,253	4,135	4,578	4,186	3,485	-	-	-
2	-	-	4,049	2,978	4,322	3,883	4,901	3,975	3,202	-	-	3,683
3	-	-	3,098	-	4,211	3,892	4,583	3,938	4,311	-	2,582	3,093
4	-	-	-	-	3,885	4,026	3,395	3,908	4,252	4,393	2,959	3,457
5	-	-	-	3,628	4,151	4,053	4,267	3,986	3,978	3,707	-	-
6	-	4,239	-	2,572	4,126	3,988	4,283	3,897	3,360	4,183	-	-
7	-	4,473	-	-	4,094	3,866	4,248	4,144	3,421	-	-	-
8	-	4,446	-	-	4,107	4,035	4,217	3,979	3,557	-	-	-
9	-	4,436	2,613	-	4,033	4,057	3,789	3,862	3,404	-	-	-
10	-	4,144	-	-	4,150	4,097	4,357	3,810	3,626	-	2,814	-
11	-	4,120	-	-	4,057	4,116	4,375	4,091	4,431	4,380	2,977	-
12	-	-	-	-	4,093	4,405	4,373	3,725	4,322	4,541	3,054	-
13	-	2,820	-	-	3,977	4,388	4,361	3,534	4,361	-	3,191	-
14	-	-	-	-	4,032	4,386	4,187	3,223	3,307	-	3,247	-
15	-	4,391	3,350	-	4,498	4,407	4,095	4,120	2,217	-	3,243	-
16	-	4,420	3,404	-	2,724	4,328	4,394	3,968	3,536	-	3,477	-
17	-	4,005	3,455	-	-	4,187	4,389	2,719	3,159	-	-	-
18	-	2,715	3,484	-	3,977	3,087	4,390	2,559	-	-	-	-
19	-	-	-	-	4,079	3,516	4,372	3,039	-	-	-	-
20	-	4,022	-	3,539	4,077	4,315	3,055	-	-	-	-	-
21	-	-	-	4,005	4,137	4,202	-	-	-	-	-	-
22	-	-	-	3,874	4,155	3,436	-	-	2,588	-	-	-
23	-	4,404	-	3,877	4,122	3,025	4,171	3,572	-	-	-	-
24	-	4,398	-	3,978	4,097	3,015	4,144	3,753	1,624	-	3,332	-
25	-	-	-	4,062	4,153	4,200	4,097	3,109	-	-	-	-
26	-	3,317	-	3,816	3,937	4,344	3,724	3,575	-	-	-	-
27	-	4,368	-	3,741	4,235	4,326	3,554	3,726	-	3,714	2,966	-
28	-	4,416	-	3,841	3,984	3,078	3,243	3,602	1,274	-	3,155	-
29	-	4,375	3,328	4,184	4,164	2,862	3,659	3,792	-	-	-	-
30	-	-	3,108	4,265	4,170	3,479	4,025	3,331	3,262	-	-	-
31	-	-	2,614	-	4,147	-	4,302	3,491	-	-	-	-

Figure 50. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Dose for Reactor 6 (mJ/cm²)

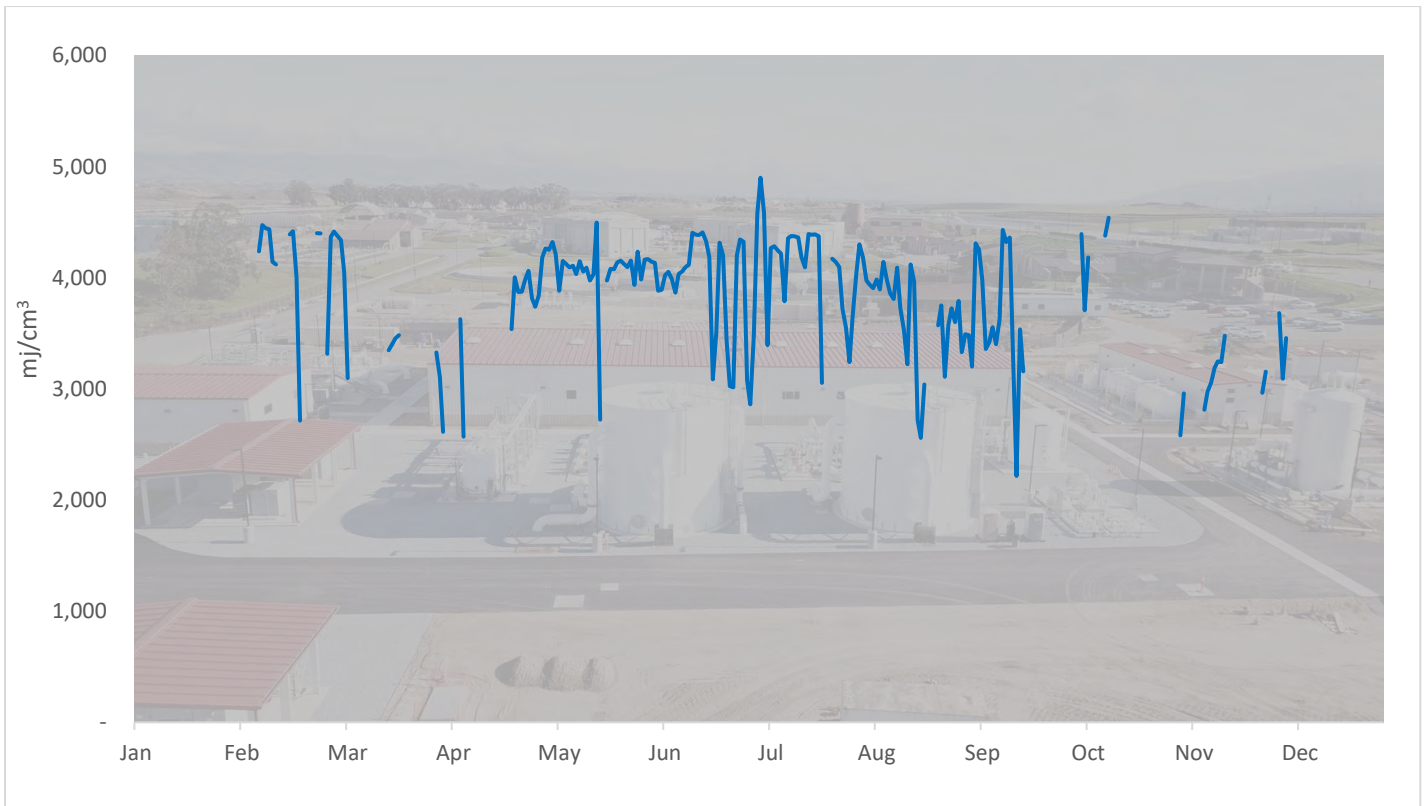


**Table 51. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Daily Minimum UV Dose for Reactor 6 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	4,103	-	-	4,019	2,002	4,278	3,874	2,149	-	-
2	-	-	-	-	3,710	3,044	3,929	3,837	2,694	-	-	3,052
3	-	-	-	-	-	2,865	4,808	3,923	3,321	-	2,269	2,769
4	-	-	-	-	3,497	3,436	4,145	3,902	3,908	-	2,903	3,346
5	-	-	-	-	2,728	3,453	3,585	2,899	4,313	2,418	-	-
6	-	-	-	3,562	3,816	3,265	3,584	2,905	3,377	2,421	-	-
7	-	-	-	-	3,309	3,088	4,214	4,121	2,553	2,871	-	-
8	-	4,216	-	-	3,433	3,941	4,177	2,401	2,761	-	-	-
9	-	4,215	-	-	-	3,429	4,145	2,866	3,068	-	-	-
10	-	4,201	-	-	-	2,669	3,040	4,000	2,601	-	2,327	-
11	-	-	-	-	-	1,807	4,289	2,989	3,161	-	2,826	-
12	-	-	-	-	-	4,334	4,310	3,016	4,376	2,793	2,901	-
13	-	-	-	-	-	4,331	4,304	3,008	3,526	2,766	3,013	-
14	-	-	-	-	2,991	4,316	4,256	3,019	4,350	-	3,174	-
15	-	-	-	-	3,148	4,331	2,802	3,342	3,118	-	3,203	-
16	-	-	-	-	3,750	4,243	4,310	2,780	2,098	-	3,224	-
17	-	-	-	-	-	2,985	4,306	3,417	2,053	-	-	-
18	-	-	-	-	3,906	3,514	4,348	3,354	2,585	-	-	-
19	-	-	-	-	4,045	3,047	4,342	2,689	-	-	-	-
20	-	-	-	-	2,990	4,238	4,305	2,829	-	-	-	-
21	-	-	-	-	3,403	4,023	2,889	-	-	-	-	-
22	-	-	-	-	4,079	3,510	-	-	-	-	-	-
23	-	-	-	-	2,875	2,603	-	-	2,415	-	-	-
24	-	-	-	2,953	4,019	2,906	3,879	2,664	-	-	2,725	-
25	-	-	-	-	3,274	3,907	3,651	3,895	-	-	-	-
26	-	-	-	-	3,045	4,165	4,036	2,958	-	-	-	-
27	-	-	-	-	4,098	3,998	2,432	3,078	-	-	2,732	-
28	-	-	-	-	2,604	4,106	2,823	3,883	-	2,048	3,101	-
29	-	4,184	-	-	4,048	2,565	2,795	2,226	-	-	-	-
30	-	-	-	-	4,040	2,002	2,982	3,077	-	-	-	-
31	-	-	3,366	-	4,047	-	2,743	3,874	-	-	-	-

Figure 51. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Dose for Reactor 6 (mJ/cm²)

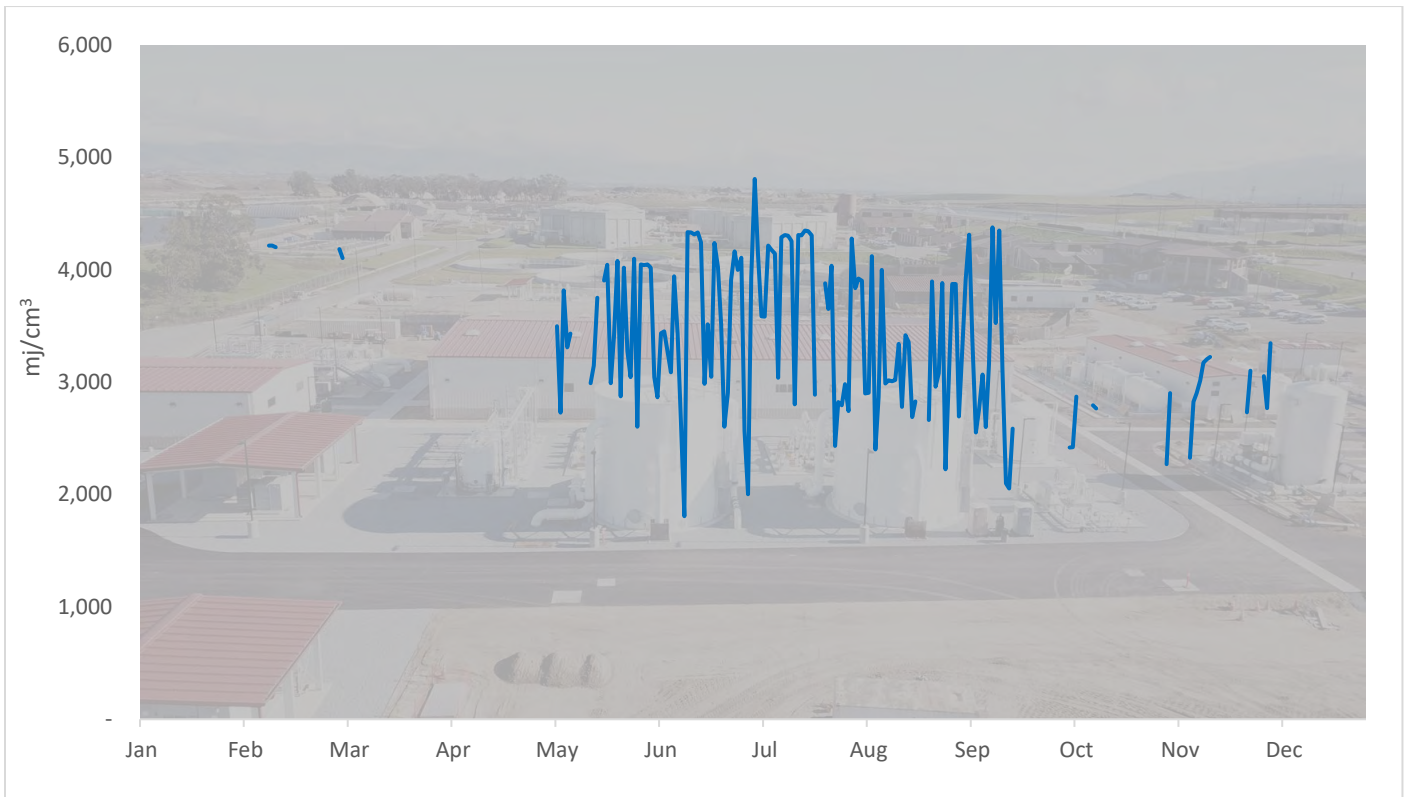


**Table 52. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 6 (mJ/cm²)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	5,987	-	5,793	4,989	5,441	5,274	5,773	-	-	6,494
2	-	-	6,314	6,530	5,261	6,514	5,423	4,277	5,873	-	6,421	6,479
3	-	-	6,538	-	6,442	6,380	5,392	5,518	5,038	-	5,997	5,713
4	-	-	-	-	6,475	5,392	6,514	6,222	5,985	6,367	-	-
5	-	-	-	6,519	6,091	4,911	6,299	6,046	5,871	6,098	-	-
6	-	6,493	-	6,478	6,525	6,491	4,664	5,720	6,515	6,381	-	-
7	-	5,228	-	-	6,491	6,520	4,704	5,720	6,376	-	-	-
8	-	5,201	-	-	5,212	5,456	4,610	5,981	6,474	-	-	-
9	-	5,147	6,511	-	6,509	6,500	5,964	5,936	6,423	-	4,110	-
10	-	6,512	-	-	6,202	6,500	4,787	5,994	6,154	-	4,776	-
11	-	6,458	-	-	5,579	6,500	4,834	6,005	5,077	5,967	4,777	-
12	-	-	-	-	6,545	4,839	4,785	6,418	5,954	6,315	3,355	-
13	-	6,484	-	-	6,454	4,796	4,797	6,073	5,579	-	3,446	-
14	-	-	-	-	6,457	4,798	6,251	6,475	5,831	-	3,329	-
15	-	6,479	6,533	-	5,744	4,812	6,380	5,393	5,967	-	6,341	-
16	-	4,613	6,512	-	6,533	4,755	4,823	6,462	5,967	-	-	-
17	-	6,499	6,327	-	-	6,011	4,840	6,392	5,609	-	-	-
18	-	6,491	5,924	-	6,493	6,336	4,816	6,426	-	-	-	-
19	-	-	-	-	6,472	5,769	5,781	6,403	-	-	-	-
20	-	6,482	-	6,475	5,748	4,711	6,469	-	-	-	-	-
21	-	-	-	6,458	4,791	4,727	-	-	-	-	-	-
22	-	-	-	6,266	4,799	6,387	-	-	6,218	-	-	-
23	-	6,450	-	6,520	4,917	6,439	6,445	6,137	-	-	6,210	-
24	-	5,437	-	4,841	4,698	6,257	4,269	6,020	5,315	-	-	-
25	-	-	-	6,410	5,905	4,926	4,203	6,335	-	-	-	-
26	-	6,522	-	6,513	6,438	5,534	5,812	6,286	-	-	6,390	-
27	-	6,502	-	6,193	5,118	4,968	6,244	5,866	-	6,339	6,398	-
28	-	5,158	-	6,497	6,529	6,521	6,167	6,543	6,172	-	-	-
29	-	5,170	6,534	6,506	5,024	6,263	6,323	6,090	-	-	-	-
30	-	-	6,487	4,887	5,035	6,184	5,778	6,358	6,172	-	-	-
31	-	-	6,516	-	5,001	-	4,399	6,159	-	-	-	-

Figure 52. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Dose for Reactor 6 (mJ/cm²)

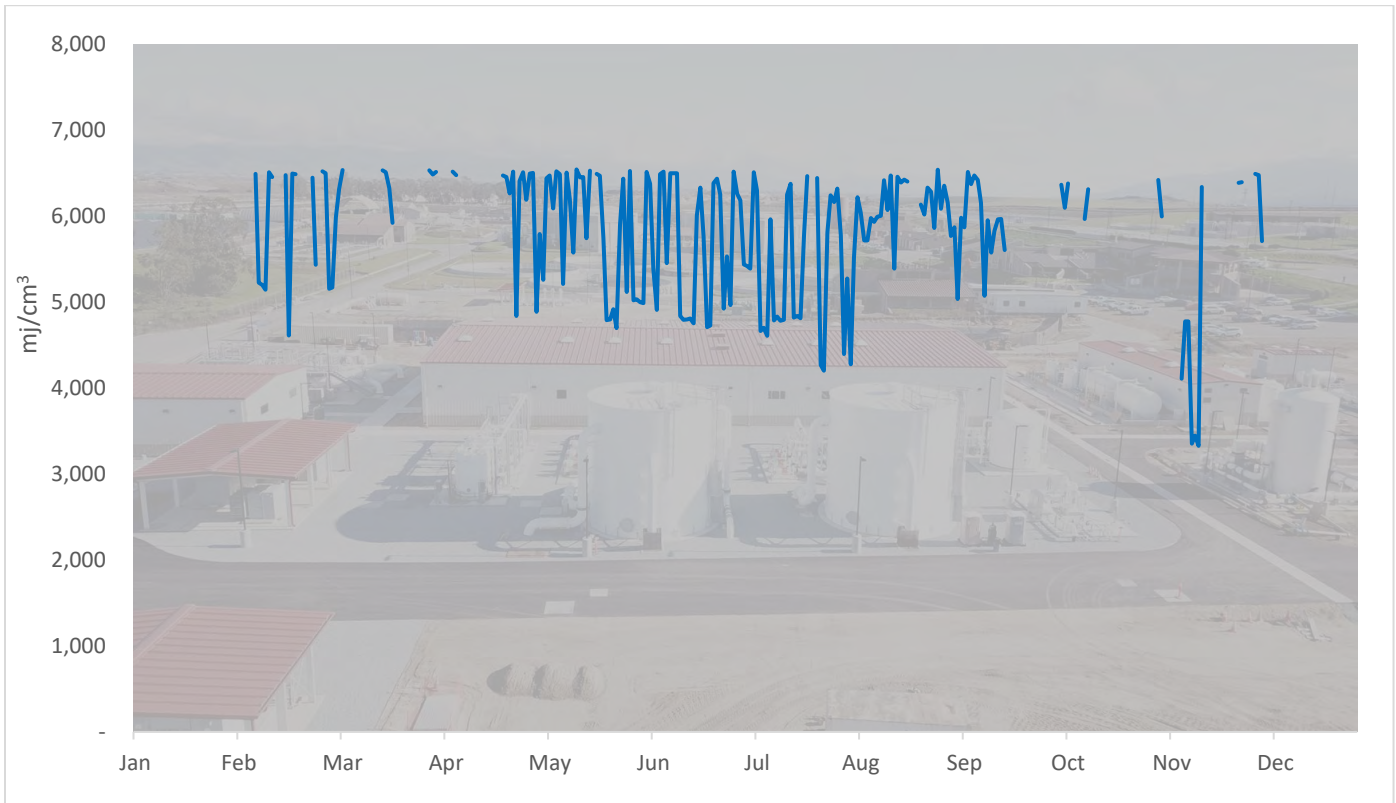


**Table 53. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Transmittance (%)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	98.09	97.40	99.20	99.10	99.00	99.30	99.30	99.01	98.30	98.51
2	-	-	98.82	97.20	98.70	99.10	99.10	99.20	99.20	98.96	98.17	98.56
3	-	-	99.35	97.30	99.10	99.10	99.10	99.00	99.40	99.04	98.24	98.42
4	-	-	98.67	97.60	99.00	99.10	99.00	99.00	99.20	99.06	98.18	98.65
5	-	-	98.11	98.00	98.20	98.90	99.10	99.10	99.30	98.86	98.34	98.64
6	-	97.15	97.72	98.00	98.30	98.70	99.10	99.00	97.30	98.82	98.20	98.54
7	-	98.62	97.64	97.10	98.80	98.80	98.80	99.00	97.30	98.98	98.23	98.56
8	-	97.71	97.68	97.40	98.90	98.80	98.50	99.10	98.30	99.08	98.12	98.62
9	-	97.82	97.74	97.60	99.00	98.80	98.80	99.10	99.30	99.03	98.13	98.60
10	-	97.86	97.63	97.30	99.00	99.00	98.90	98.80	99.30	98.95	98.04	98.57
11	-	98.17	97.62	97.50	99.30	99.00	99.10	99.10	99.50	99.07	98.09	98.66
12	-	97.90	98.11	97.80	99.20	97.30	99.10	99.10	99.40	98.98	98.29	98.66
13	-	98.13	98.48	98.40	99.20	98.80	99.00	99.20	99.40	98.92	98.69	98.67
14	-	97.87	97.05	98.10	97.20	98.80	99.10	99.20	99.40	98.93	98.51	98.68
15	-	95.70	96.86	97.60	99.00	98.90	99.20	99.10	99.30	99.07	98.41	98.67
16	-	97.63	98.11	97.90	99.20	98.90	99.30	99.20	98.90	99.26	98.55	98.56
17	-	97.52	97.43	97.60	99.00	98.80	99.30	99.10	99.20	99.22	98.62	98.65
18	-	97.33	97.46	97.90	98.80	98.80	99.30	99.30	97.20	99.12	98.65	98.21
19	-	97.50	97.51	98.00	98.90	99.00	99.30	99.30	99.30	99.17	98.69	98.28
20	-	97.39	97.39	98.20	98.90	97.40	97.50	99.20	99.40	99.14	98.72	98.32
21	-	97.49	97.32	98.50	99.00	98.70	97.30	99.10	97.40	99.17	99.11	98.21
22	-	97.74	97.46	98.30	98.90	98.70	97.20	99.20	99.20	99.13	99.05	98.18
23	-	97.78	97.65	98.80	98.90	96.90	97.10	99.30	98.70	99.07	98.89	98.19
24	-	97.80	97.87	98.40	98.80	97.40	99.40	99.20	98.70	99.08	98.66	98.27
25	-	97.80	97.79	99.00	98.80	97.70	98.50	99.30	97.40	98.96	98.76	98.25
26	-	97.88	97.65	98.90	98.90	98.60	97.90	99.20	99.00	98.49	98.81	98.35
27	-	97.79	97.50	98.70	99.30	99.00	97.90	99.10	99.00	98.22	98.28	98.45
28	-	98.02	97.89	99.00	99.20	99.10	97.90	99.20	97.50	97.83	98.49	98.49
29	-	97.96	97.79	98.90	99.20	99.20	98.00	97.20	99.00	97.99	98.61	98.47
30	-		98.28	98.90	99.20	96.30	98.30	99.30	97.30	98.03	98.41	98.40
31	-		97.96		99.10		99.30	99.30		98.22		98.18

Figure 53. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average UV Transmittance (%)

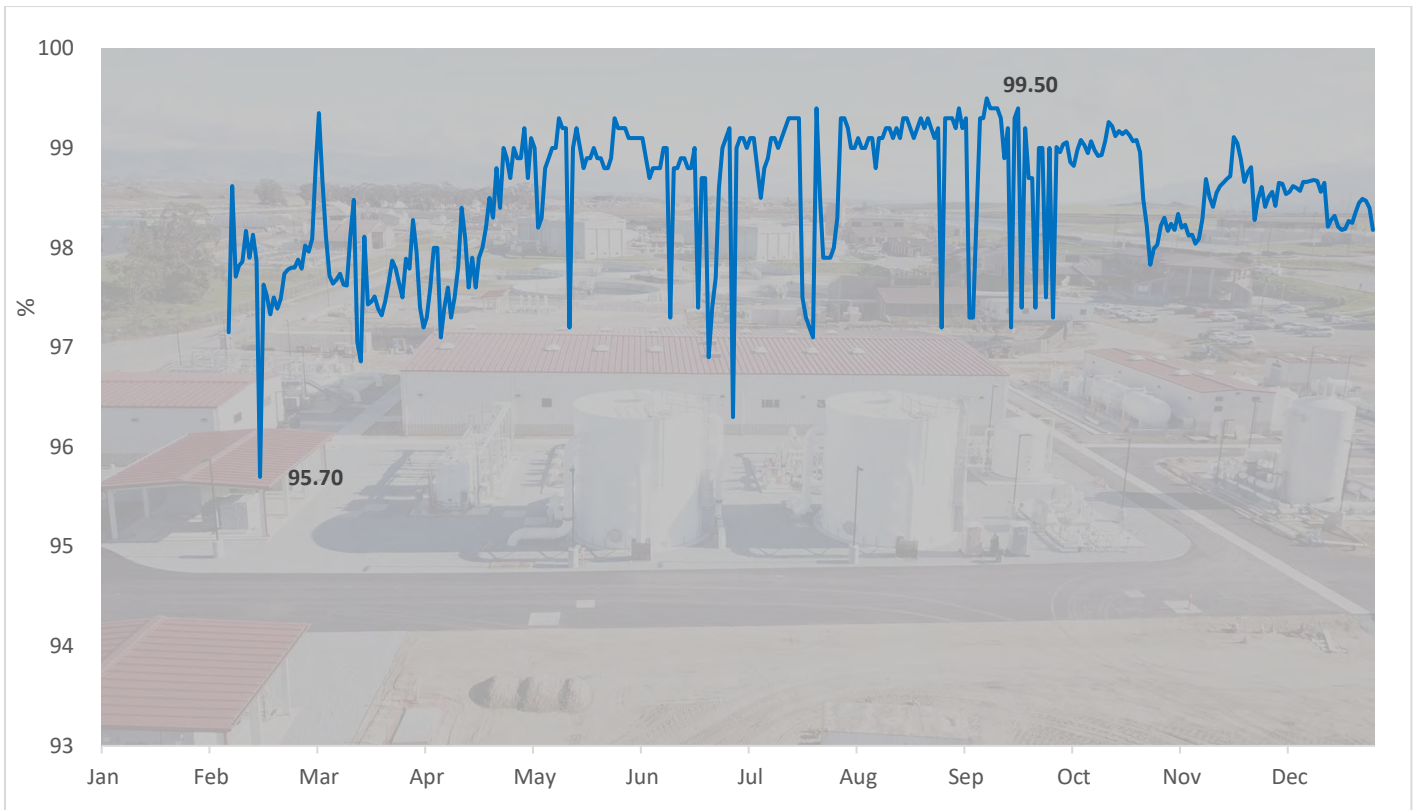


**Table 54. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Transmittance (%)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	97.84	97.40	99.20	99.10	99.00	99.30	99.30	98.96	98.22	98.41
2	-	-	98.28	97.20	98.70	99.10	99.10	99.20	99.40	97.23	98.07	98.38
3	-	-	99.21	97.30	99.10	99.10	99.10	99.10	99.40	99.01	97.91	98.39
4	-	-	98.67	97.60	99.00	99.10	99.00	99.20	99.40	99.04	98.05	98.41
5	-	-	98.11	98.00	98.20	98.90	99.10	99.20	99.40	97.61	98.16	98.64
6	-	97.03	97.56	98.00	98.30	98.70	99.10	99.20	99.50	97.28	98.09	98.54
7	-	98.44	97.59	97.10	98.80	98.80	98.80	99.20	99.30	97.38	97.98	98.38
8	-	97.56	97.47	97.40	98.90	98.80	98.50	99.20	99.10	97.24	98.12	98.49
9	-	97.69	97.74	97.60	99.00	98.80	98.80	99.10	99.40	99.03	97.90	98.55
10	-	97.76	97.63	97.30	99.00	99.00	98.90	99.10	99.30	97.11	98.00	98.51
11	-	97.88	97.36	97.50	99.30	99.00	99.10	99.30	99.50	98.55	97.86	98.54
12	-	97.83	97.88	97.80	99.20	97.20	99.10	99.20	99.40	98.98	98.28	98.54
13	-	97.99	98.48	98.40	99.10	98.80	99.00	99.30	99.50	98.60	98.28	98.56
14	-	97.79	97.01	98.10	97.20	98.80	99.10	99.20	99.40	98.93	98.51	98.62
15	-	95.70	96.71	97.60	99.00	98.90	99.20	99.30	99.50	98.89	98.27	98.60
16	-	95.70	96.64	97.90	99.20	98.90	99.30	99.20	99.00	99.24	98.36	98.53
17	-	97.40	97.38	97.60	99.00	98.80	99.30	99.30	99.30	99.20	98.59	97.16
18	-	97.21	97.29	97.90	98.80	98.80	99.30	99.40	99.40	98.88	98.64	98.21
19	-	97.30	97.34	98.00	98.90	99.00	99.30	99.30	99.40	99.09	98.63	98.21
20	-	97.39	97.39	98.20	98.90	97.30	97.50	99.20	99.50	99.02	98.63	98.15
21	-	96.95	97.25	98.50	99.00	98.70	97.60	99.20	99.60	99.10	98.80	98.14
22	-	96.89	97.41	98.30	98.90	98.70	97.60	99.30	99.20	99.12	99.05	98.18
23	-	97.65	97.50	98.80	98.90	96.90	97.80	99.40	98.70	99.00	98.89	97.99
24	-	97.77	97.87	98.40	98.80	97.40	99.40	99.30	98.90	99.04	98.66	98.16
25	-	97.66	97.79	99.00	98.80	97.70	98.50	99.30	99.20	98.83	98.50	98.14
26	-	97.61	97.63	98.90	98.90	98.60	98.20	99.30	99.00	98.43	98.73	98.13
27	-	97.78	97.50	98.70	99.30	99.00	98.20	99.40	99.10	98.21	98.28	98.36
28	-	97.74	97.82	99.00	99.20	99.10	98.20	99.30	99.10	97.73	98.00	98.36
29	-	97.85	97.46	98.90	99.20	99.20	98.40	99.40	99.00	97.98	98.61	98.38
30	-		98.16	98.90	99.20	96.30	98.80	99.30	99.10	97.83	98.31	98.31
31	-		97.96		99.10		99.00	99.30		97.97		98.18

Figure 54. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum UV Transmittance (%)

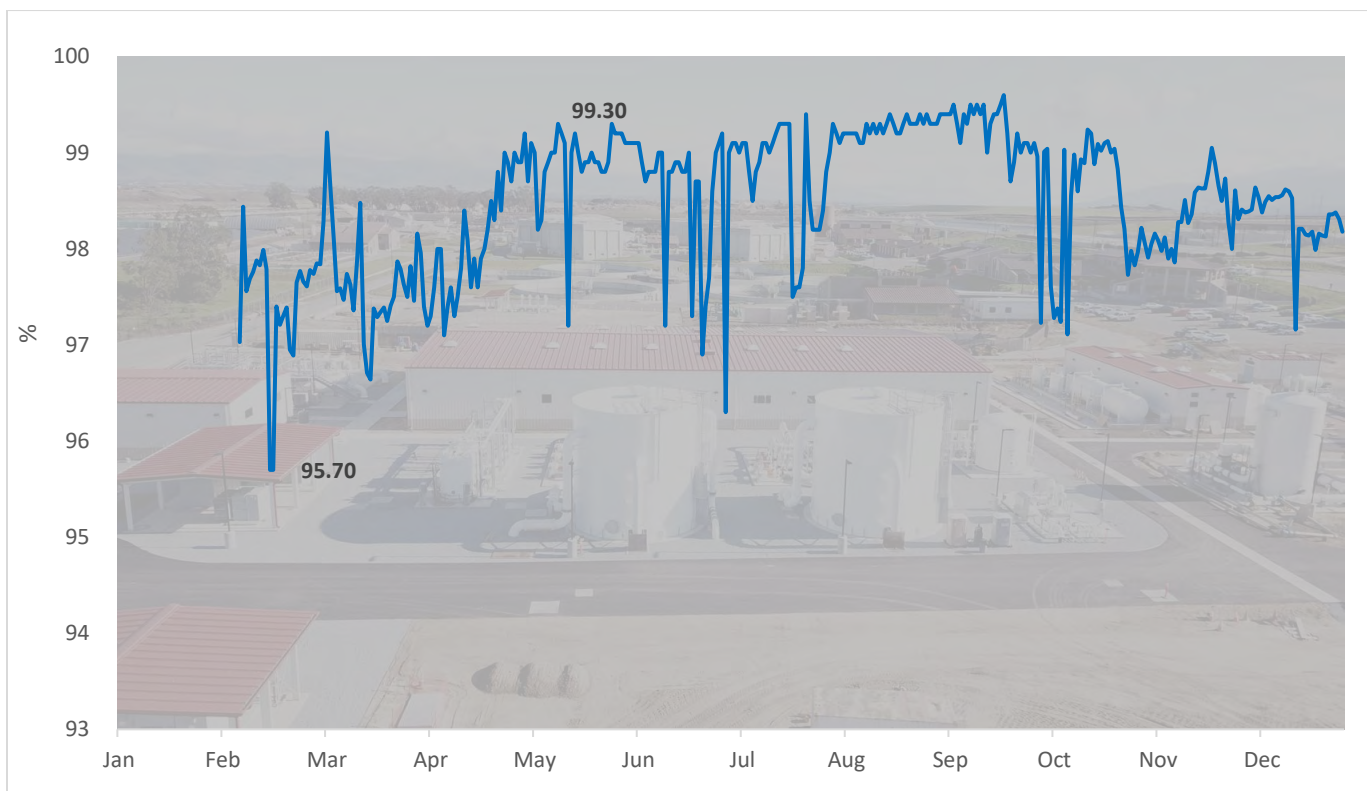


**Table 55. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Transmittance (%)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	98.09	97.40	99.20	99.10	99.00	99.30	100.00	99.03	98.43	98.54
2	-	-	98.82	97.20	98.70	99.10	99.10	99.30	99.40	99.96	98.20	98.59
3	-	-	99.37	97.30	99.10	99.10	99.10	99.10	99.50	99.09	98.24	98.51
4	-	-	99.62	97.60	99.00	99.10	99.00	99.20	99.40	99.06	98.24	98.65
5	-	-	98.65	98.00	98.20	98.90	99.10	99.20	99.40	100.00	98.43	98.80
6	-	97.47	97.74	98.00	98.30	98.70	99.10	99.20	100.00	99.97	98.21	98.64
7	-	99.71	97.67	97.10	98.80	98.80	98.80	99.20	99.90	100.00	98.23	98.56
8	-	97.72	97.70	97.40	98.90	98.80	98.50	99.30	99.10	100.00	98.29	98.62
9	-	97.84	97.74	97.60	99.00	98.80	98.80	99.20	99.40	99.16	98.20	98.66
10	-	97.89	97.90	97.30	99.00	99.00	98.90	99.10	99.40	100.00	98.19	98.68
11	-	98.25	97.62	97.50	99.30	99.00	99.10	99.30	100.00	99.07	98.09	98.67
12	-	97.97	98.11	97.80	99.20	97.30	99.10	99.20	100.00	99.19	98.34	98.67
13	-	98.35	98.94	98.40	99.30	98.80	99.00	99.30	99.50	98.92	98.70	98.67
14	-	98.36	97.26	98.10	97.20	98.80	99.10	99.30	100.00	99.13	98.67	98.70
15	-	95.70	96.86	97.60	99.00	98.90	99.20	99.30	99.70	99.07	98.41	98.69
16	-	99.04	98.74	97.90	99.20	98.90	99.30	99.50	99.30	99.27	98.55	98.64
17	-	97.54	97.47	97.60	99.00	98.80	99.30	99.30	99.30	99.26	98.66	99.31
18	-	97.49	97.49	97.90	98.80	98.80	99.30	99.40	99.90	99.19	98.69	98.44
19	-	97.50	97.57	98.00	98.90	99.00	99.30	99.50	99.40	99.18	98.69	98.29
20	-	97.84	97.52	98.20	98.90	97.40	97.50	99.50	99.50	99.14	98.72	98.34
21	-	97.49	97.39	98.50	99.00	98.70	97.60	99.20	100.00	99.19	99.11	98.23
22	-	98.12	97.46	98.30	98.90	98.70	97.70	99.30	99.40	99.15	99.22	98.31
23	-	97.79	97.85	98.80	98.90	96.90	97.80	99.40	98.90	99.10	98.96	98.19
24	-	97.84	97.87	98.40	98.80	97.50	99.50	99.40	98.90	99.12	98.85	98.28
25	-	97.84	97.79	99.00	98.80	97.70	98.90	99.30	99.90	99.01	98.76	98.25
26	-	97.88	97.74	98.90	98.90	98.60	98.20	99.40	100.00	98.59	98.83	98.35
27	-	97.94	97.59	98.70	99.30	99.00	98.20	99.40	99.10	98.58	98.74	98.48
28	-	98.03	99.03	99.00	99.20	99.10	98.20	99.90	100.00	98.02	98.49	98.49
29	-	98.06	97.79	98.90	99.20	99.20	98.40	100.00	99.20	98.30	98.94	98.50
30	-		98.53	98.90	99.20	96.30	98.80	100.00	100.00	98.03	98.45	98.46
31	-		98.15		99.10		99.30	100.00		98.22		98.38

Figure 55. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum UV Transmittance (%)

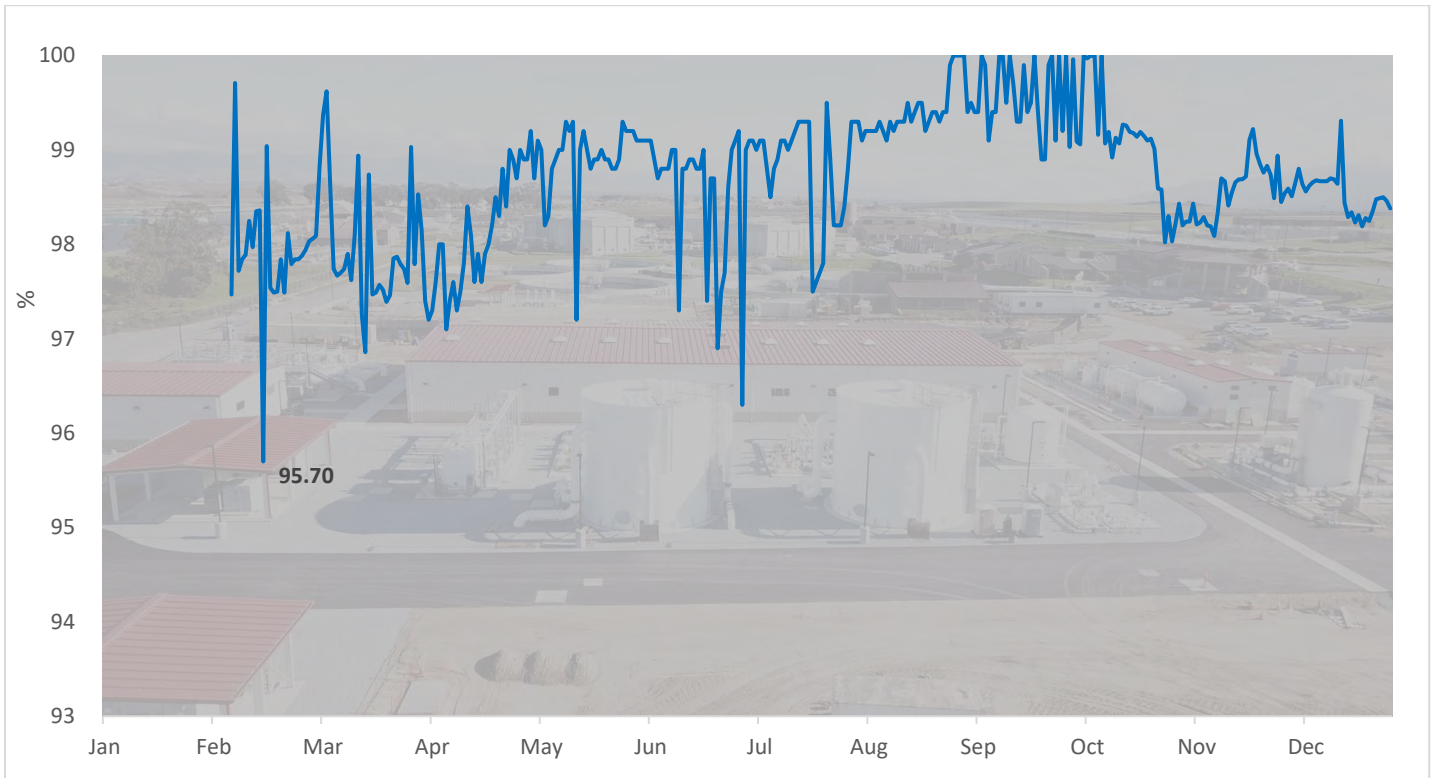


**Table 56. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average pH**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	8.49	8.18	8.59	8.30	8.37	8.01	8.35	8.67	8.31	7.74
2	-	-	7.74	8.40	8.60	7.49	8.58	8.11	8.43	8.73	8.46	8.02
3	-	-	7.37	8.60	7.78	7.40	8.53	8.25	8.35	8.26	8.18	8.18
4	-	-	6.79	8.50	7.90	7.20	8.59	8.15	8.32	8.25	8.44	8.16
5	-	-	7.45	8.40	8.60	7.70	8.21	8.11	8.35	7.35	8.76	8.30
6	-	8.60	7.57	8.10	8.50	7.70	8.45	8.22	8.49	8.46	8.35	8.22
7	-	8.66	7.40	8.10	8.40	7.80	8.43	8.19	8.43	6.75	8.63	7.87
8	-	8.58	7.54	8.00	8.60	7.90	8.53	8.24	8.35	8.13	8.60	8.15
9	-	8.42	7.58	8.60	8.40	8.30	8.50	8.21	8.16	8.42	8.52	8.17
10	-	8.46	8.06	8.50	8.50	8.50	8.54	8.14	7.92	8.56	8.06	8.32
11	-	8.23	8.47	8.35	8.30	8.60	8.51	8.15	8.12	9.04	8.47	8.13
12	-	7.14	8.25	8.30	8.50	8.70	8.49	8.18	8.44	8.62	8.25	8.11
13	-	7.99	8.79	8.40	8.60	8.13	8.57	7.85	8.45	8.50	8.21	8.45
14	-	7.91	8.63	8.50	8.60	8.50	8.47	8.14	8.42	8.17	8.25	8.10
15	-	8.65	8.73	8.50	8.60	8.40	8.51	8.31	8.27	8.50	8.17	8.05
16	-	8.17	7.07	7.80	8.00	8.30	8.56	8.33	8.32	8.44	8.31	8.34
17	-	8.29	8.69	8.62	8.50	8.30	8.57	8.35	8.36	8.36	8.44	7.95
18	-	8.61	8.73	8.40	8.30	8.20	8.55	8.33	8.30	8.36	8.05	8.14
19	-	8.31	8.72	8.50	8.40	7.70	8.57	8.45	8.36	8.40	8.29	8.30
20	-	8.20	8.72	8.00	8.30	7.70	8.39	8.33	8.33	8.27	8.36	8.09
21	-	8.51	8.68	8.10	8.40	8.51	7.89	8.35	8.54	8.19	8.49	7.81
22	-	8.27	8.55	7.95	8.40	8.50	8.22	8.42	8.48	8.50	8.56	7.91
23	-	8.34	8.55	8.30	8.34	8.60	8.14	8.41	8.03	8.41	8.39	8.11
24	-	8.36	8.38	8.10	8.10	8.50	8.19	8.41	7.59	8.27	8.07	8.11
25	-	8.63	8.59	8.10	8.00	8.20	7.95	8.40	8.31	8.60	8.02	8.43
26	-	8.09	8.73	8.13	7.90	8.40	7.85	8.34	8.64	8.58	8.27	8.20
27	-	7.82	8.75	8.10	7.40	8.38	7.84	8.41	8.68	8.41	8.19	8.19
28	-	7.86	8.49	8.30	7.70	8.40	8.07	8.39	8.75	8.60	8.26	8.10
29	-	8.38	8.57	8.30	8.34	8.50	8.22	8.25	8.71	8.46	8.47	8.28
30	-		7.18	8.10	7.30	8.80	8.07	8.43	8.64	8.46	8.15	7.97
31	-		7.87		8.30		8.30	8.33		8.24		7.89

Figure 56. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average pH

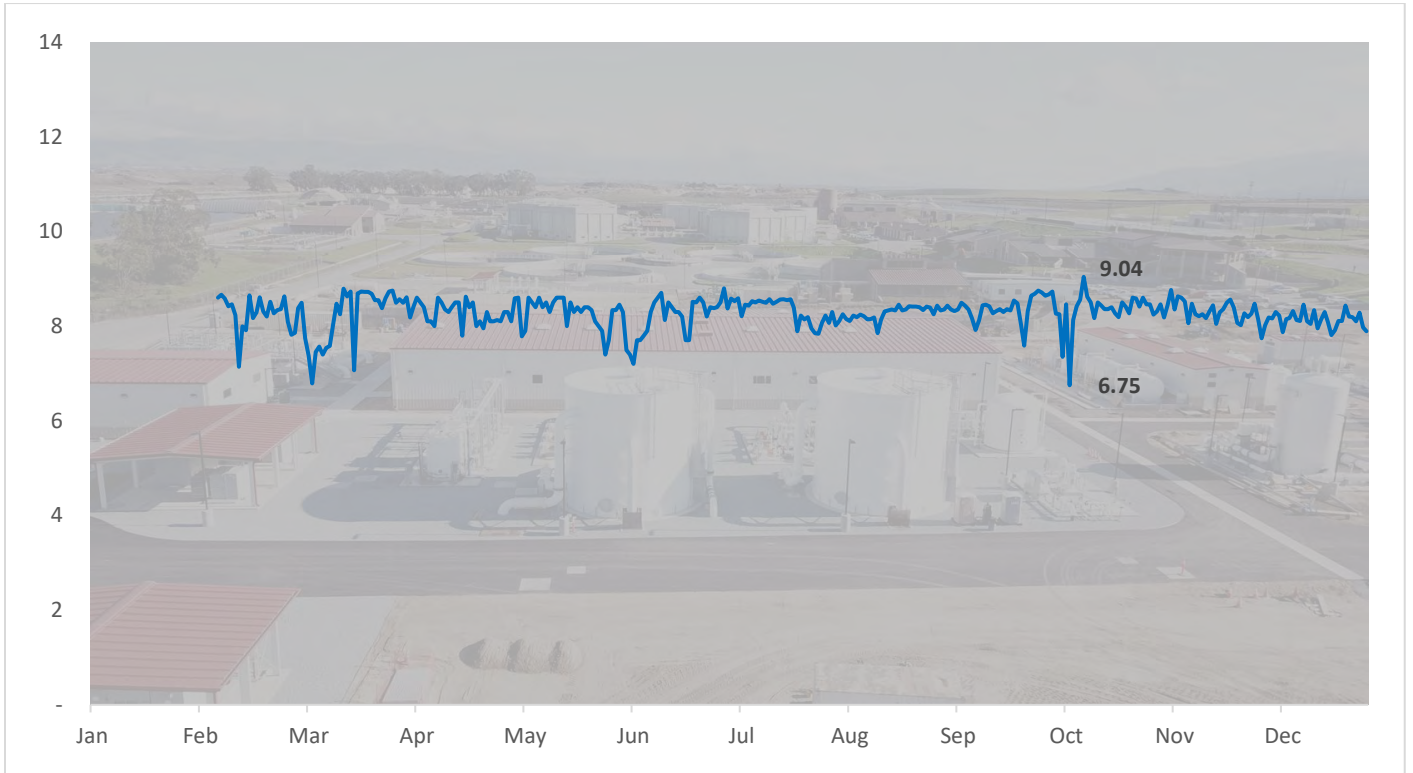


**Table 57. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum pH**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	8.30	7.39	8.38	7.70	7.43	7.87	7.92	8.32	7.92	7.22
2	-	-	7.23	8.60	7.70	7.38	8.42	7.89	7.85	8.17	8.04	7.63
3	-	-	7.24	8.80	7.67	7.10	8.32	8.07	7.87	8.17	7.64	7.84
4	-	-	6.50	8.30	7.70	6.60	8.35	7.98	8.17	8.16	7.67	7.79
5	-	-	6.58	8.30	6.70	7.60	7.66	7.80	8.20	7.10	8.06	7.80
6	-	6.92	7.44	8.30	8.30	7.60	8.10	8.01	8.24	7.32	8.01	7.92
7	-	7.56	7.33	7.90	8.30	7.40	8.09	7.88	8.27	6.30	8.16	7.69
8	-	8.53	7.36	8.30	7.70	7.30	8.33	7.89	7.67	7.02	8.27	7.78
9	-	8.33	7.50	8.40	8.30	8.10	8.29	7.99	7.10	7.95	7.80	8.04
10	-	8.35	7.28	8.20	8.30	8.20	8.28	7.81	6.43	7.84	6.43	8.01
11	-	7.11	8.15	8.09	7.60	8.30	8.34	7.81	6.98	8.36	7.96	7.67
12	-	6.71	7.75	8.20	8.30	6.60	8.28	7.98	8.29	7.94	7.94	7.64
13	-	6.57	8.51	8.30	7.70	6.60	8.27	7.68	8.20	7.79	7.66	8.11
14	-	6.65	7.72	8.30	7.70	8.30	8.29	7.45	8.22	7.42	7.81	7.64
15	-	7.10	7.93	8.20	7.40	8.30	7.67	7.49	7.95	7.66	7.91	7.46
16	-	7.77	6.67	6.50	7.90	8.20	7.99	7.41	7.77	7.21	8.06	7.79
17	-	7.51	7.77	7.99	7.60	8.10	8.47	7.82	8.20	7.52	8.15	7.23
18	-	7.98	8.55	8.50	8.10	7.80	8.36	7.76	8.15	7.24	7.67	7.90
19	-	7.07	8.16	8.60	8.20	7.60	8.42	7.69	8.20	7.53	7.68	7.84
20	-	6.95	8.65	7.47	8.10	7.60	6.86	7.73	8.22	7.69	8.12	7.90
21	-	7.26	8.42	7.90	8.11	8.40	6.69	7.71	8.26	7.04	8.15	7.04
22	-	7.75	8.36	7.47	8.10	7.80	8.03	8.09	8.27	8.06	8.48	7.07
23	-	8.07	8.33	7.70	8.00	7.60	7.92	8.04	7.05	7.97	8.20	7.54
24	-	7.47	8.12	8.50	7.90	8.20	7.96	8.00	7.38	7.12	7.53	7.71
25	-	8.13	8.16	7.80	7.90	8.10	7.84	7.97	7.60	8.34	7.15	8.28
26	-	7.49	8.27	7.76	7.40	8.10	7.74	8.00	8.51	8.22	7.95	7.91
27	-	7.10	7.55	8.40	7.20	8.10	7.68	8.01	8.53	7.04	7.61	7.92
28	-	7.40	7.82	7.80	7.50	8.20	7.55	8.19	8.53	7.41	7.76	7.57
29	-	8.18	8.29	8.60	7.32	8.00	7.46	7.90	8.46	8.13	7.99	8.04
30	-		7.18	7.90	7.30	7.20	7.73	8.09	8.41	7.93	7.79	7.78
31	-		7.87		8.30		7.78	7.80		7.22		7.22

**Figure 57. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum pH**



**Table 58. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum pH**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	8.62	8.86	8.73	9.00	8.85	8.17	8.83	9.37	8.93	9.06
2	-	-	8.42	8.90	8.70	7.68	8.82	8.75	8.59	10.02	8.87	8.57
3	-	-	8.10	9.00	7.91	7.60	8.73	8.48	8.55	8.39	8.81	9.25
4	-	-	8.41	9.30	8.90	8.20	8.93	8.49	8.45	8.39	9.12	8.59
5	-	-	7.62	8.60	8.70	8.40	8.70	8.50	8.44	8.54	9.49	8.65
6	-	9.08	7.81	8.60	8.70	8.00	8.99	8.52	9.19	9.49	8.87	8.53
7	-	8.92	7.54	8.80	8.80	7.90	8.95	8.88	8.59	9.52	8.89	8.35
8	-	8.72	7.65	8.60	8.70	8.60	8.81	9.75	8.59	10.40	9.22	8.41
9	-	8.62	7.65	9.80	8.80	8.80	8.70	8.47	9.69	9.26	9.30	8.34
10	-	8.63	8.81	8.70	8.90	8.80	8.85	8.61	8.80	9.13	8.70	8.59
11	-	8.84	8.81	8.60	8.70	8.90	8.70	8.79	8.57	9.93	9.03	8.45
12	-	7.51	8.62	8.40	8.80	8.90	8.64	8.59	8.56	9.09	8.74	8.51
13	-	9.09	9.02	8.50	8.60	8.60	9.17	8.23	8.59	9.06	8.78	8.65
14	-	8.75	8.90	8.90	8.80	8.70	8.69	9.81	8.86	9.07	8.66	8.35
15	-	8.81	9.23	8.73	8.80	8.80	8.88	8.48	8.47	9.38	8.65	8.36
16	-	8.92	9.11	8.90	8.60	8.70	9.27	8.52	9.29	9.05	8.67	8.99
17	-	8.89	9.03	8.60	8.60	8.40	8.72	8.56	8.53	10.00	8.66	8.92
18	-	9.19	9.14	8.70	8.70	8.70	8.71	9.08	8.50	9.27	8.27	8.52
19	-	8.95	8.98	8.70	9.00	9.50	8.68	10.30	8.51	9.16	8.75	8.60
20	-	9.11	8.95	8.30	8.80	8.70	9.03	8.66	8.48	9.18	8.71	8.54
21	-	9.05	8.80	8.70	8.82	8.70	8.54	8.69	9.30	8.93	8.86	9.87
22	-	8.84	8.71	8.60	8.60	8.70	8.52	8.59	9.00	8.98	8.65	8.52
23	-	8.58	8.74	8.70	8.60	8.80	9.31	8.70	8.57	8.97	8.65	8.74
24	-	8.83	8.84	8.70	8.40	10.40	9.45	8.62	8.50	8.63	8.84	8.73
25	-	9.06	8.98	8.50	8.50	8.70	8.16	8.58	9.05	9.13	8.48	8.60
26	-	8.72	8.94	8.46	8.10	8.90	8.80	8.69	9.02	8.99	8.42	8.46
27	-	8.60	9.45	8.50	8.40	8.60	8.05	9.02	8.85	10.20	9.45	8.49
28	-	8.63	8.83	8.80	7.90	9.10	8.58	8.57	9.24	9.69	8.68	9.07
29	-	8.62	8.72	8.70	8.79	8.90	8.69	8.55	9.19	9.04	8.86	8.79
30	-		8.90	8.70	8.80	9.30	8.42	8.67	8.84	9.64	8.31	8.15
31	-		8.90		8.70		9.40	8.51		8.72		8.77

**Figure 58. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum pH**

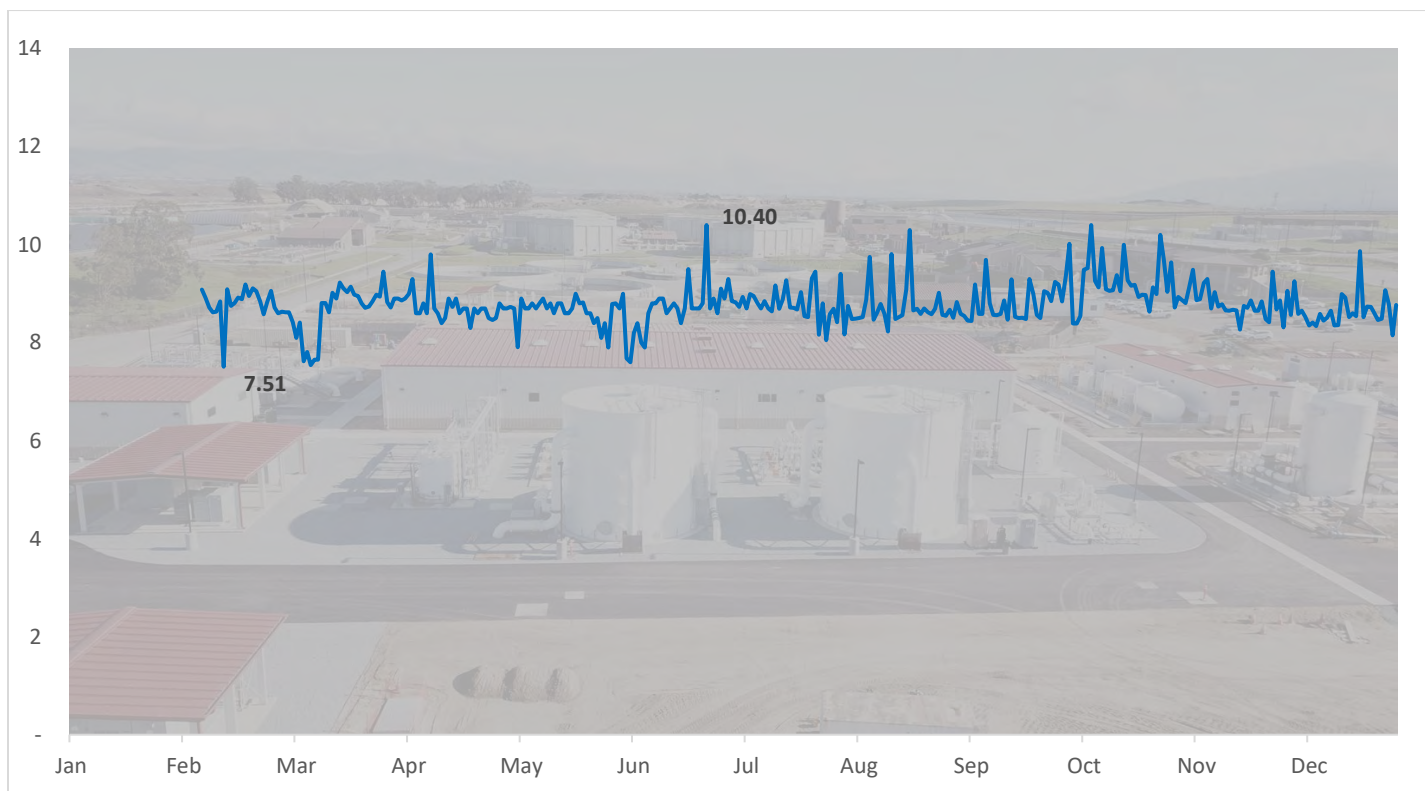


**Table 59. AWPf Product Water Monitoring
Monthly Arsenic (ug/L)**

Month	Arsenic ug/L
January	-
February	ND 1.00
March	ND 1.00
April	ND 1.20
May	ND 1.20
June	ND 1.00
July	ND 1.00
August	ND 1.00
September	ND 1.00
October	ND 1.00
November	ND 1.00
December	ND 1.00

**Figure 59. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Arsenic (ug/L) – N/A**

All monitoring results were ND.

**Table 60. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Boron (ug/L)**

Month	Boron ug/L
January	-
February	0.09
March	0.18
April	0.18
May	0.24
June	0.2
July	0.16
August	0.32
September	0.2
October	0.25
November	0.27
December	0.23

**Figure 60. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Boron (ug/L)**

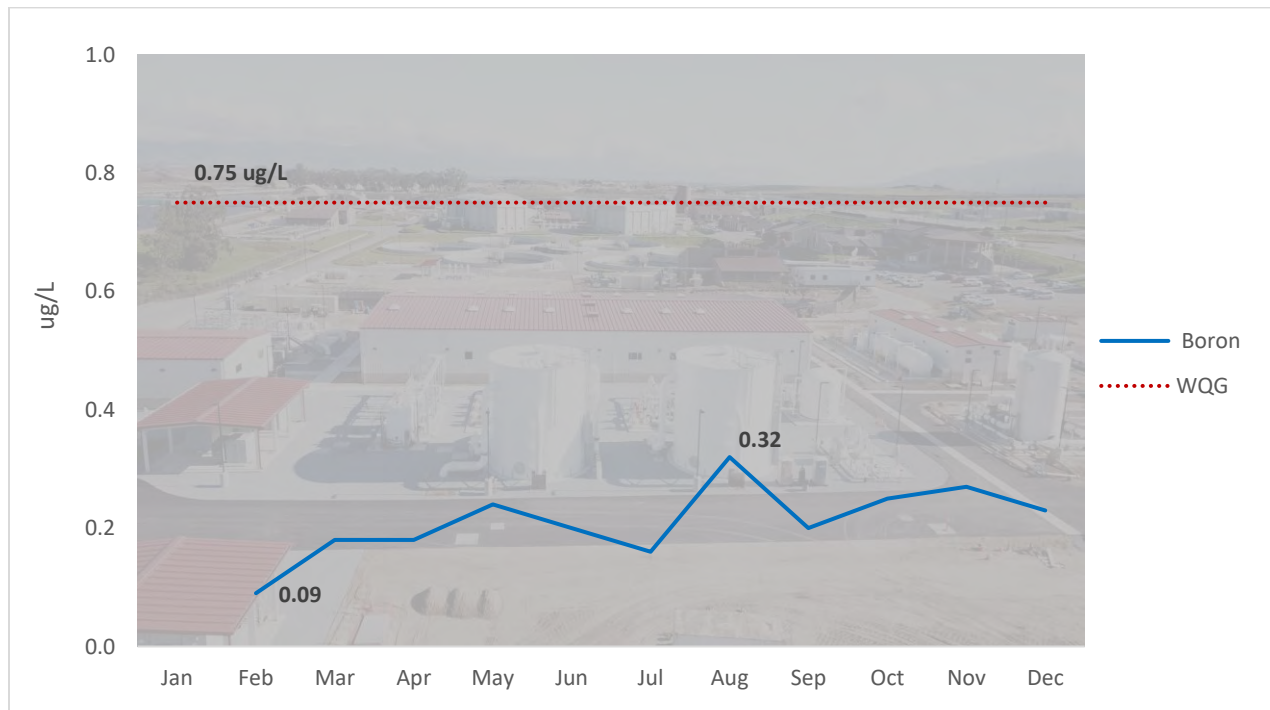


**Table 61. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Chloride (mg/L)**

Month	Chloride mg/L
January	-
February	7.59
March	7.77
April	10.03
May	8.92
June	9.65
July	10.6
August	11.48
September	10.05
October	28.2
November	35.79
December	35.31

**Figure 61. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Chloride (mg/L)**

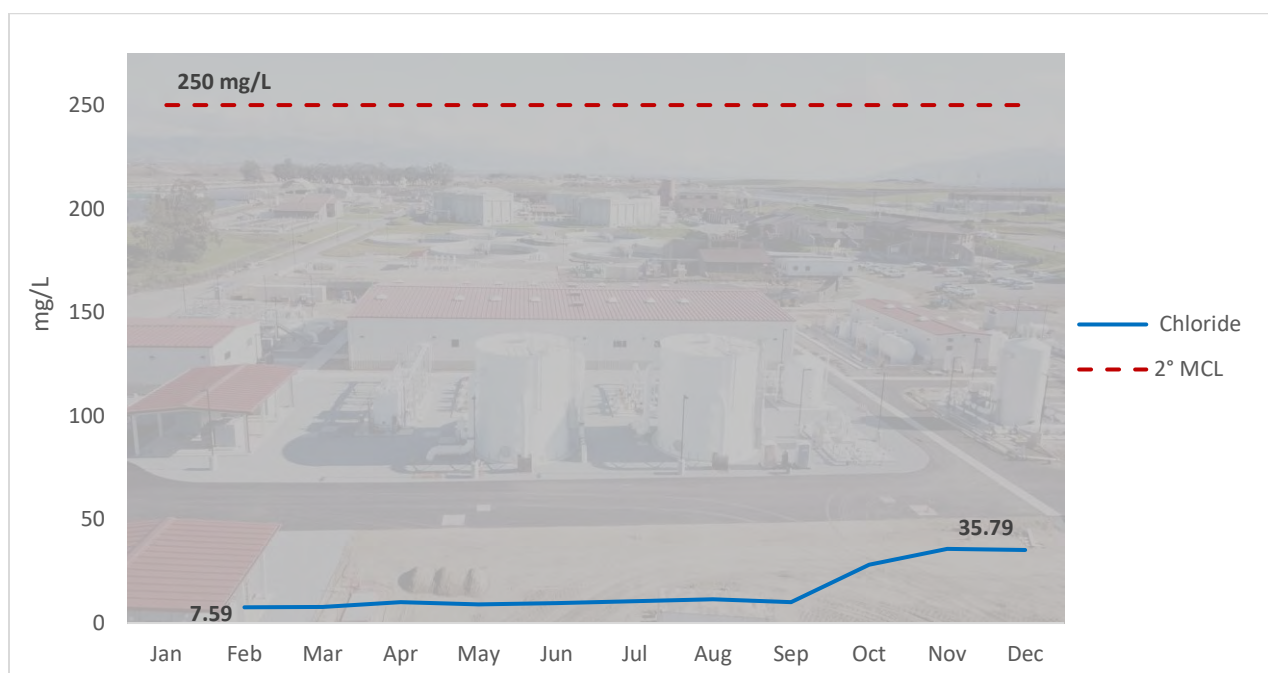


**Table 62. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Chromium – Total (ug/L)**

Month	Chromium ug/L
January	-
February	ND 1.00
March	ND 1.00
April	ND 4.50
May	ND 4.50
June	2
July	ND 1.00
August	ND 1.00
September	ND 1.00
October	ND 1.00
November	ND 1.00
December	ND 1.00

**Figure 62. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Chromium – Total (ug/L)**

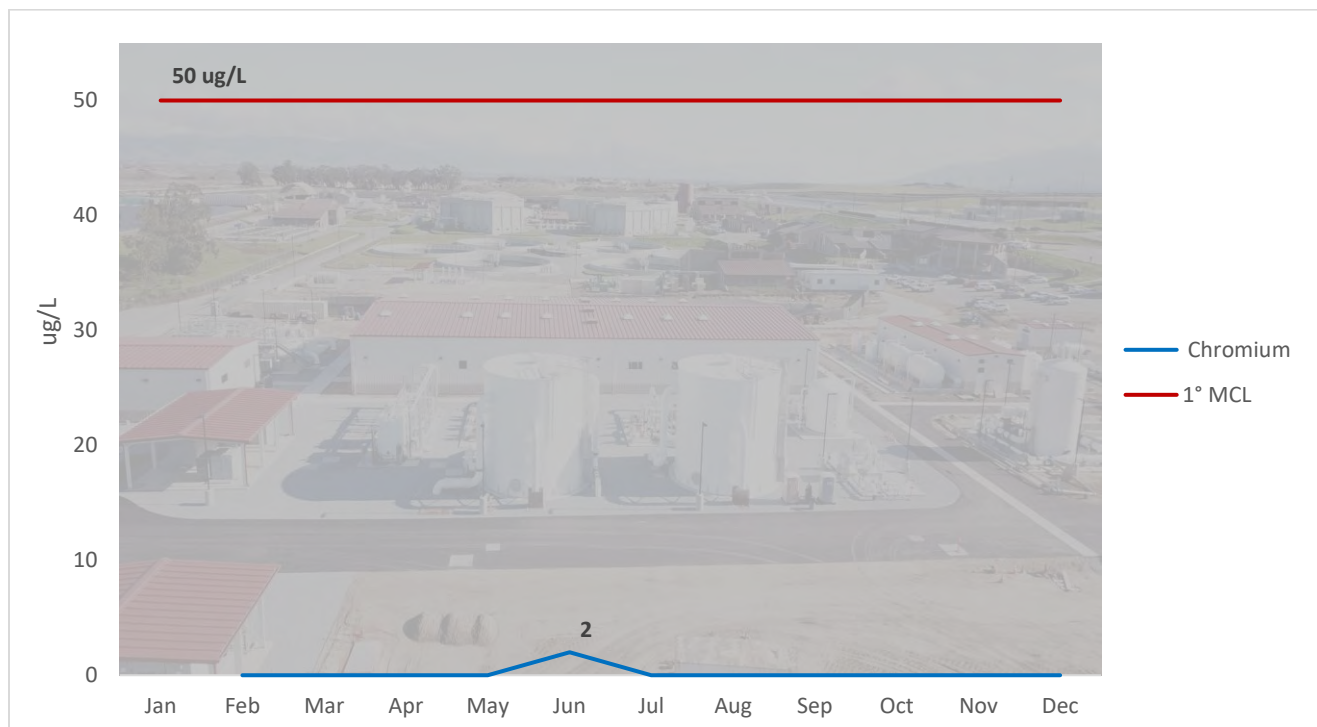


**Table 63. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Bi-Weekly Total Nitrogen¹**

Week	Total Nitrogen mg/L	
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	2.0
7	6.6	2.2
8	1.8	2.6
9	2.4	2.2
10	2.8	2.3
11	2.0	2.4
12	1.7	1.8
13	2.0	1.9
14	2.1	2.3
15	1.4	1.2
16	2.0	1.7
17	1.7	1.7
18	2.3	2.0

Week	Total Nitrogen mg/L	
19	1.9	2.1
20	2.1	2.2
21	2.7	2.5
22	2.4	2.8
23	2.2	2.4
24	1.8	2.4
25	1.9	2.7
26	2.7	2.3
27	2.5	2.3
28	2.0	2.0
29	2.2	2.2
30	3.3	1.9
31	2.5	2.7
32	2.4	2.2
33	1.2	2.0
34	2.1	2.0
35	2.4	2.7
36	2.4	2.3

Week	Total Nitrogen mg/L	
37	1.7	2.9
38	3.0	2.3
39	2.5	2.8
40	3.0	3.4
41	2.4	3.5
42	2.7	2.9
43	2.4	2.8
44	2.6	2.6
45	2.0	1.6
46	1.6	2.0
47	2.0	2.5
48	1.9	6.6
49	2.4	2.4
50	1.5	3.1
51	2.0	1.3
52	1.3	3.2
53	1.6	1.0

¹Total Nitrogen includes nitrate-N, nitrite-N, ammonia-N and organic-N

**Figure 63. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Bi-Weekly Total Nitrogen¹**

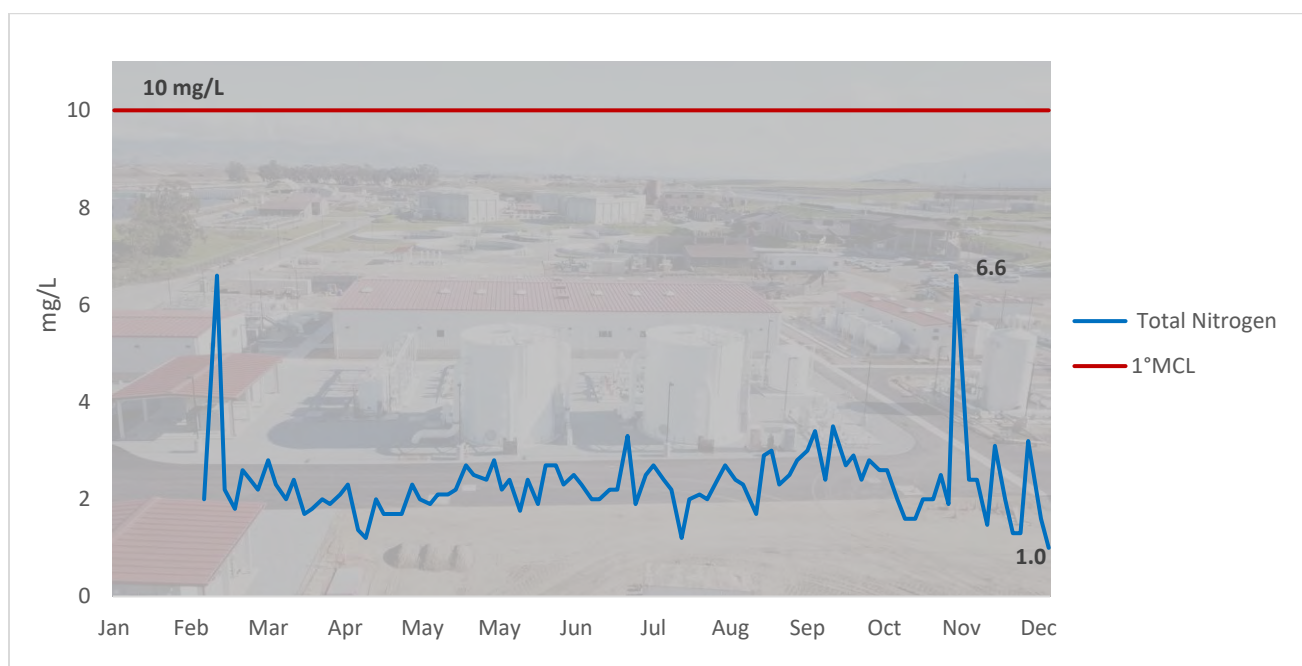


**Table 64. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Weekly Nitrate-N (mg/L)**

Week	Nitrate-N mg/L	Week	Nitrate-N mg/L	Week	Nitrate-N mg/L
1	-	18	0.46	36	0.52
2	-	19	0.54	37	0.35
3	-	20	0.74	38	0.45
4	-	21	0.80	39	0.53
5	-	22	0.40	40	0.73
6	0.48	23	0.58	41	0.72
7	0.42	24	0.51	42	0.68
8	0.41	25	0.54	43	0.77
9	0.37	26	0.44	44	0.45
10	0.32	27	0.49	45	0.49
11	0.39	28	0.30	46	0.46
12	0.37	29	0.44	47	0.66
13	0.40	30	0.61	48	0.64
14	0.43	31	0.85	49	0.74
15	0.27	32	0.70	50	0.75
16	0.45	33	0.40	51	0.80
17	0.36	34	0.42	52	0.60
		35	0.56	53	0.66

**Figure 64. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Weekly Nitrate-N (mg/L)**

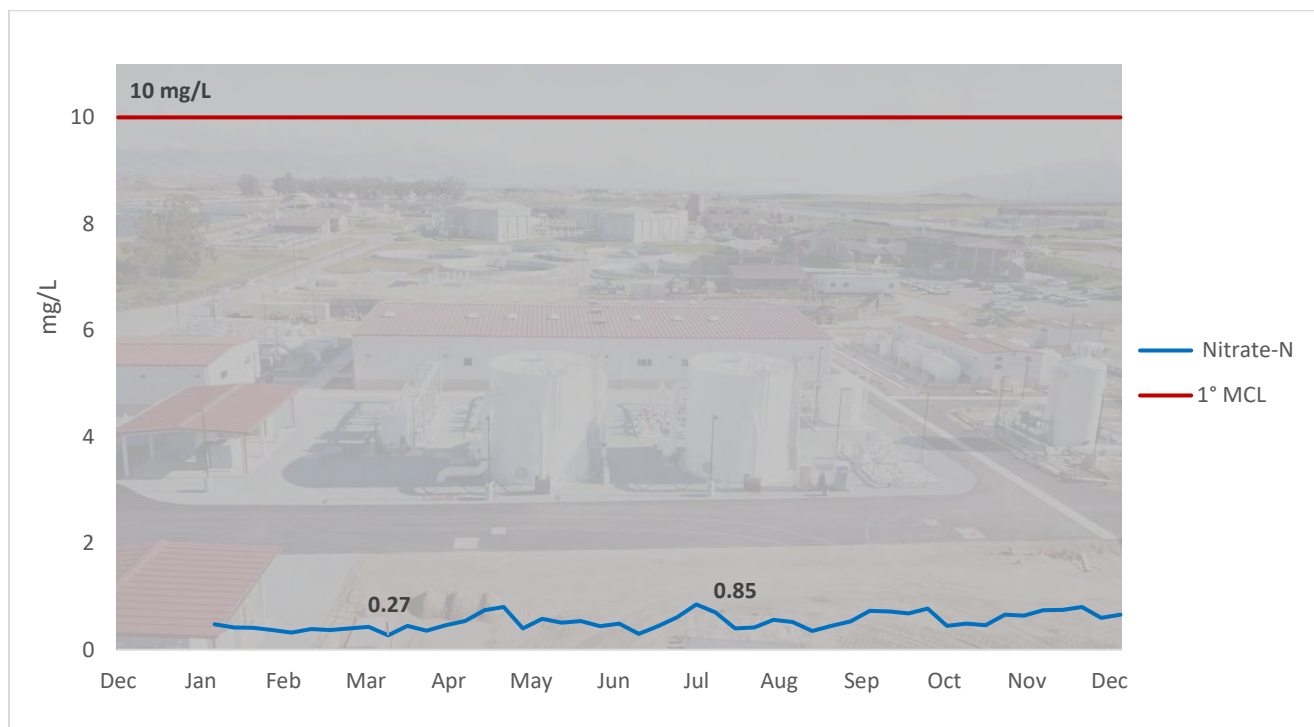


**Table 65. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Weekly Total Kjeldahl Nitrogen-N (mg/L)**

Week	TKN mg/L	Week	TKN mg/L	Week	TKN mg/L
1	-	18	1.74	36	1.75
2	-	19	1.39	37	2.10
3	-	20	1.37	38	2.15
4	-	21	1.72	39	2.05
5	-	22	2.20	40	2.40
6	1.54	23	1.70	41	2.15
7	3.95	24	1.53	42	1.85
8	1.79	25	1.72	43	1.55
9	1.96	26	2.05	44	2.00
10	2.23	27	1.85	45	1.25
11	1.78	28	1.70	46	1.30
12	1.32	29	1.71	47	1.50
13	1.50	30	1.85	48	3.50
14	1.73	31	1.70	49	1.55
15	1.00	32	1.60	50	1.45
16	1.33	33	1.40	51	0.75
17	1.27	34	1.60	52	1.55
		35	1.90	53	0.55

**Figure 65. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Weekly Total Kjeldahl Nitrogen-N (mg/L)**

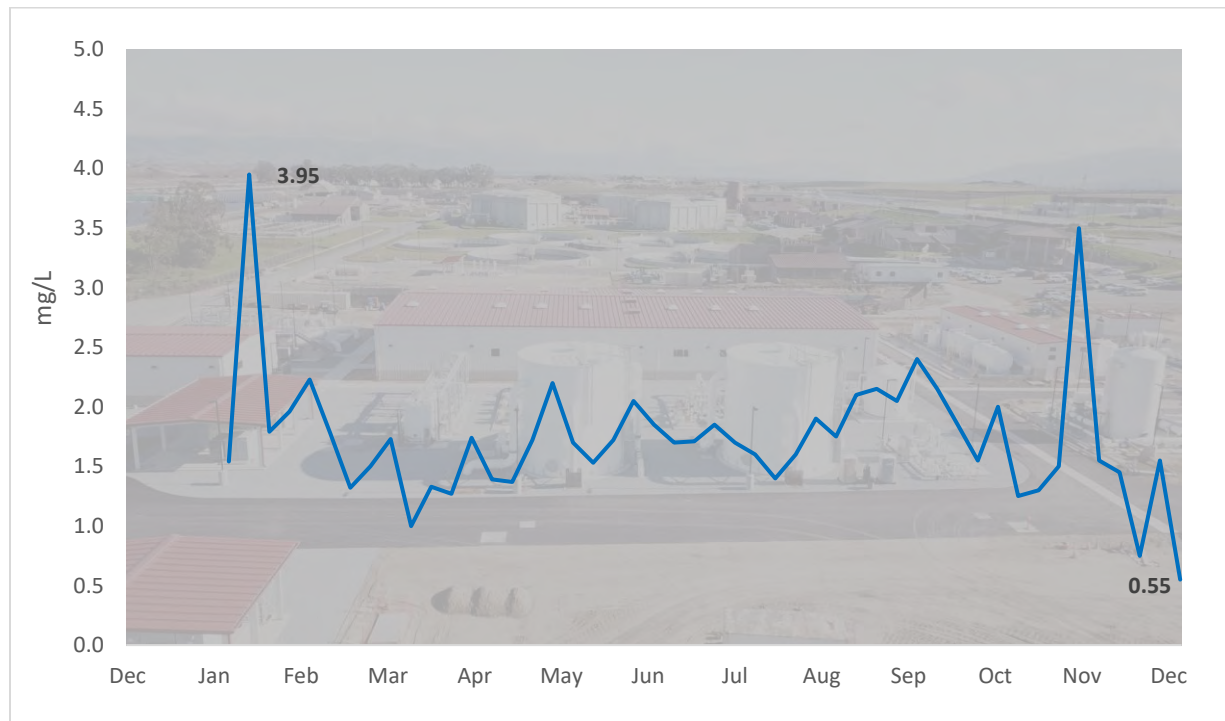


**Table 66. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Sodium (mg/L)**

Month	Sodium mg/L
January	-
February	9.1
March	8.4
April	10
May	11
June	12
July	11
August	14
September	14
October	15
November	27
December	19

**Figure 66. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Sodium (mg/L)**

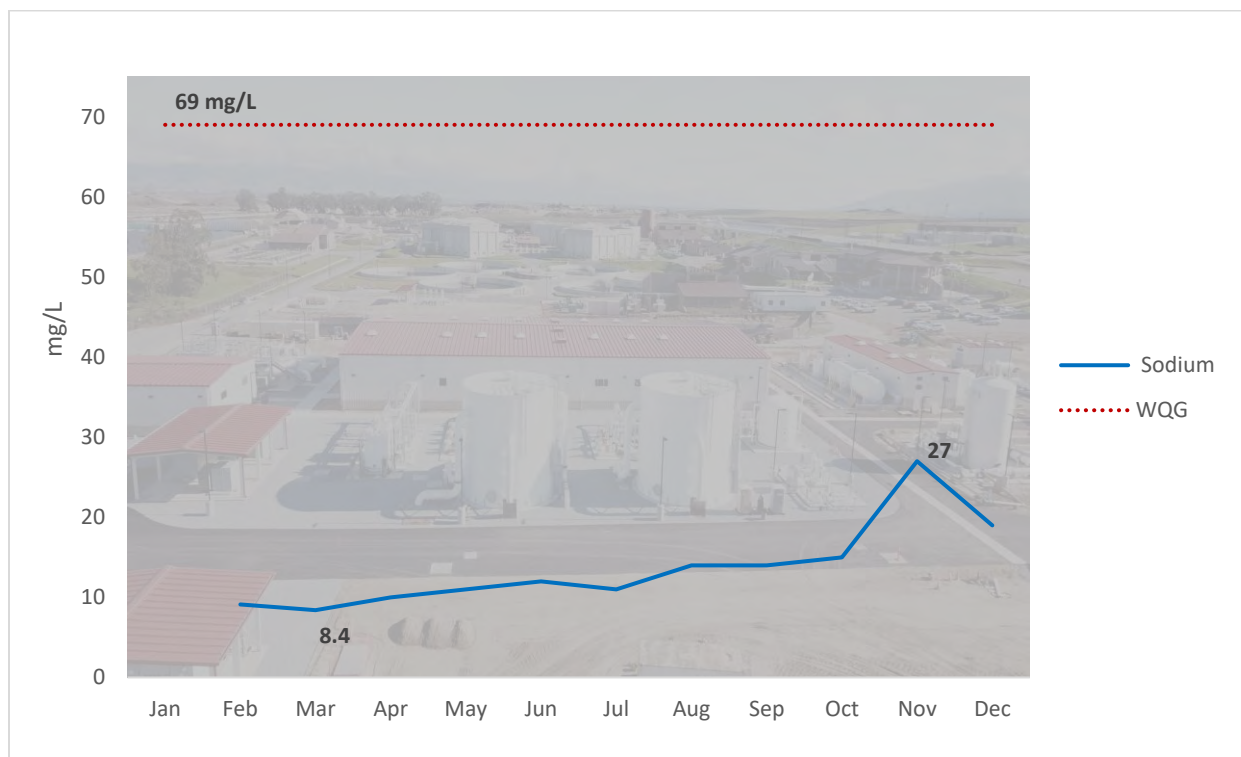


**Table 67. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Sulfate (mg/L)**

Month	Sulfate mg/L
January	-
February	2.61
March	0.56
April	0.24
May	0.89
June	0.34
July	3.21
August	0.28
September	0.49
October	0.64
November	0.48
December	0.40

**Figure 67. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Sulfate (mg/L)**

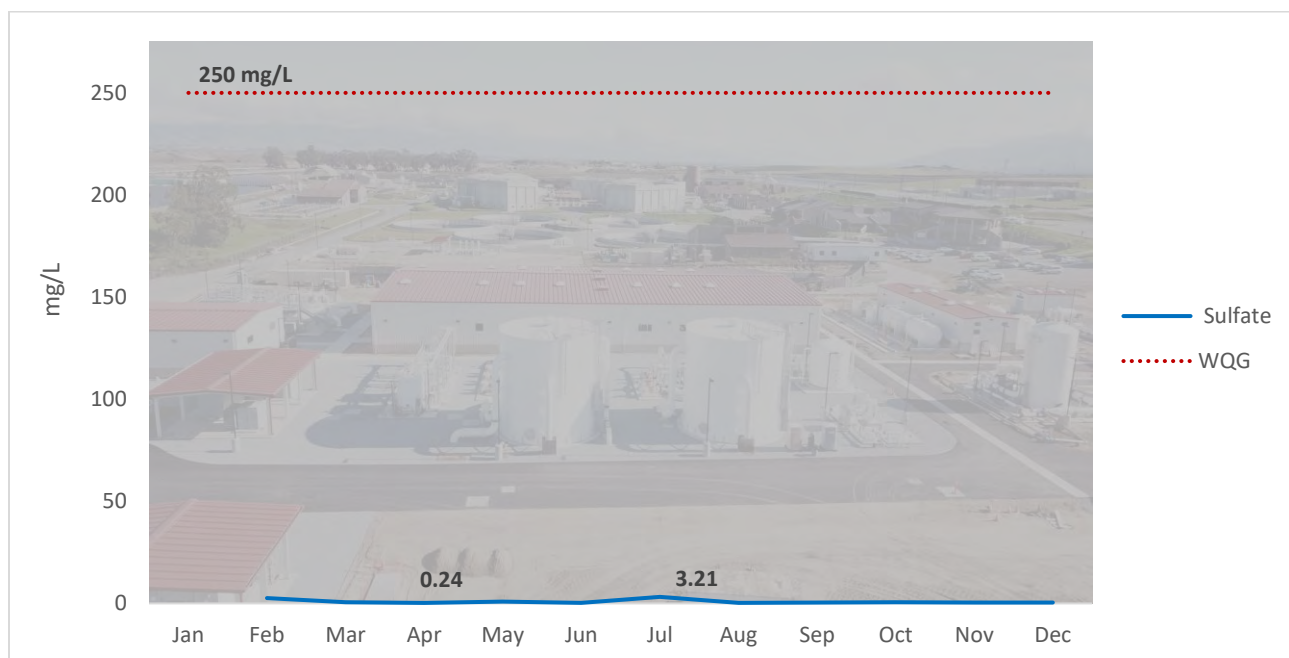


**Table 68. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly TDS (mg/L)**

Month	TDS mg/L
January	-
February	48
March	45
April	45
May	45
June	60
July	56
August	66
September	85
October	72
November	100
December	85

**Figure 68. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly TDS (mg/L)**

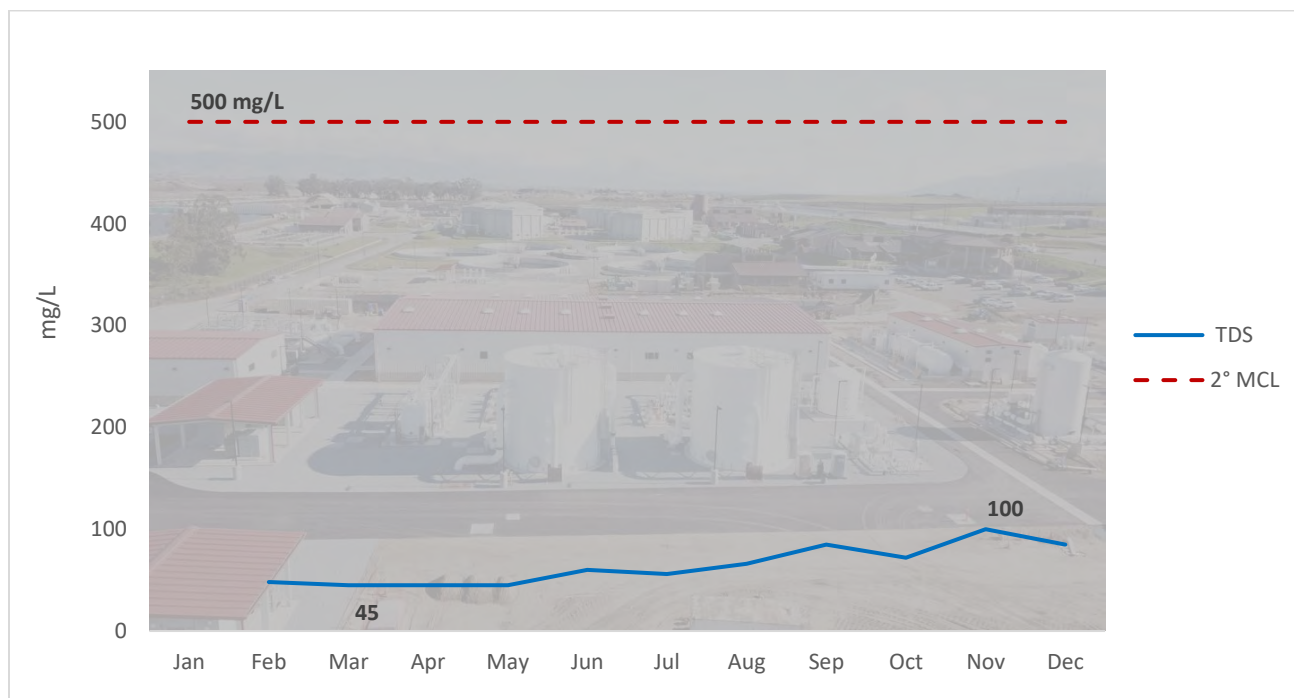


**Table 69. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Daily Total Coliform (MPN/100mL)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
2	-	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
3	-	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
4	-	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
5	-	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
6	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
7	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
8	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
9	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
10	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
11	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
12	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
13	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
14	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
15	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
16	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
17	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
18	-	ND 1	ND 1	ND 1	ND 1	ND 1*	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
19	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
20	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
21	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
22	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
23	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
24	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
25	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
26	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
27	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
28	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
29	-	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
30	-		ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
31	-		ND 1		ND 1		ND 1	ND 1		ND 1		ND 1

*Sample was prematurely removed from incubator, rendering the analysis invalid; an additional replacement sample was collected and analyzed the next day.

**Figure 69. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Total Coliform (MPN/100mL) – N/A**

All monitoring results were ND.

**Table 70. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Weekly TOC (mg/L)**

Week	TOC mg/L	Week	TOC mg/L	Week	TOC mg/L
1	-	18	0.4	36	0.4
2	-	19	0.4	37	0.9
3	-	20	0.4	38	0.8
4	-	21	0.4	39	0.7
5	-	22	0.5	40	*0.2
6	-	23	0.6	41	0.2
7	0.2	24	0.6	42	0.1
8	0.2	25	0.5	43	0.1
9	0.5	26	0.4	44	0.1
10	0.4	27	0.5	45	0.1
11	0.4	28	0.5	46	0.1
12	0.3	29	0.6	47	0.1
13	0.2	30	0.4	48	0.1
14	0.3	31	0.4	49	0.1
15	0.3	32	0.4	50	0.1
16	0.4	33	0.4	51	0.1
17	0.3	34	0.6	52	0.1
		35	0.6	53	0.1

**Changed TOC monitoring from Weekly Composite to Continuous Weekly Average calculated from Daily Average.*

**Figure 70. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Weekly TOC (mg/L)**

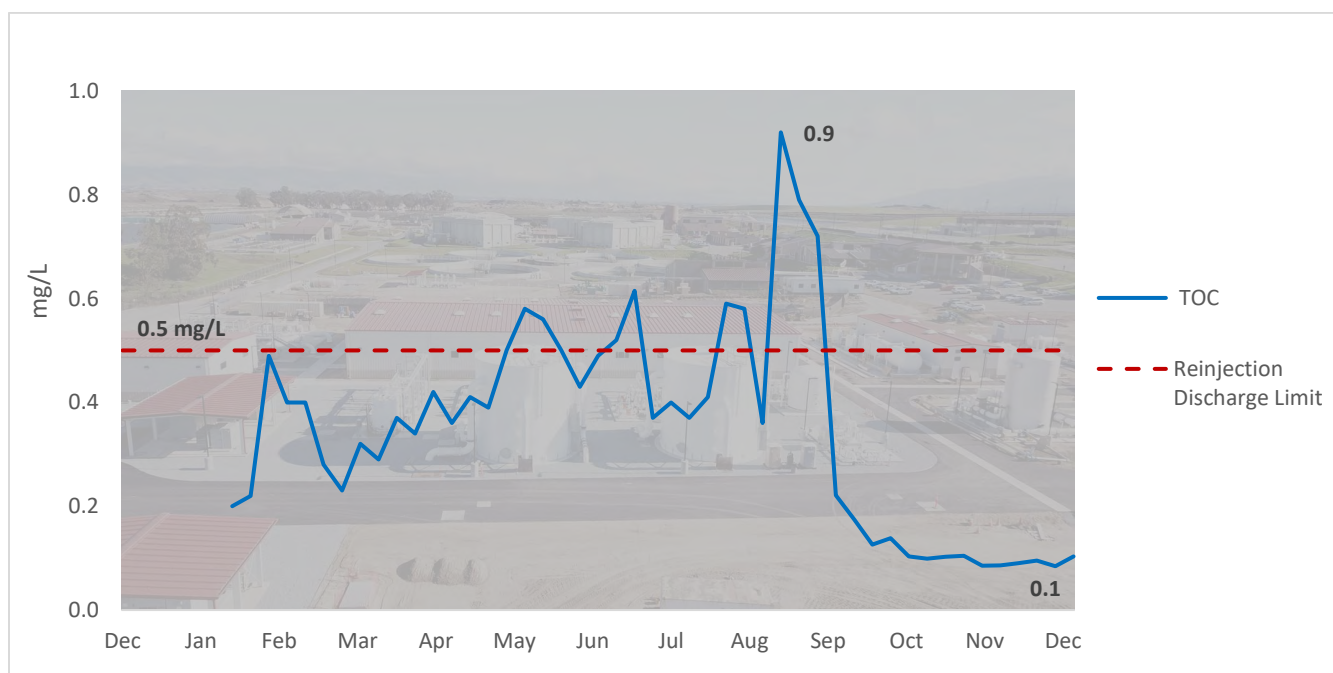


**Table 71. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Turbidity (NTU)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.73	1.60	0.72	0.32	0.64	0.26	1.08	0.29	0.10	0.25
2	-	-	1.44	1.37	0.71	0.28	0.50	0.34	1.33	1.09	0.16	0.12
3	-	-	1.31	0.88	0.72	0.28	0.44	0.43	0.98	0.26	0.16	0.43
4	-	-	2.39	0.79	0.96	0.56	0.42	0.42	0.56	0.25	0.15	0.11
5	-	-	2.54	1.08	0.88	0.47	0.44	0.34	0.47	0.29	0.12	0.84
6	-	0.49	2.72	1.66	0.82	0.41	0.42	0.40	0.86	0.33	0.10	0.11
7	-	0.53	2.83	0.64	0.85	0.40	0.45	0.43	0.68	0.49	0.10	0.11
8	-	0.43	2.95	0.53	0.89	0.42	0.43	0.37	0.79	0.33	0.11	0.11
9	-	0.39	0.35	0.65	1.03	0.47	0.41	0.37	2.29	0.18	0.10	0.11
10	-	2.06	0.48	0.59	3.18	0.49	0.42	0.46	0.77	0.17	0.15	0.12
11	-	2.61	0.55	0.62	1.21	0.46	0.42	0.47	0.75	0.17	0.19	0.12
12	-	0.39	0.47	0.62	0.90	0.43	0.42	0.38	0.78	0.12	0.12	0.12
13	-	0.81	0.65	0.53	0.79	0.35	0.44	0.32	0.78	0.12	0.10	0.13
14	-	0.66	0.73	0.80	1.07	0.45	0.43	3.38	0.75	0.13	0.10	0.12
15	-	0.90	1.60	1.43	0.90	0.47	0.69	1.30	0.63	0.17	0.10	0.12
16	-	1.94	0.72	0.80	0.80	0.45	0.52	1.54	1.02	0.16	0.10	0.17
17	-	2.24	1.39	0.73	0.85	0.50	0.54	1.37	0.55	0.50	0.17	0.71
18	-	2.55	0.78	0.62	0.90	0.47	0.56	3.37	0.53	0.23	0.11	0.14
19	-	1.94	1.91	0.62	0.90	0.64	0.56	4.49	0.56	0.11	0.20	0.13
20	-	0.72	0.55	1.49	0.89	0.52	0.59	0.81	0.52	0.17	0.18	0.13
21	-	1.93	0.49	0.63	0.94	0.45	0.40	0.82	1.85	0.16	0.13	0.53
22	-	0.51	0.71	0.50	0.89	0.48	0.42	1.00	0.83	0.11	0.10	0.21
23	-	0.48	0.93	0.66	0.87	0.45	0.38	0.97	0.80	0.16	0.11	0.18
24	-	0.74	3.16	0.65	0.88	0.82	0.35	0.97	1.46	0.12	0.12	0.14
25	-	0.96	2.91	0.54	0.88	0.51	0.26	0.90	3.06	0.10	0.12	0.14
26	-	1.44	2.07	0.69	0.76	0.64	0.25	0.82	0.74	0.10	0.10	0.14
27	-	2.16	1.81	0.60	0.87	0.50	0.25	1.59	0.29	0.42	0.26	0.14
28	-	1.35	2.68	0.74	0.81	0.48	0.32	0.82	0.36	0.33	0.18	0.26
29	-	0.48	3.09	0.67	0.42	0.54	0.45	0.51	0.28	0.11	2.51	0.14
30	-		2.41	0.65	0.52	0.52	0.28	0.86	0.27	0.11	0.19	0.14
31	-		1.50		0.55		0.48	0.73		0.10		0.15

**Figure 71. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Average Turbidity (NTU)**

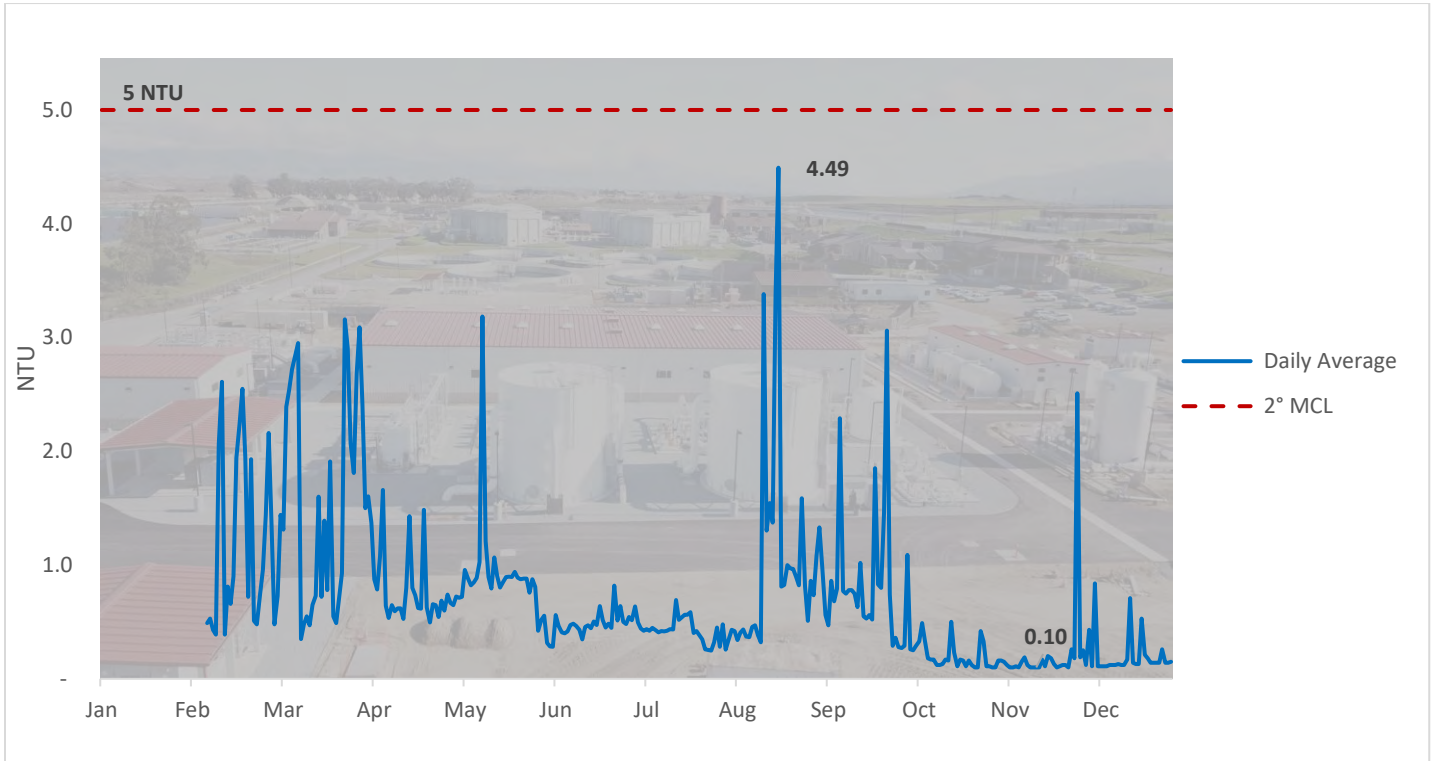


**Table 72. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Turbidity (NTU)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	0.30	0.90	0.70	0.30	0.31	0.22	0.44	0.17	0.10	0.11
2	-	-	0.56	3.00	0.60	0.30	0.43	0.25	0.58	0.17	0.10	0.11
3	-	-	1.06	0.90	0.60	0.25	0.43	0.32	0.54	0.24	0.10	0.11
4	-	-	1.93	0.80	0.60	0.20	0.41	0.27	0.45	0.17	0.10	0.10
5	-	-	2.21	0.80	0.70	0.30	0.41	0.24	0.25	0.15	0.10	0.11
6	-	0.43	2.34	2.40	0.80	0.30	0.32	0.19	0.24	0.14	0.10	0.11
7	-	0.36	2.36	0.40	0.80	0.32	0.41	0.25	0.29	0.18	0.10	0.11
8	-	0.38	2.48	0.60	0.70	0.32	0.42	0.25	0.31	0.15	0.10	0.11
9	-	0.36	0.34	0.50	0.80	0.40	0.40	0.24	0.27	0.11	0.10	0.11
10	-	0.37	0.34	0.60	1.40	0.30	0.40	0.24	0.27	0.11	0.10	0.11
11	-	0.42	0.45	0.60	0.70	0.40	0.38	0.24	0.34	0.11	0.10	0.11
12	-	0.33	0.45	0.70	0.80	0.20	0.39	0.25	0.60	0.11	0.10	0.12
13	-	0.28	0.40	0.50	0.70	0.10	0.40	0.24	0.31	0.11	0.10	0.12
14	-	0.39	0.52	0.50	0.60	0.14	0.41	0.24	0.61	0.11	0.10	0.12
15	-	0.48	0.60	0.80	0.70	0.44	0.35	0.32	0.26	0.11	0.10	0.12
16	-	1.70	0.51	0.50	0.70	0.40	0.36	0.65	0.46	0.10	0.10	0.12
17	-	2.04	0.60	0.80	0.80	0.40	0.50	0.69	0.26	0.11	0.09	0.13
18	-	2.29	0.74	0.60	0.80	0.40	0.52	0.27	0.25	0.11	0.10	0.13
19	-	0.50	0.38	0.60	0.90	0.40	0.48	0.27	0.49	0.10	0.10	0.13
20	-	0.44	0.25	0.60	0.80	0.50	0.20	0.54	0.26	0.10	0.10	0.13
21	-	0.63	0.42	2.60	0.80	0.40	0.20	0.25	0.24	0.10	0.10	0.13
22	-	0.41	0.66	0.60	0.80	0.40	0.37	0.60	0.47	0.10	0.10	0.14
23	-	0.34	0.48	0.50	0.82	0.30	0.36	0.57	0.34	0.10	0.10	0.14
24	-	0.39	1.72	0.80	0.84	0.50	0.26	0.61	0.15	0.10	0.10	0.14
25	-	0.47	1.02	0.50	0.85	0.40	0.25	0.60	1.31	0.10	0.10	0.14
26	-	1.04	0.68	0.60	0.70	0.40	0.24	0.31	0.27	0.10	0.10	0.14
27	-	1.71	1.45	0.60	0.80	0.40	0.23	0.29	0.17	0.10	0.10	0.14
28	-	0.37	2.25	0.50	0.80	0.40	0.17	0.33	0.17	0.10	0.11	0.14
29	-	0.39	2.54	0.70	0.30	0.40	0.23	0.25	0.17	0.10	1.44	0.13
30	-		0.51	0.50	0.30	0.30	0.18	0.32	0.16	0.10	0.11	0.14
31	-		0.98		0.50		0.25	0.31		0.10		0.14

**Figure 72. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Minimum Turbidity (NTU)**

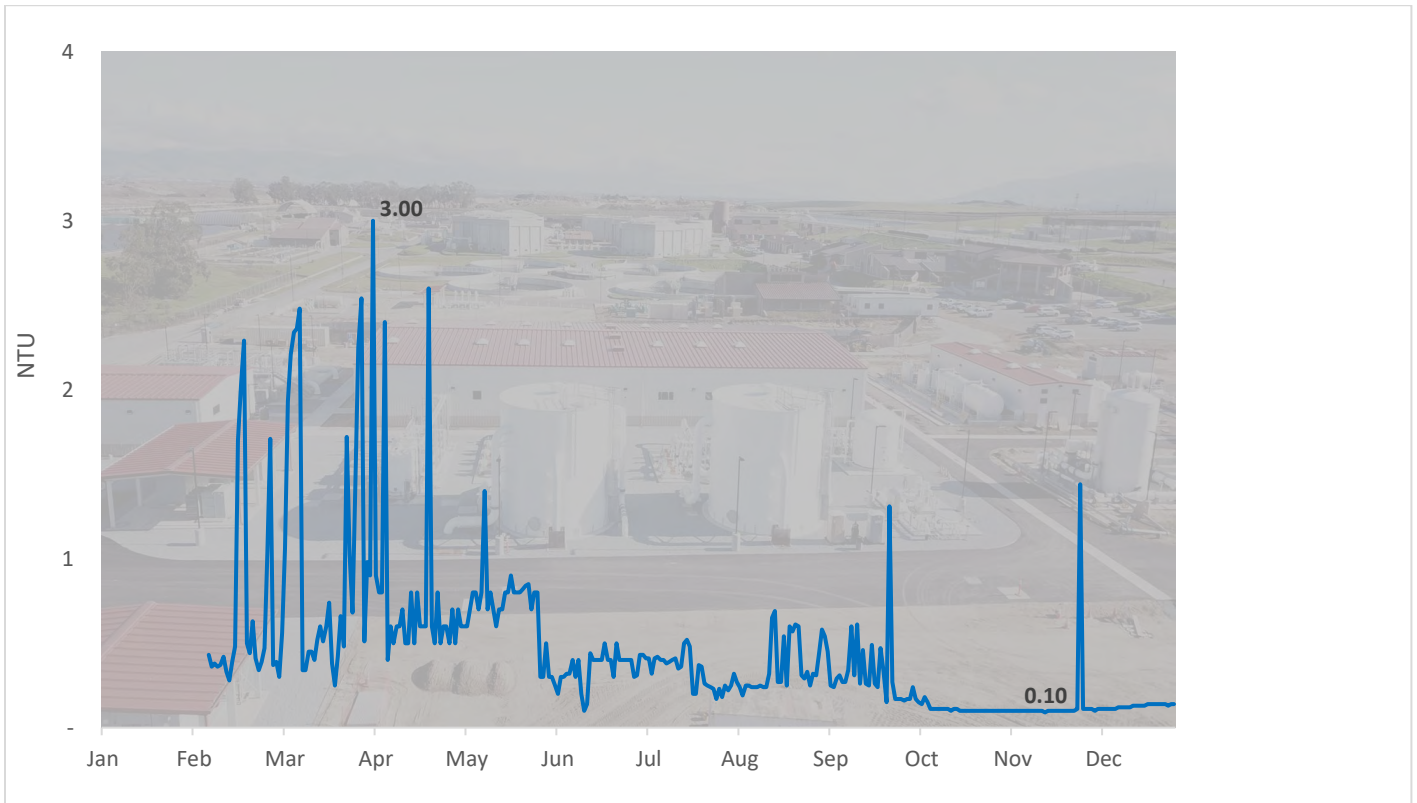


**Table 73. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Turbidity (NTU)**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	1.84	3.40	0.90	3.50	0.66	1.63	6.08	0.29	0.33	0.61
2	-	-	2.00	3.00	0.90	0.30	0.44	1.50	7.51	2.56	0.32	0.14
3	-	-	2.89	4.20	1.20	0.70	0.44	2.74	2.78	0.26	0.28	0.86
4	-	-	3.36	2.70	1.90	2.80	0.43	1.08	1.38	0.25	0.39	0.44
5	-	-	4.38	2.70	3.70	1.20	0.44	2.33	1.28	0.29	0.24	2.29
6	-	3.52	4.53	6.40	1.40	1.30	0.43	3.81	1.43	0.33	0.37	0.22
7	-	4.41	4.63	2.70	1.10	1.80	0.43	1.50	0.87	0.49	0.87	0.28
8	-	0.69	5.49	1.80	2.40	1.10	0.42	0.55	1.06	0.33	0.25	0.34
9	-	0.82	3.61	2.40	2.10	1.70	0.40	0.84	4.99	0.18	0.24	0.12
10	-	6.04	1.59	1.20	3.50	2.20	0.40	3.93	1.14	0.17	0.29	0.80
11	-	8.87	2.25	2.50	3.10	1.90	0.42	4.93	0.88	0.17	0.29	0.26
12	-	1.94	1.89	1.30	1.30	2.30	0.42	5.21	2.90	0.12	0.29	0.28
13	-	2.83	1.54	0.80	1.40	0.50	0.43	2.82	1.00	0.12	0.35	0.17
14	-	4.30	4.54	2.50	2.90	2.00	0.43	10.46	1.55	0.13	0.44	0.13
15	-	1.23	8.51	4.30	1.40	0.70	0.69	1.74	1.23	0.17	0.33	0.28
16	-	2.53	7.65	1.12	2.20	0.50	0.52	1.89	1.57	0.16	0.26	0.22
17	-	3.41	5.34	1.60	2.40	0.70	0.55	1.53	1.62	0.50	0.27	2.18
18	-	3.74	1.17	0.80	3.10	0.90	0.53	8.05	1.89	0.23	0.29	3.38
19	-	4.31	6.92	0.90	1.20	5.00	1.66	23.21	0.63	0.11	0.21	0.14
20	-	2.01	0.96	3.00	2.00	1.50	0.20	6.82	1.39	0.17	0.29	0.23
21	-	6.87	1.21	2.50	2.30	0.50	4.98	6.84	6.29	0.16	0.21	0.59
22	-	4.76	3.30	0.80	1.30	1.40	4.71	1.87	1.34	0.11	0.18	0.46
23	-	1.16	2.20	1.80	1.00	2.30	2.89	4.94	1.20	0.16	0.15	0.26
24	-	1.42	3.50	1.20	1.10	3.10	5.56	1.32	4.98	0.12	0.27	0.19
25	-	2.00	3.22	0.70	1.10	2.20	0.28	1.08	6.60	0.10	0.21	0.21
26	-	2.22	4.57	2.60	1.10	1.30	1.86	1.11	0.86	0.10	0.11	0.14
27	-	3.12	3.33	0.90	3.40	0.80	0.84	12.18	0.31	0.42	0.29	0.17
28	-	3.82	3.99	1.70	0.90	0.70	5.67	1.22	0.67	0.33	0.24	0.61
29	-	2.23	5.04	2.60	1.90	2.50	4.06	3.01	1.86	0.11	3.80	0.28
30	-		6.10	3.40	0.80	2.50	5.59	3.35	0.42	0.11	0.31	0.26
31	-		2.63		0.80		7.15	2.68		0.10		0.45

**Figure 73. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Daily Maximum Turbidity (NTU)**

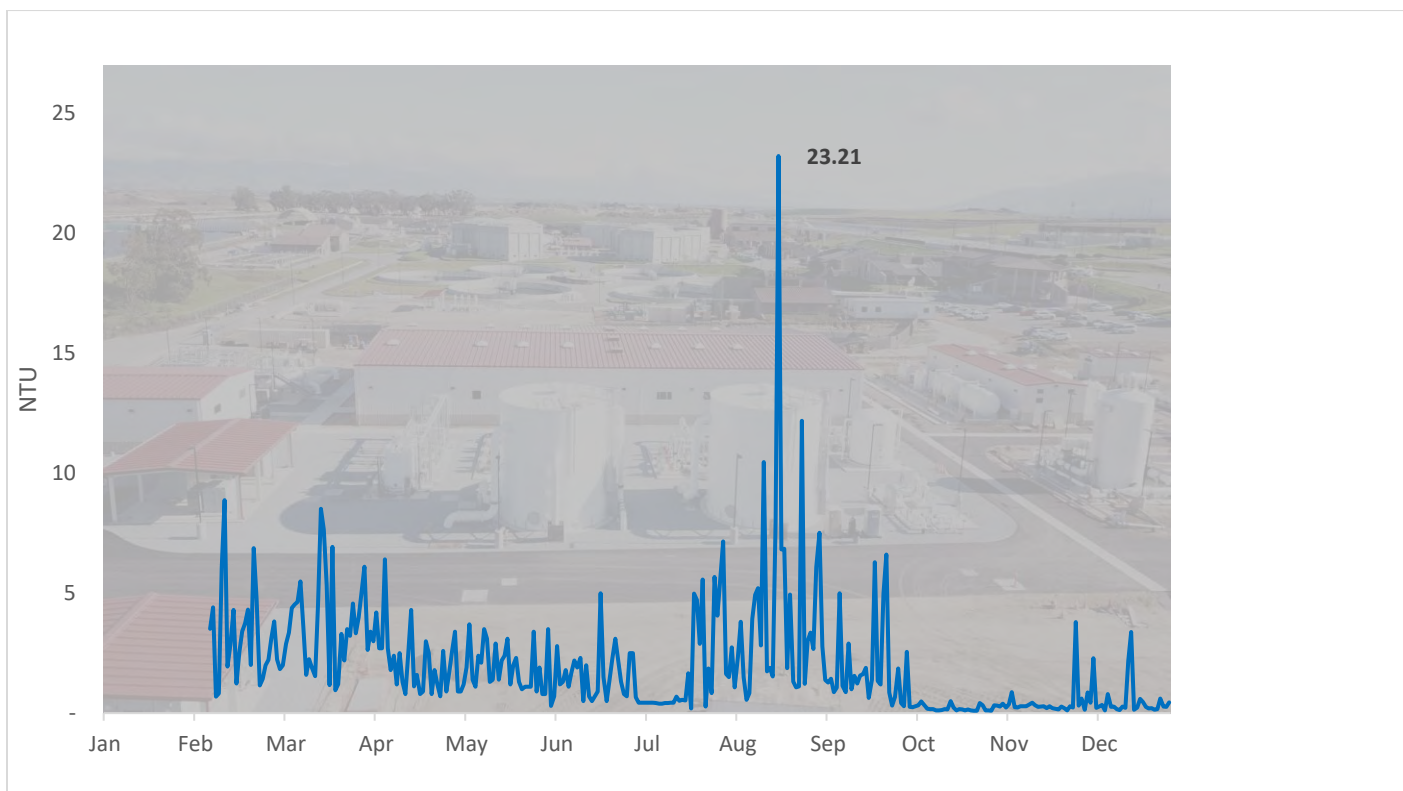


**Table 74. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Lead (ug/L)**

Month	Lead ug/L
January	-
February	ND 1.00
March	ND 1.00
April	ND 0.45
May	ND 0.45
June	ND 1.00
July	ND 1.00
August	ND 1.00
September	ND 1.00
October	ND 1.00
November	ND 1.00
December	ND 1.00

**Figure 74. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Lead (ug/L) – N/A**

All monitoring results were ND.

**Table 75. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Copper (ug/L)**

Month	Copper ug/L
January	-
February	ND 5.00
March	ND 5.00
April	ND 2.30
May	ND 2.30
June	ND 5.00
July	ND 5.00
August	ND 5.00
September	ND 5.00
October	ND 5.00
November	ND 5.00
December	ND 5.00

**Figure 75. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Monthly Copper (ug/L) – N/A**

All monitoring results were ND.

Table 76. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Inorganics with Primary MCLs

Month	Aluminum ug/L	Antimony ug/L	Arsenic ug/L	Asbestos MFL	Barium ug/L	Beryllium ug/L	Cadmium ug/L	Chromium (Total) ug/L	Cyanide ug/L	Fluoride mg/L	Mercury ug/L	Nickel ug/L	Nitrate (as Nitrogen) mg/L	Nitrite (as Nitrogen) mg/L	Nitrate + Nitrite mg/L	Perchlorate ug/L	Selenium ug/L	Thallium ug/L
January																		
February	33	ND 1	ND 1	ND 0.19	0.5	ND 1	ND 1	ND 1	ND 2.2	ND 0.05	ND 1	ND 1	0.41	ND 0.02	0.4	ND 0.61	ND 2.5	ND 1
March	32	ND 1	ND 1	ND 0.22	ND 1	ND 1	ND 1	ND 1	ND 2.2	ND 0.05	ND 1	ND 1	0.37	0.06	0.39	ND 0.61	ND 2.5	ND 1
April	DNQ 49	ND 0.91	ND 1	ND 0.19	ND 23	ND 0.45	ND 4.5	ND 4.5	ND 2.2	ND 0.1	ND 0.09	ND 4.5	0.4	0.06	0.43	ND 0.61	ND 0.91	ND 0.45
May	DNQ 25	ND 0.91	ND 1	ND 0.20	ND 23	ND 0.45	ND 4.5	ND 4.5	DNQ 2.5	ND 0.1	ND 0.09	ND 4.5	0.62	0.08	0.68	ND 0.61	ND 0.91	ND 0.45
June	34	ND 1	ND 1	ND 0.20	ND 1	ND 1	ND 1	2	ND 2.2	ND 0.1	ND 1	ND 1	0.52	0.07	0.58	ND 0.61	ND 2.5	ND 1
July	32	ND 1	ND 1	ND 0.20	ND 1	ND 1	ND 1	ND 1	ND 2.2	ND 0.1	ND 1	ND 1	0.53	0.08	0.59	ND 0.61	ND 2.5	ND 1
August	40	ND 1	ND 1	ND 0.19	ND 1	ND 1	ND 1	ND 1	ND 2.2	ND 0.1	ND 1	ND 1	0.53	0.07	0.58	ND 0.61	ND 2.5	ND 1
September	59	ND 1	ND 1	ND 0.20	ND 1	ND 1	ND 1	ND 1	ND 2.2	ND 0.1	ND 0.50	ND 1	0.48	0.08	0.53	DNQ 1.50	ND 2.5	ND 1
October	36	ND 1	ND 1	ND 0.20	ND 1	ND 1	ND 1	ND 1	ND 2.2	ND 0.1	ND 1	ND 1	0.67	0.22	0.86	ND 0.61	ND 2.5	ND 1
November	ND 5	ND 1	ND 1	ND 0.20	1	ND 1	ND 1	ND 1	ND 2.2	ND 0.1	ND 1	ND 1	0.58	0.09	0.78	ND 0.61	ND 2.5	ND 1
December	ND 5	ND 1	ND 1	ND 0.20	1	ND 1	ND 1	ND 1	ND 2.2	ND 0.1	ND 1	ND 1	0.7	0.09	0.78	ND 4	ND 2.5	ND 1

Figure 76a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Inorganics with Primary MCLs
Monthly Aluminum (ug/L)

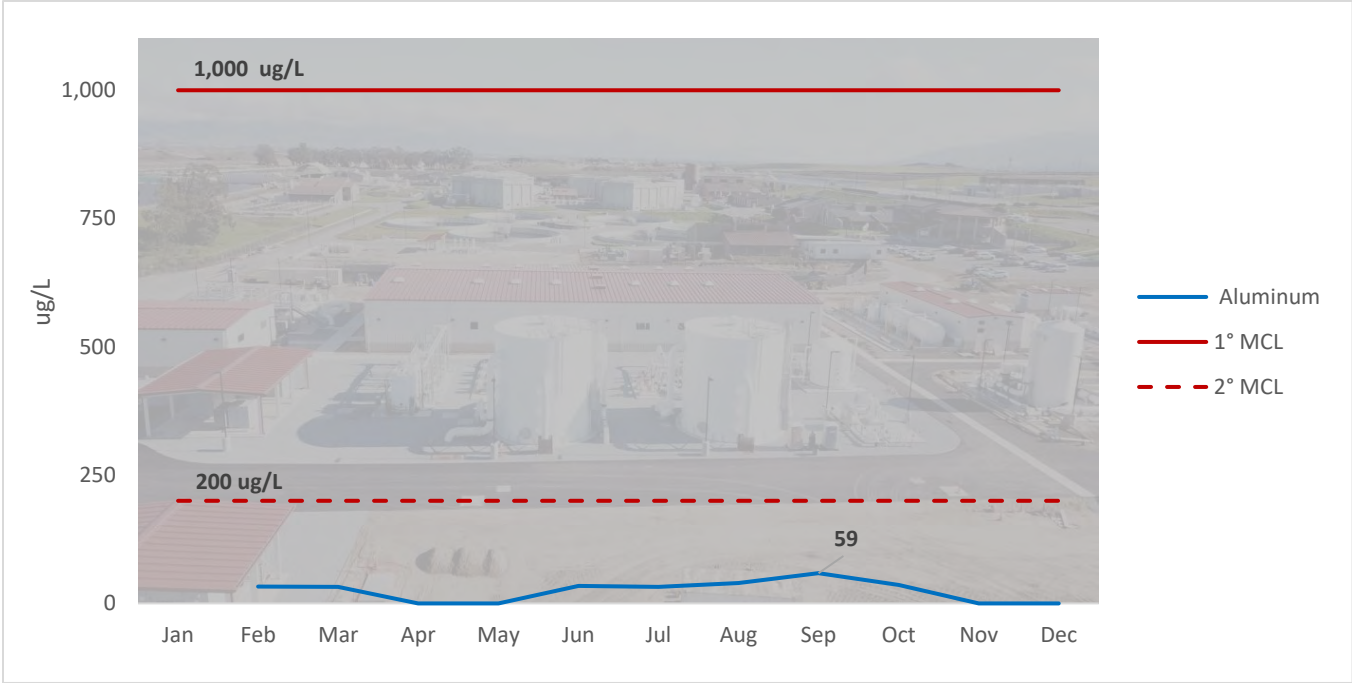


**Figure 76b. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Inorganics with Primary MCLs
 Monthly Barium (ug/L)**

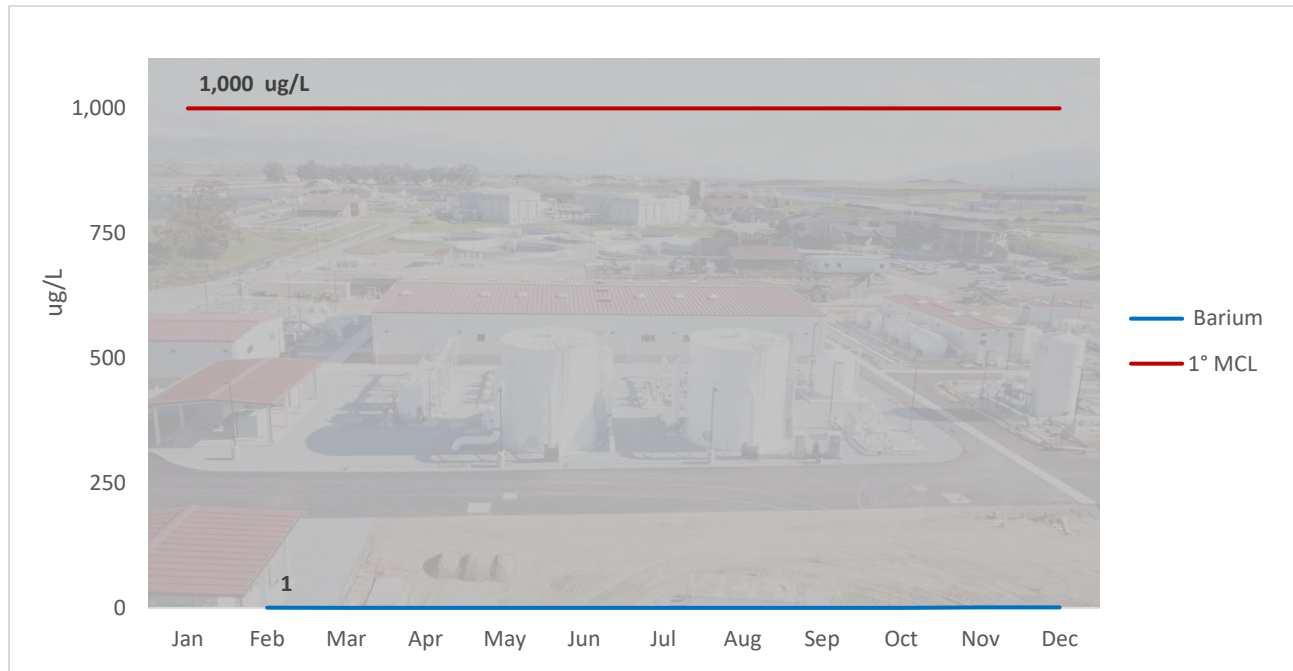


**Figure 76c. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Inorganics with Primary MCLs
 Monthly Chromium (ug/L)**

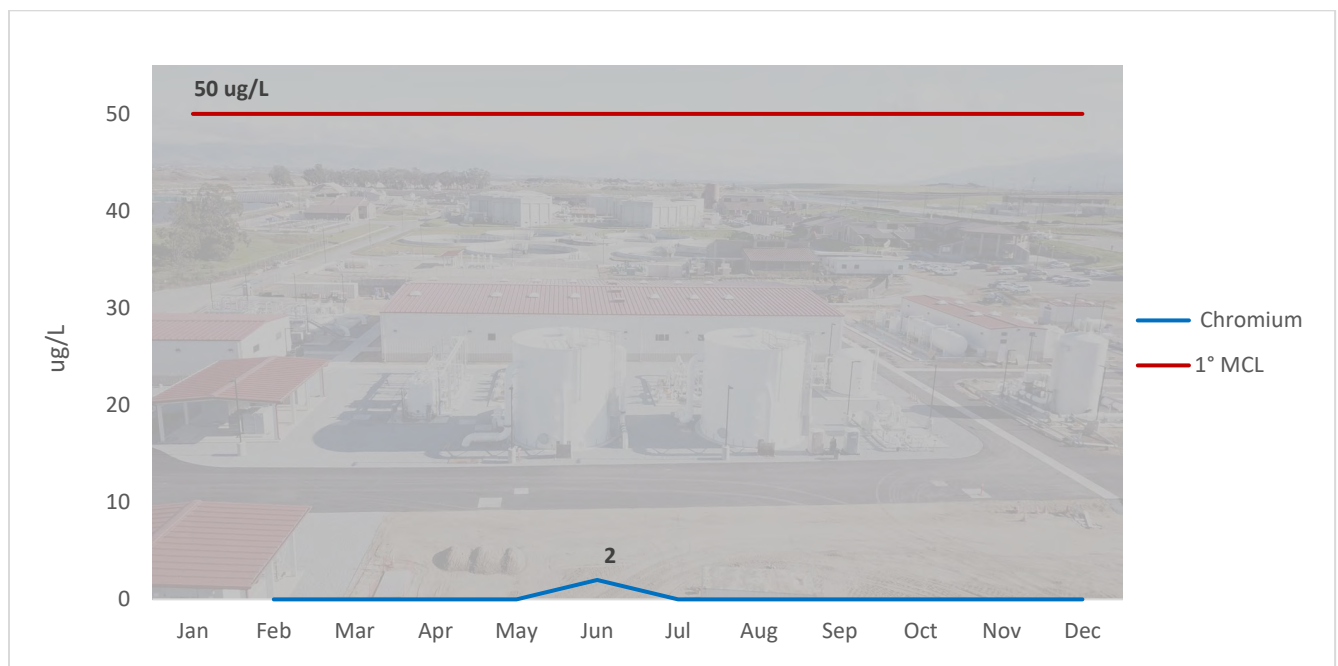


Figure 76d. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Inorganics with Primary MCLs
Monthly Nitrate (as Nitrogen) (mg/L)

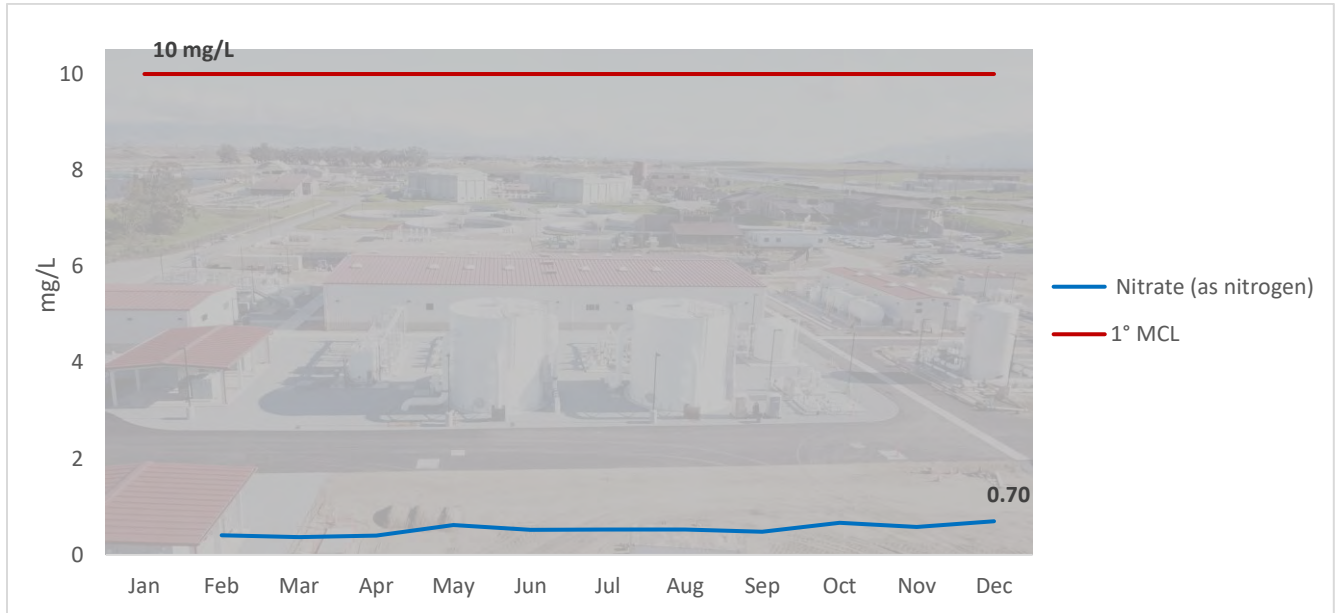


Figure 76e. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Inorganics with Primary MCLs
Monthly Nitrite (as Nitrogen) (mg/L)

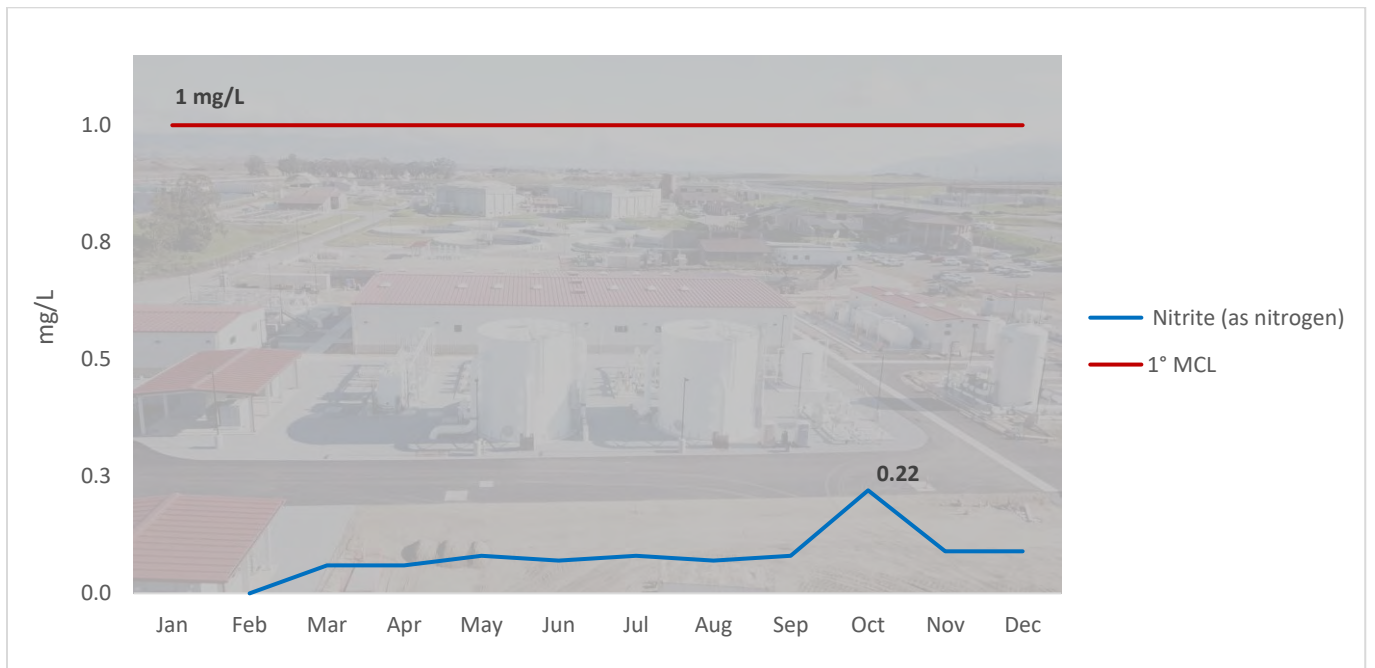


Figure 76f. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Inorganics with Primary MCLs
Nitrate + Nitrite (mg/L)

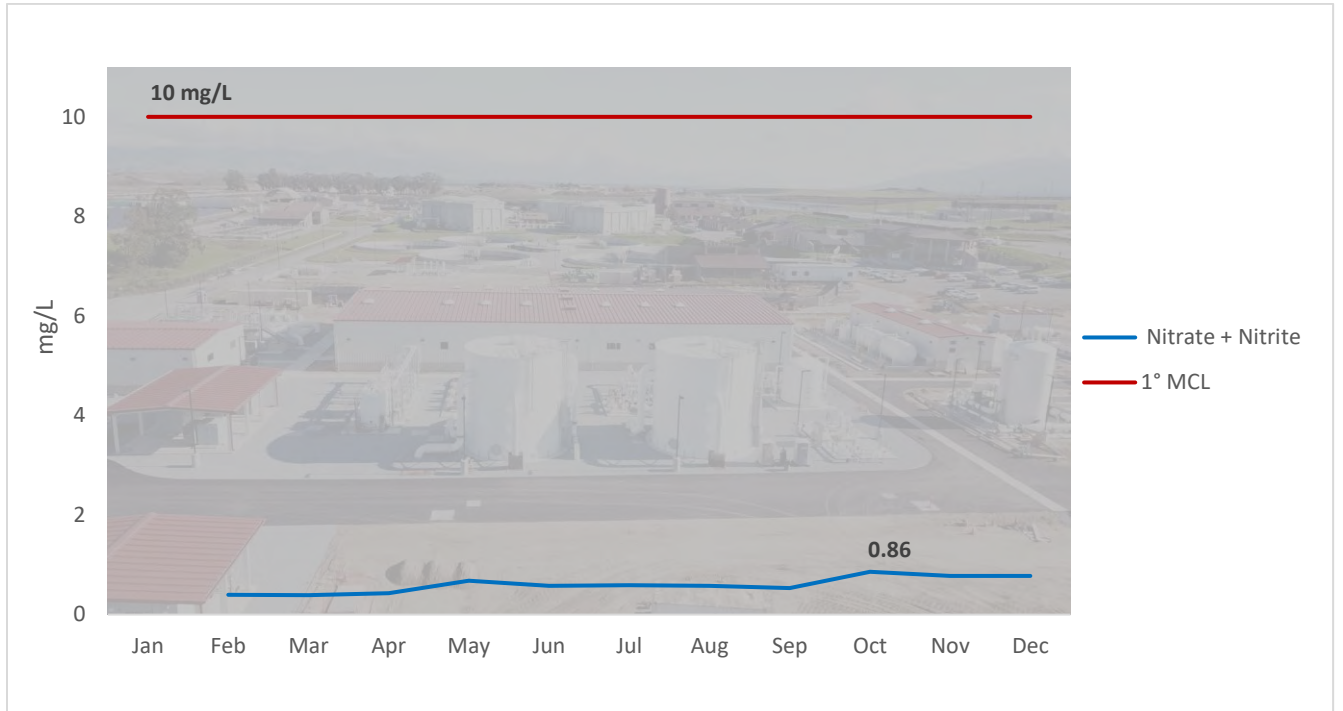


**Table 77. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents/Parameters with Secondary MCLs**

Month	Aluminum ug/L	Chloride mg/L	Color	Copper ug/L	Foam Agents (MBAS) mg/L	Iron mg/L	Manganese ug/L	Methyl-tert-butyl- ether (MTBE) ug/L	Odor- Threshold TON	Silver ug/L	Specific Conductance us/cm	Sulfate mg/L	Thiobencarb ug/L	TDS mg/L	Turbidity NTU	Zinc ug/L
January																
February	33	7.59	ND 2	ND 5	ND 0.03	ND 0.01	ND 1	ND 0.07	1	ND 10	120.2	2.61	ND 8.30E-03	48	0.29	ND 5
March	32	7.77	ND 2	ND 5	ND 0.03	ND 0.01	ND 1	ND 0.50	1	ND 10	85	0.56	ND 8.30E-03	45	0.2	ND 5
April	DNQ 49	10.03	ND 2	ND 2.3	ND 0.05	ND 0.01	ND 4.5	ND 0.07	1	ND 4.5	106	0.24	ND 8.30E-03	45	0.25	ND 23
May	DNQ 25	8.92	ND 2	ND 2.3	ND 0.05	ND 0.01	ND 4.5	ND 0.07	2	ND 4.5	103	0.89	ND 8.30E-03	45	0.2	ND 23
June	34	9.65	ND 2	ND 5	ND 0.05	DNQ 0.01	2	ND 0.07	2	ND 10	110	0.34	ND 8.30E-03	60	0.3	ND 5
July	32	10.6	ND 2	ND 5	ND 0.05	DNQ 0.01	ND 1	ND 0.07	1	ND 10	105	3.21	ND 8.30E-03	56	0.25	ND 5
August	40	11.48	ND 2	ND 5	ND 0.05	DNQ 0.03	ND 1	ND 0.07	1	ND 10	130	0.28	ND 8.30E-03	66	0.25	ND 5
September	59	10.05	ND 2	ND 5	ND 0.05	0.04	1	ND 0.07	1	ND 10	170	0.49	ND 8.30E-03	85	0.35	ND 5
October	36	28.2	ND 2	ND 5	ND 0.05	DNQ 0.02	ND 1	ND 0.07	2	ND 10	141	0.64	ND 8.30E-03	72	0.25	ND 5
November	ND 5	35.79	ND 2	ND 5	ND 0.05	ND 0.01	ND 1	ND 0.07	1	ND 10	204	0.48	ND 8.30E-03	100	0.05	ND 5
December	ND 5	35.31	ND 2	ND 5	ND 0.05	ND 0.10	2	ND 0.07	1	ND 10	178	0.4	ND 8.30E-03	85	0.5	ND 5

**Figure 77a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents/Parameters with Secondary MCLs
Monthly Aluminum (ug/L)**

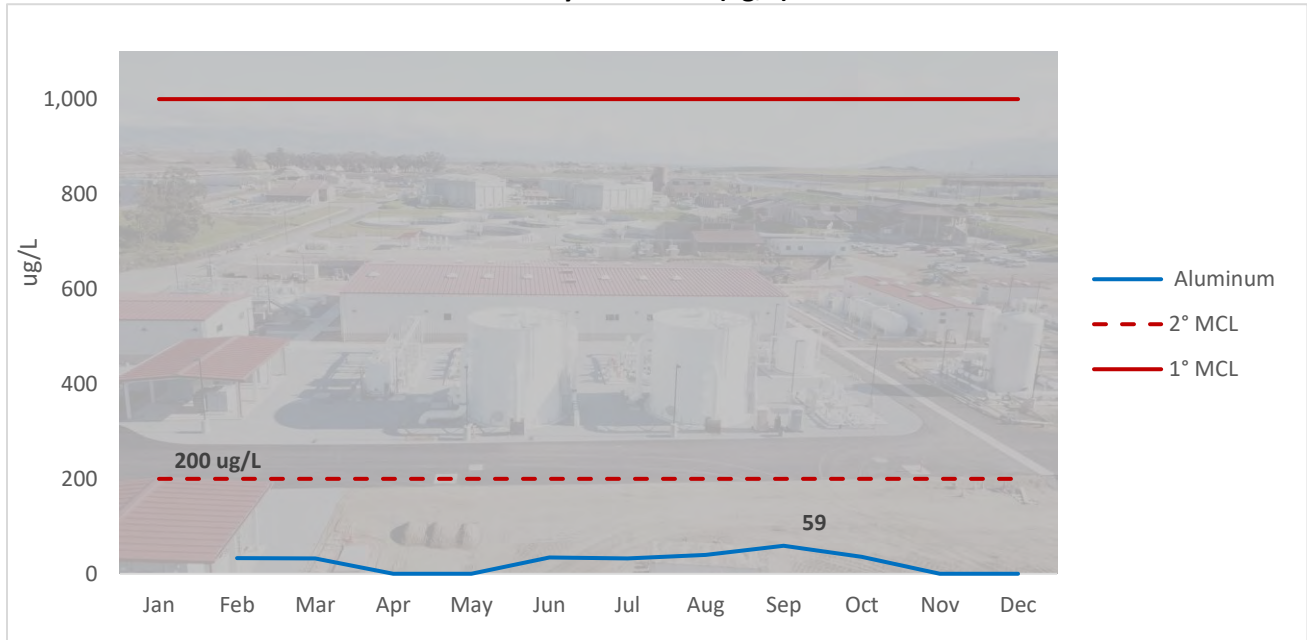


**Figure 77b. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents/Parameters with Secondary MCLs
Monthly Chloride (mg/L)**

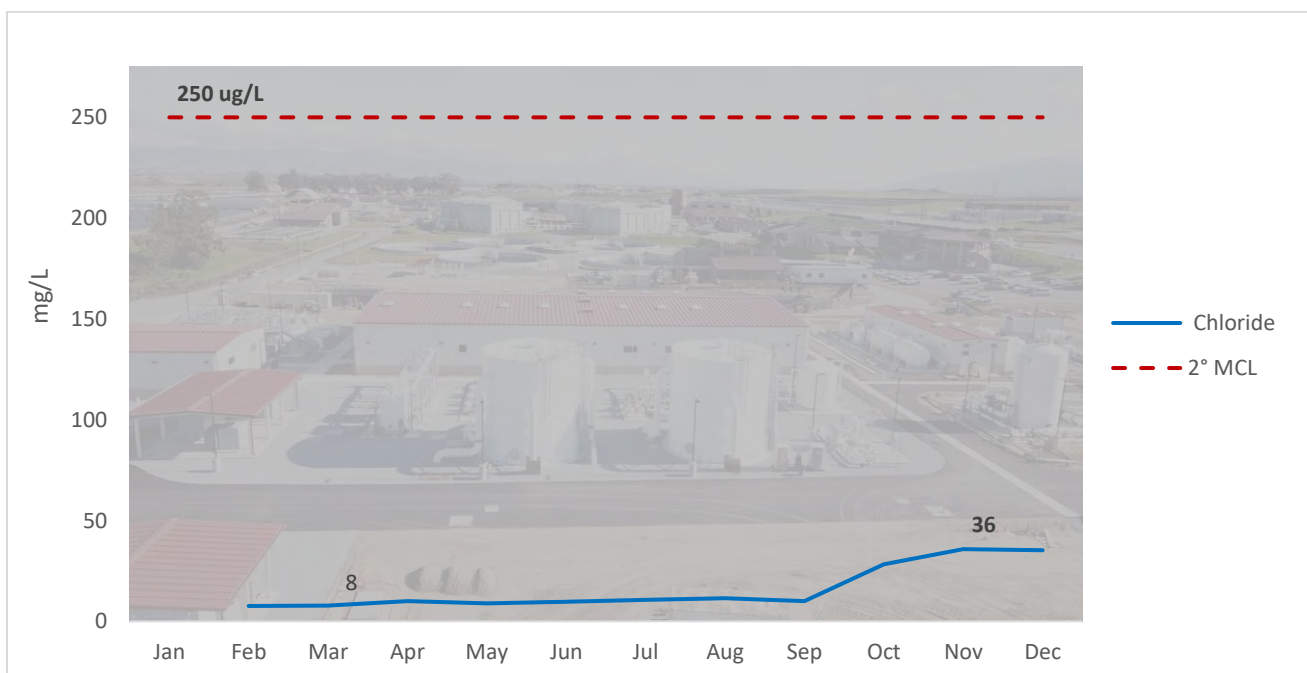


**Figure 77c. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Constituents/Parameters with Secondary MCLs
 Monthly Iron (mg/L)**

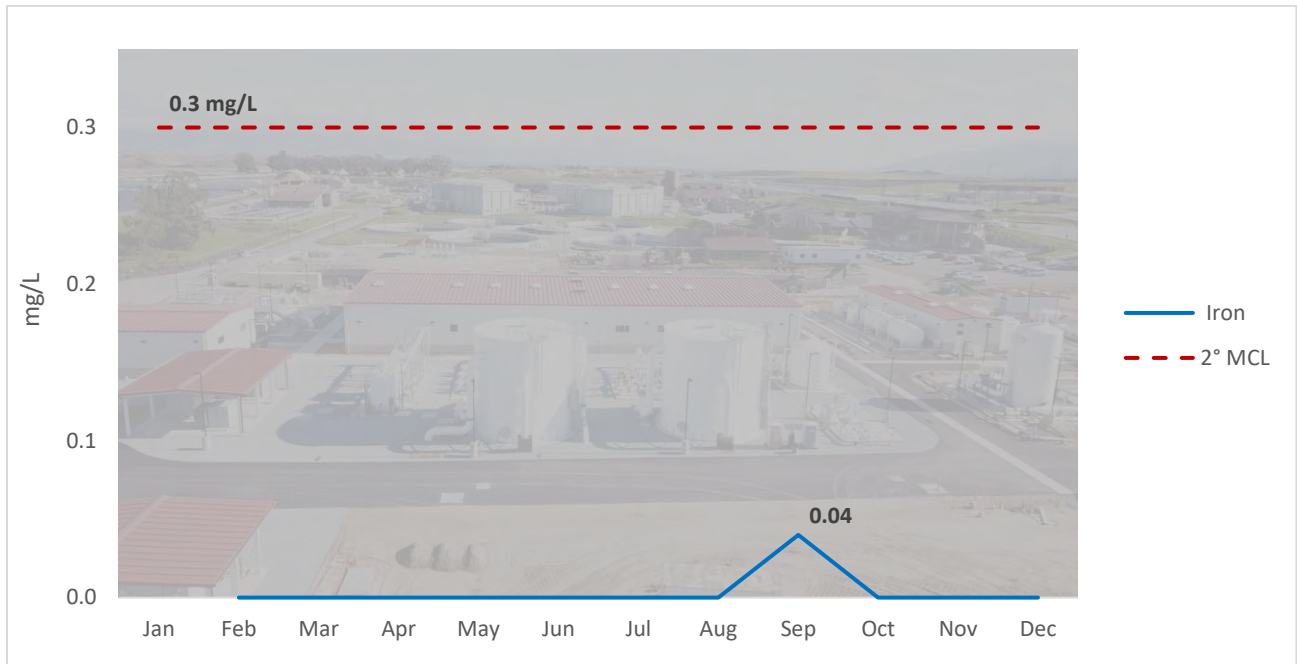


**Figure 77d. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Constituents/Parameters with Secondary MCLs
 Monthly Manganese (ug/L)**

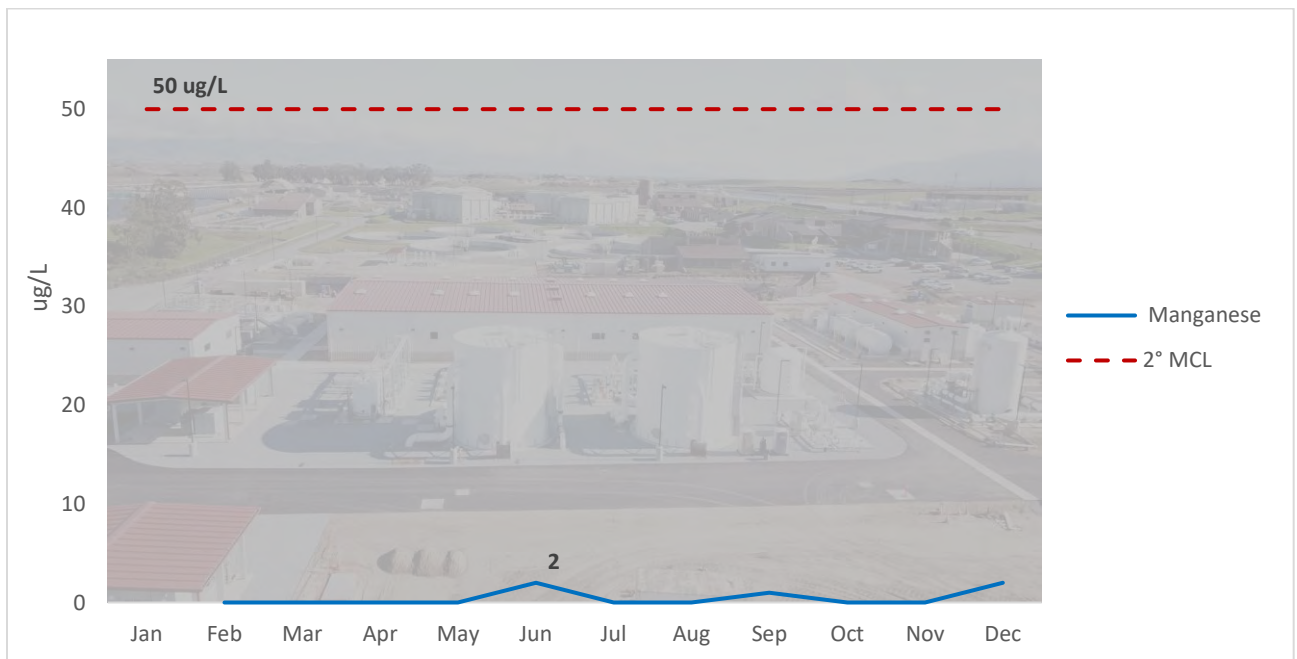


**Figure 77e. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents/Parameters with Secondary MCLs
Monthly Odor (TON)**

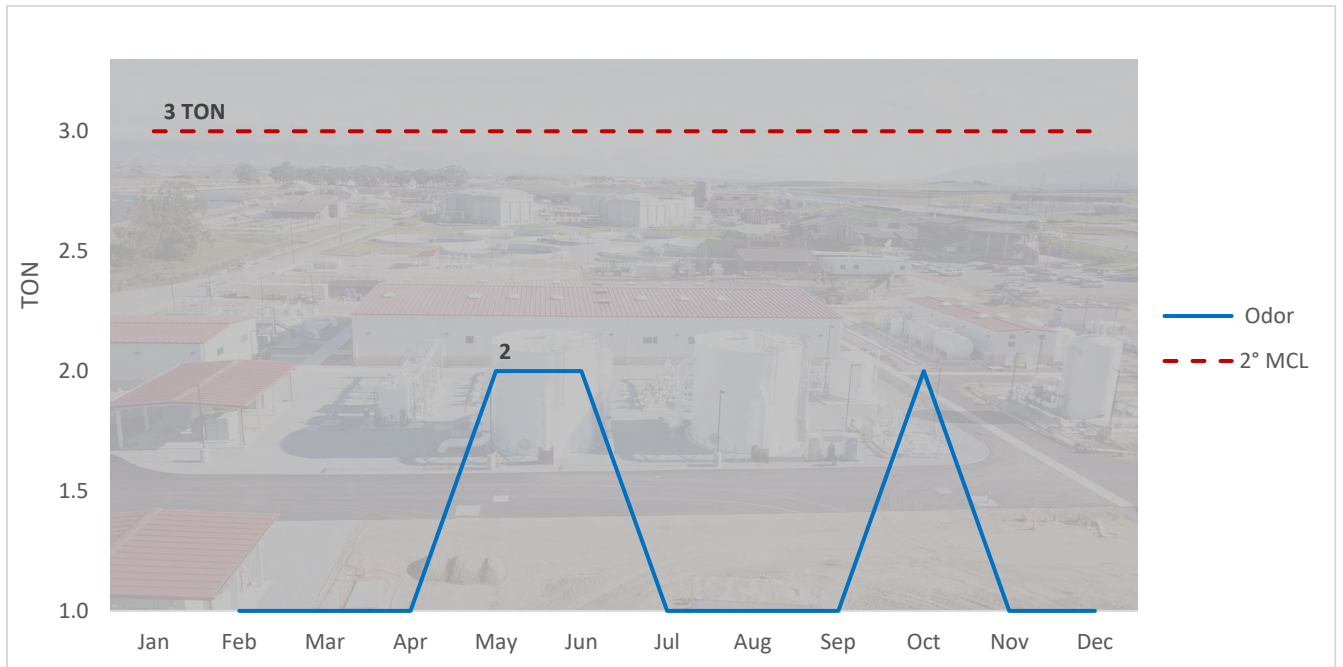


**Figure 77f. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents/Parameters with Secondary MCLs
Monthly Specific Conductance (uS/cm)**

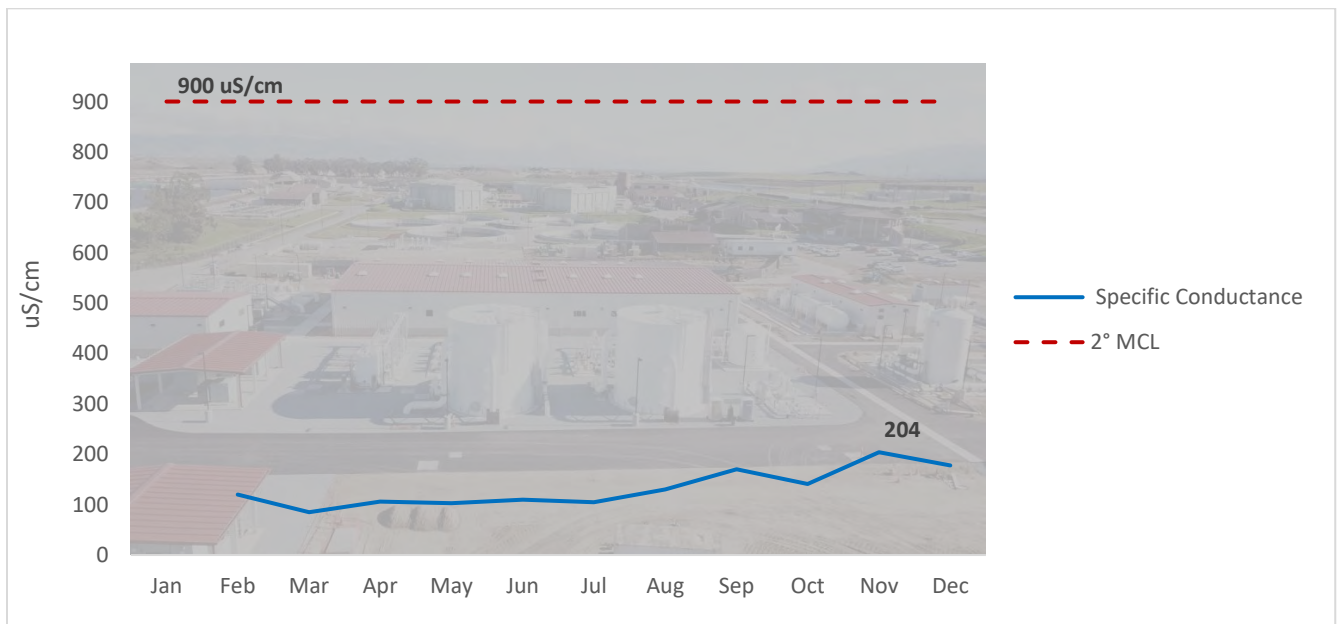


**Figure 77g. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Constituents/Parameters with Secondary MCLs
 Monthly Sulfate (mg/L)**

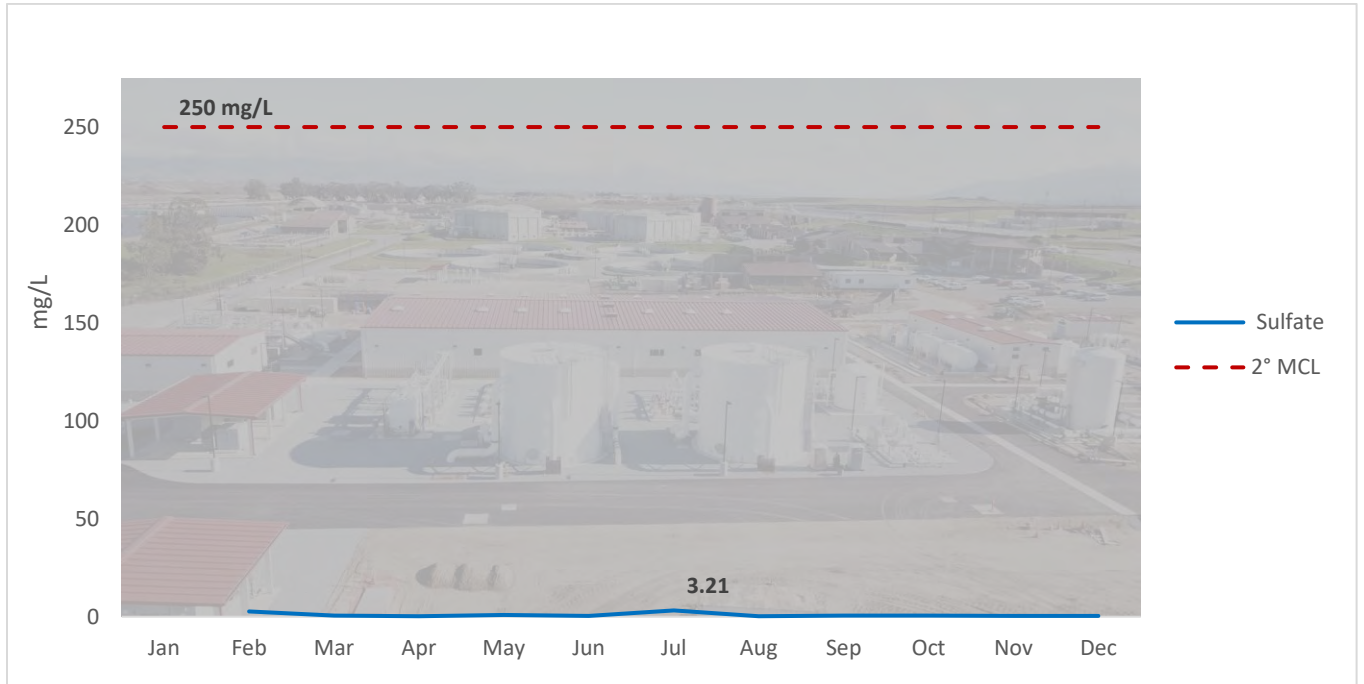


**Figure 77h. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Constituents/Parameters with Secondary MCLs
 Monthly TDS (mg/L)**

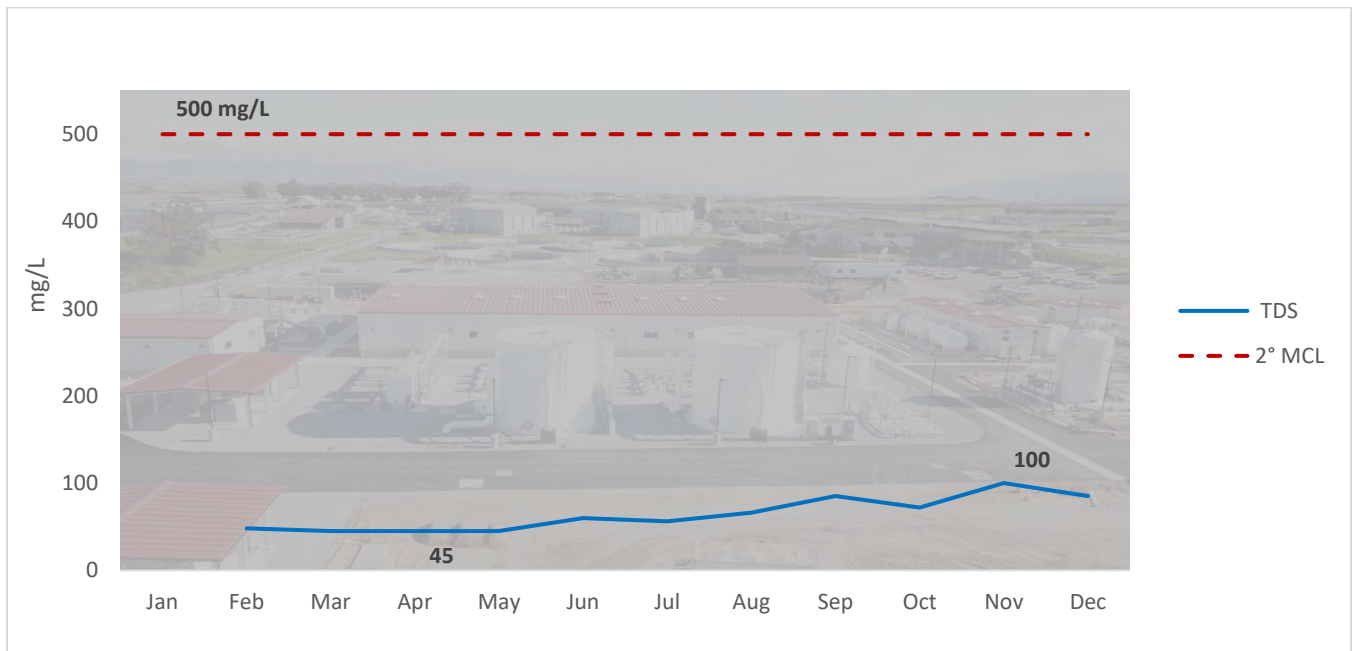


**Figure 77i. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents/Parameters with Secondary MCLs
Monthly Turbidity (NTU)**

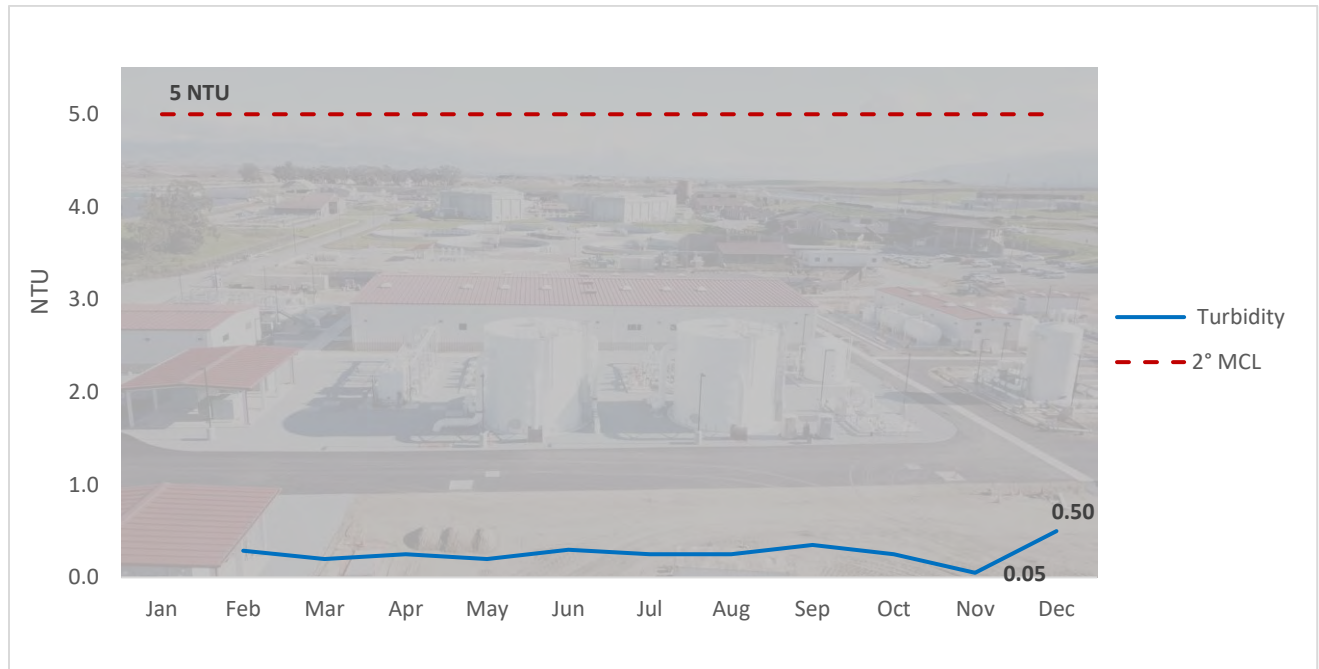


**Table 78. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Radioactivity**

Month	Gross Alpha Particle Activity pCi/L	Gross Beta Particle Activity pCi/L	Combined Radium-226 and Radium-228 pCi/L	Strontium-90 pCi/L	Tritium pCi/L	Uranium pCi/L
January						
February	4.07	0.08	0.13	0.072	ND 434	ND 0.30
March	4.34	5.92	0.53	0.12	77.2	ND 0.30
April	3.21	4.37	0.24	0.02	ND 434	ND 0.67
May	4.77	1.35	0.16	0.14	341	ND 0.67
June	2.61	2.94	0.20	0.00	89.5	ND 0.67
July	0.8	2.11	0.37	0.08	197	ND 0.67
August	2.54	3.23	0.45	0.42	156	ND 0.30
September	2.7	3.22	0.68	ND 0.73	251	ND 0.67
October	3.79	4.06	0.23	ND 0.70	183	ND 0.30
November	1.42	2.67	0.23	DNQ 0.11	274	ND 0.30
December	2.87	4.99	0.23	ND 0.44	304	ND 0.30

Figure 78a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Radioactivity
Monthly Gross Alpha Particle Activity (pCi/L)

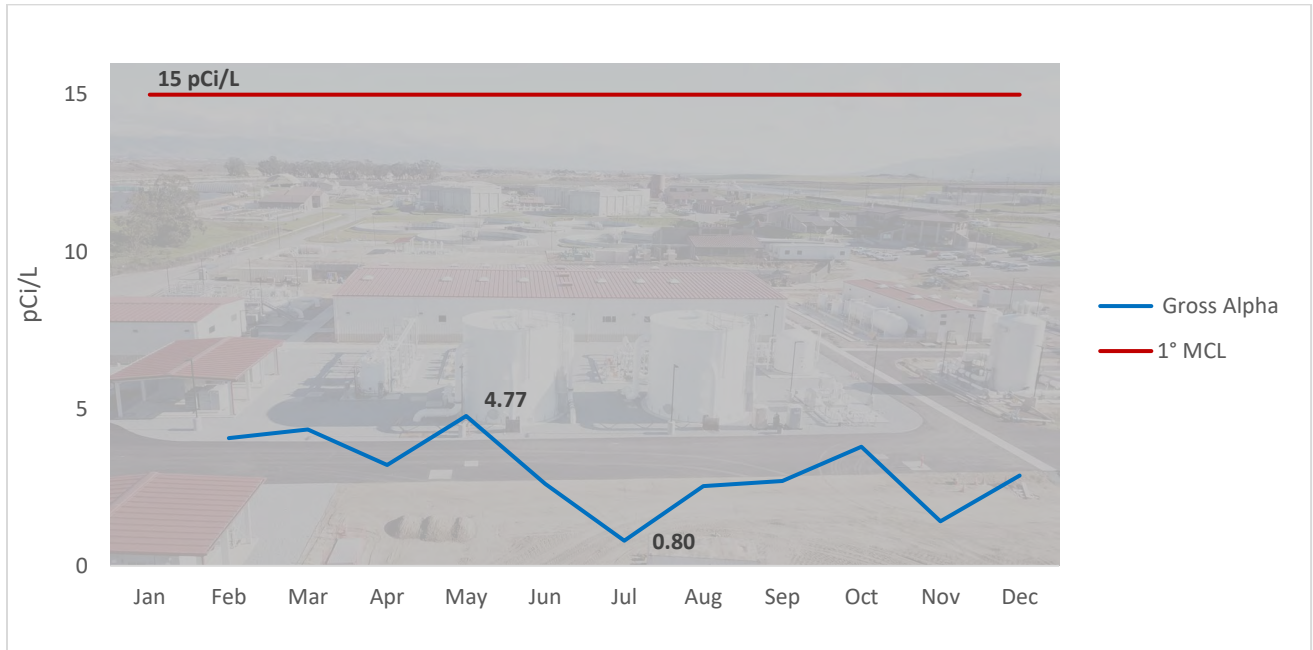


Figure 78b. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Radioactivity
Monthly Gross Beta Particle Activity (pCi/L)

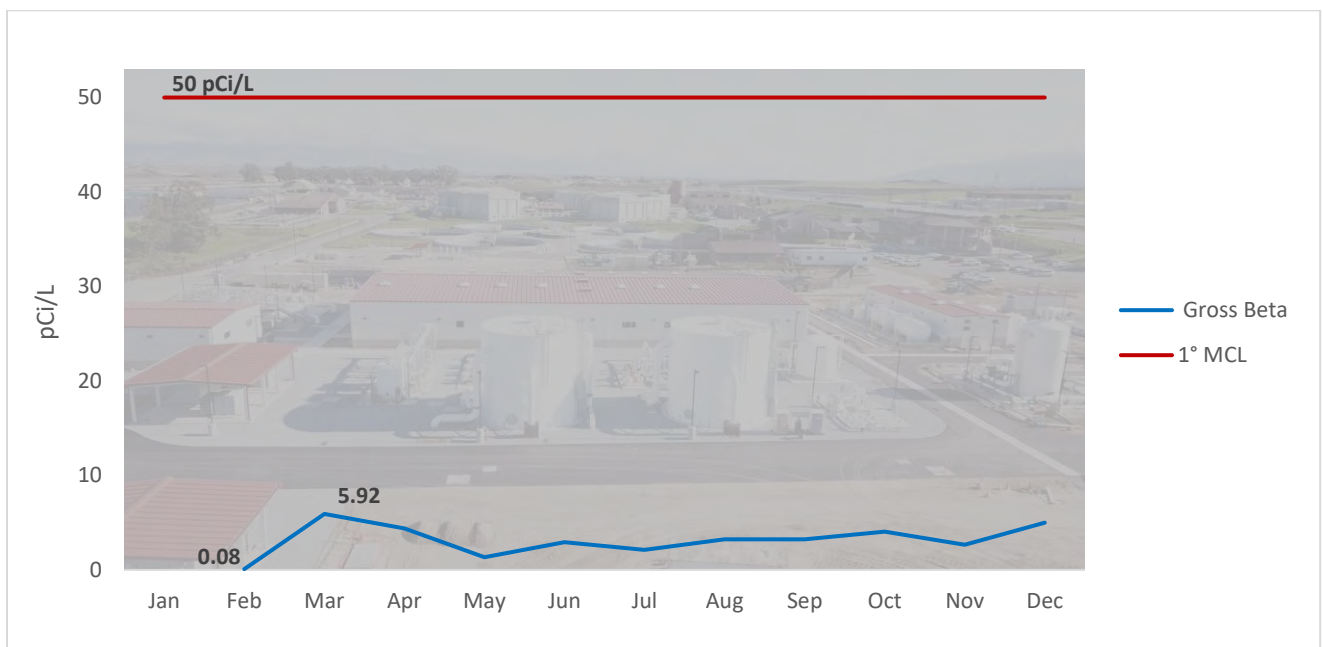


Figure 78c. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Radioactivity
Monthly Combined Radium-226 and Radium-228 (pCi/L)

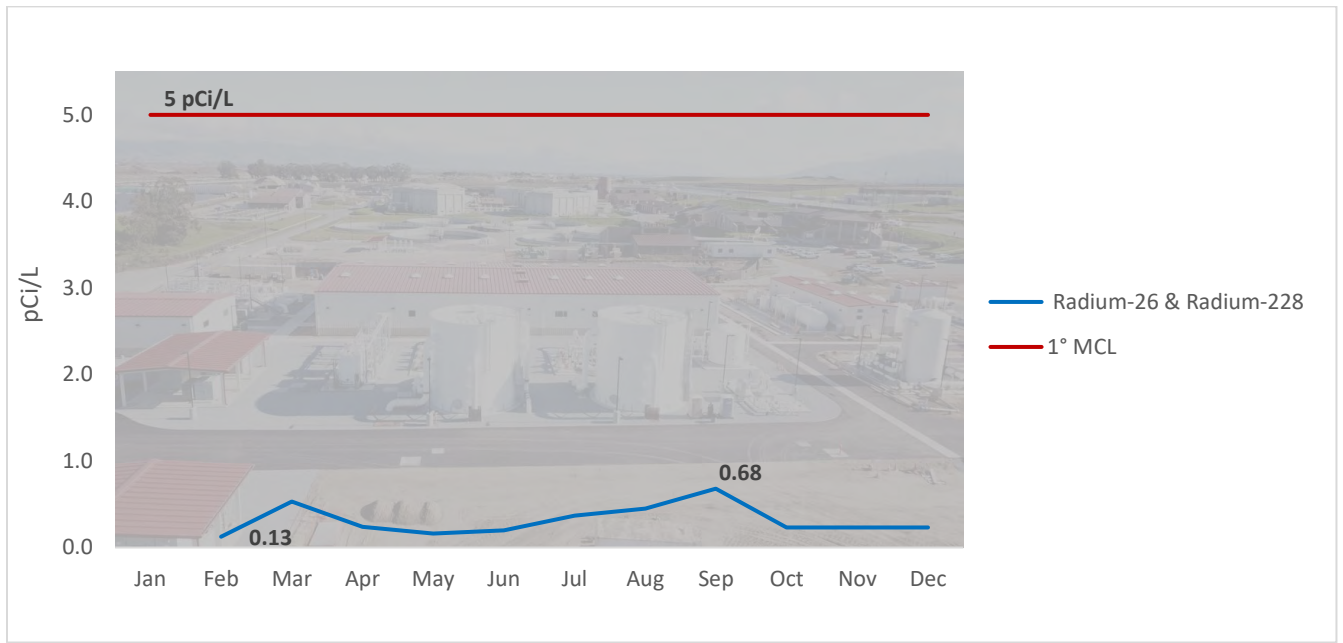


Figure 78d. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Radioactivity
Monthly Strontium-90 (pCi/L)

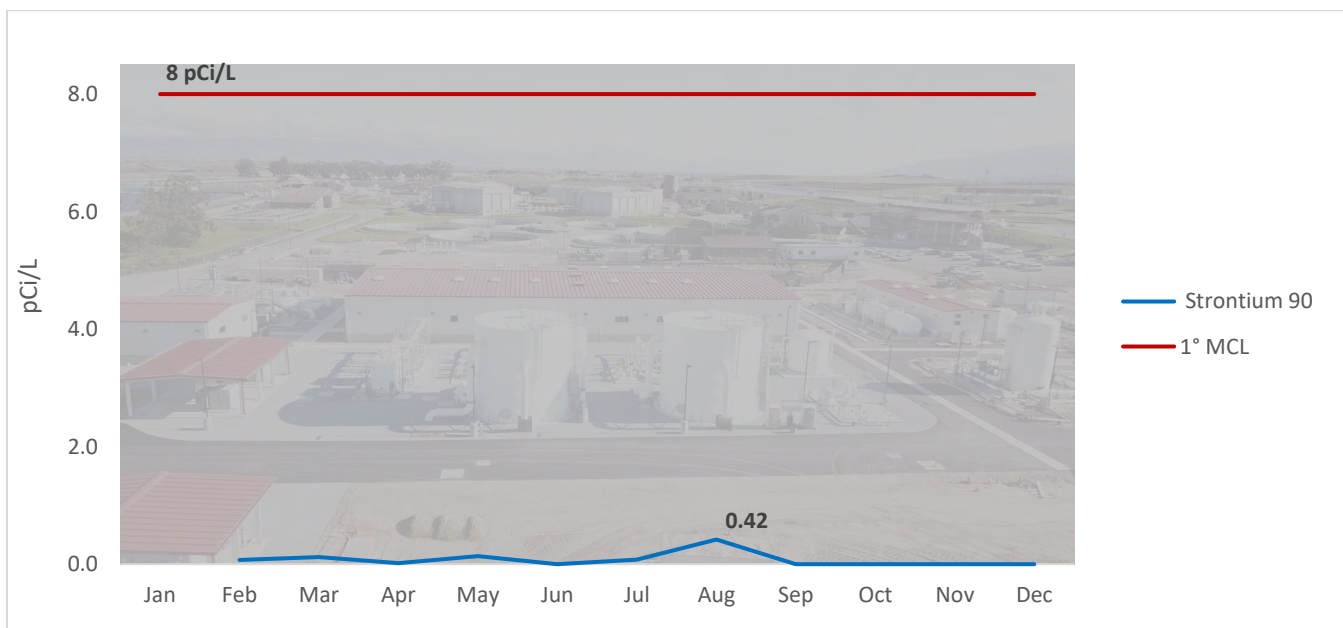


Figure 78e. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Radioactivity
Monthly Tritium (pCi/L)

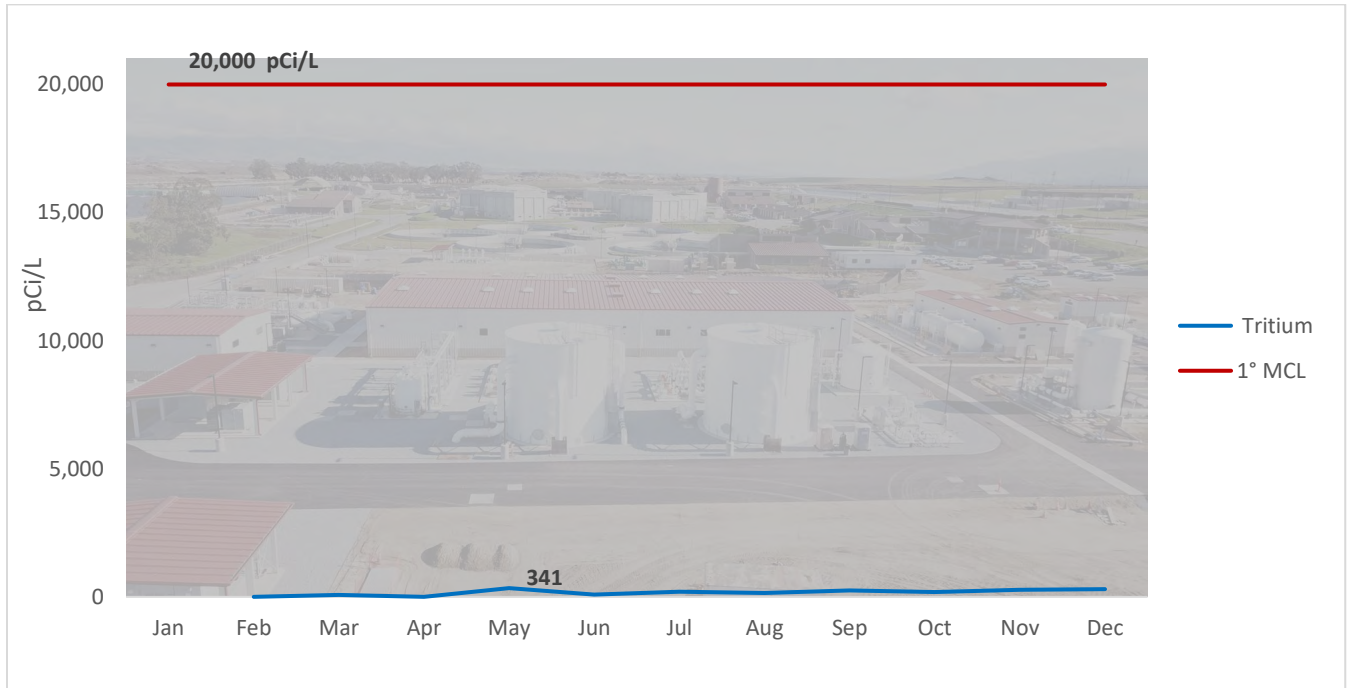


**Table 79. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Regulated Organics**

Pollutant (Monthly)	UOM	Result:											
		January	February	March	April	May	June	July	August	September	October	November	December
Volatile Organic Chemicals													
Benzene	ug/L		ND 0.12	ND 0.50	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12
Carbon Tetrachloride (CTC)	ug/L		ND 0.09	ND 0.50	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
1,2-Dichlorobenzene	ug/L		ND 0.08	ND 0.50	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
1,4-Dichlorobenzene	ug/L		ND 0.09	ND 0.50	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
1,1-Dichloroethane	ug/L		ND 0.13	ND 0.50	ND 0.13	ND 0.13	ND 0.13	ND 0.13	ND 0.13	ND 0.13	ND 0.13	ND 0.13	ND 0.13
1,2-Dichloroethane (1,2-DCA)	ug/L		ND 0.12	ND 0.50	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12
1,1-Dichloroethene (1,1-DCA)	ug/L		ND 0.11	ND 0.50	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
cis-1,2-Dichloroethylene	ug/L		ND 0.14	ND 0.50	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14
trans-1,2-Dichloroethylene	ug/L		ND 0.11	ND 0.50	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
Dichloromethane	ug/L		ND 0.07	ND 0.30	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
1,2-Dichloropropane	ug/L		ND 0.07	ND 0.50	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
1,3-Dichloropropane	ug/L		ND 0.11	ND 0.50	ND 0.11	ND 0.11	ND 0.50	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
Ethylbenzene	ug/L		ND 0.11	ND 2.00	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
Methyl-tert-butyl-ether (MTBE)	ug/L		ND 0.07	ND 0.50	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
Monochlorobenzene	ug/L		ND 0.07	ND 0.50	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
Styrene	ug/L		ND 0.11	ND 0.50	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
1,1,2,2-Tetrachloroethane	ug/L		ND 0.10	ND 0.50	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10
Tetrachloroethylene (PCE)	ug/L		ND 0.28	ND 0.50	ND 0.28	ND 0.28	ND 0.28	ND 0.28	ND 0.28	ND 0.28	ND 0.28	ND 0.28	ND 0.28
Toluene	ug/L		ND 0.06	ND 0.50	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06
1,2,4-Trichlorobenzene	ug/L		ND 0.07	ND 0.50	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.19	ND 0.07	ND 0.07	ND 0.19	ND 0.07
1,1,1-Trichloroethane	ug/L		ND 0.08	ND 0.50	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
1,1,2-Trichloroethane	ug/L		ND 0.08	ND 0.50	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
Trichloroethylene (TCE)	ug/L		ND 0.10	ND 0.50	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10
Trichlorofluoromethane	ug/L		ND 0.18	ND 0.50	ND 0.18	ND 0.18	ND 0.18	ND 0.18	ND 0.18	ND 0.18	ND 0.18	ND 0.18	ND 0.18
1,1,2-Trichloro- 1,2,2-Trifluoroethane	ug/L		ND 0.14	ND 0.50	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14
Vinyl Chloride	ug/L		ND 0.08	ND 0.50	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
Xylenes (o,m,p)	ug/L		ND 0.30	ND 0.50	ND 0.30	ND 0.30	0.6	ND 0.23	ND 0.23	ND 0.23	0.67	ND 0.23	ND 0.50
Synthetic Organic Chemicals													
1,2,3-Trichloropropane	ug/L		ND 0.05	ND 0.50	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Alachlor	ug/L		ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Atrazine	ug/L		ND 7.60E-03	ND 7.60E-03	ND 7.60E-03	DNQ 0.01	ND 7.60E-03	ND 7.60E-03	ND 7.60E-03	ND 7.60E-03	ND 7.60E-03	ND 7.60E-03	ND 7.60E-03
Bentazon	ug/L		ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30	ND 1.30
Benzo(a)pyrene	ug/L		ND 1.90E-03	ND 1.90E-03	ND 1.90E-03	DNQ 2.30E-03	ND 1.90E-03	ND 1.90E-03	ND 0.19	ND 1.90E-03	ND 1.90E-03	ND 0.19	ND 1.90E-03
Carbofuran	ug/L		ND 0.27	ND 0.27	ND 0.27	ND 0.27	ND 0.27	ND 0.27	ND 0.27	ND 0.30	ND 0.30	ND 0.30	ND 0.30

Pollutant (Monthly)	UOM	Result:											
		January	February	March	April	May	June	July	August	September	October	November	December
Synthetic Organic Chemicals (Cont.)													
Chlordane	ug/L		ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
Dalapon	ug/L		DNQ 2.60	ND 0.58	DNQ 2.70	DNQ 2.40	ND 0.58	ND 0.58	ND 0.58	ND 0.58	ND 0.58	ND 0.58	ND 0.58
1,2-Dibromo-3-chloropropane (DBCP)	ug/L		ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03	ND 6.00E-03
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/L		ND 0.07	ND 0.07	ND 0.07	DNQ 0.10	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
Di(2-ethylhexyl)adipate	ug/L		ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
Di(2-ethylhexyl)phthalate	ug/L		DNQ 0.13	ND 0.11	ND 0.11	ND 0.11	DNQ 0.17	DNQ 0.13	ND 0.11	DNQ 0.18	ND 0.11	ND 0.11	ND 0.11
Dinoseb	ug/L		ND 0.03	ND 0.03	DNQ 0.07	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03
Diquat	ug/L		ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 4.00	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
Endothal	ug/L		ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60	ND 1.60
Endrin	ug/L		ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03	ND 3.70E-03
Ethylene Dibromide (EDB)	ug/L		ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03	ND 5.00E-03
Glyphosate	ug/L		ND 2.10	ND 2.10	ND 2.10	ND 2.10	ND 2.10	ND 2.10	ND 10.00	ND 2.10	ND 2.10	ND 2.10	ND 2.10
Heptachlor	ug/L		ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03	ND 5.20E-03
Heptachlor Epoxide	ug/L		ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03	ND 4.80E-03
Hexachlorobenzene	ug/L		ND 0.03	ND 0.03	ND 0.03	DNQ 0.04	ND 0.03	ND 0.03	ND 0.19	ND 0.03	ND 0.03	ND 0.19	ND 0.03
Hexachlorocyclopentadiene	ug/L		ND 0.04	ND 0.04	DNQ 0.04	DNQ 0.07	ND 0.04	ND 0.04	ND 0.19	ND 0.04	ND 0.04	ND 0.19	ND 0.04
Lindane	ug/L		ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03	ND 5.90E-03
Metoxychlor	ug/L		ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03
Molinate	ug/L		ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03	ND 6.10E-03
Oxamyl	ug/L		ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.33	ND 0.33	ND 0.33	ND 0.33
Pentachlorophenol	ug/L		ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.96	ND 0.01
Picloram	ug/L		ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
Polychlorinated Biphenyls	ug/L		ND 0.33	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
Simazine	ug/L		ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03	ND 4.90E-03
Thiobencarb	ug/L		ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03	ND 8.30E-03
Toxaphene	ug/L		ND 0.08	ND 0.33	ND 0.33	ND 0.33	ND 0.33	ND 0.33	ND 0.33	ND 0.33	ND 0.33	ND 0.33	ND 0.33
2,3,7,8-TCDD (Dioxin)	ug/L		ND 0.77	ND 2.29	ND 1.21	ND 2.94	ND 3.73	ND 1.26	ND 1.27	ND 1.72	ND 2.70	ND 0.77	ND 1.55
2,4,5-TP (Silvex)	ug/L		ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02	ND 0.02

Figure 79. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Regulated Organics
Monthly Xylenes (ug/L)

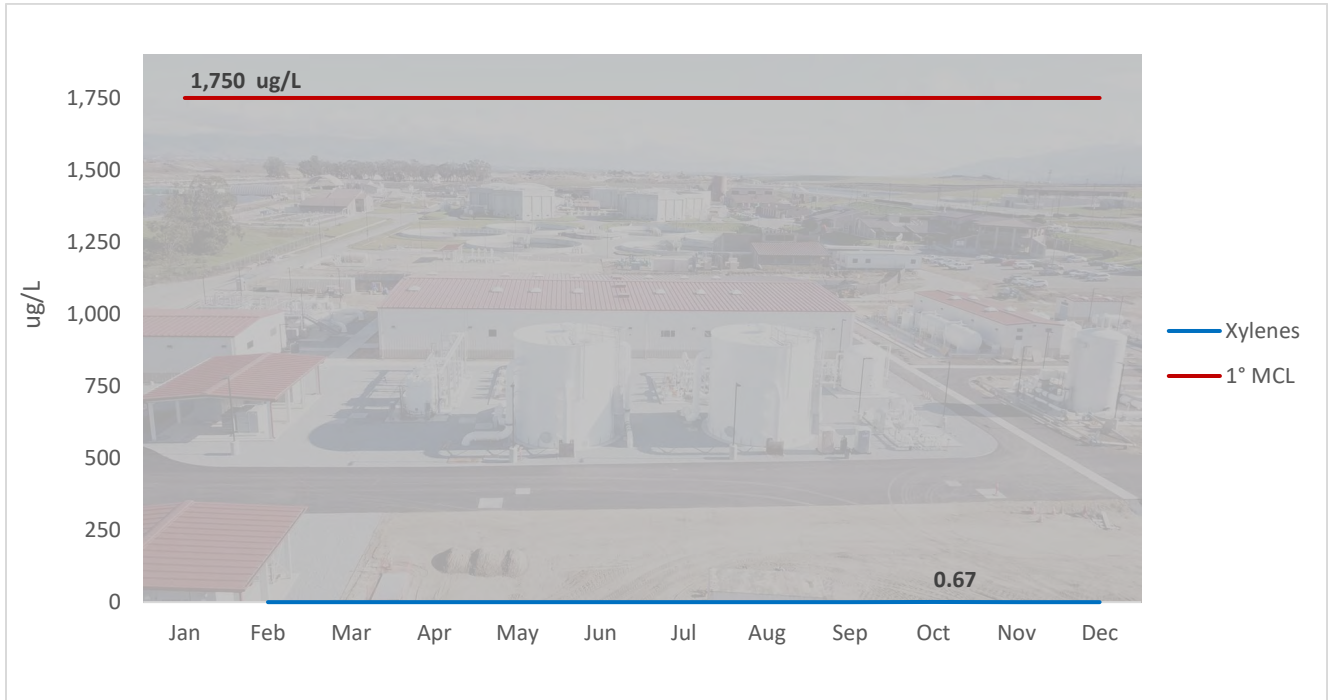


**Table 80. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Disinfection Byproducts**

Pollutant (Monthly)	UOM	Result:											
		January	February	March	April	May	June	July	August	September	October	November	December
Disinfection Byproducts													
Total Trihalomethanes (TTHM)	ug/L		ND 0.06	ND 0.50	ND 0.06	ND 0.50	ND 0.50	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06
Bromate	ug/L		ND 4.00E-04	ND 4.00E-04	ND 4.00E-04	ND 4.00E-04	ND 0.40	ND 4.00E-04	ND 4.00E-04	**No Data	ND 4.00E-04	ND 4.00E-04	ND 4.00E-04
Bromodichloromethane	ug/L		ND 0.12	ND 0.50	ND 0.12	ND 1.00	ND 0.50	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12
Bromoform	ug/L		ND 0.14	ND 0.50	ND 0.14	ND 1.00	ND 0.50	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14	ND 0.14
Chlorite	ug/L		ND 2.6	ND 2.6	ND 2.6	ND 2.6	11	ND 2.6	ND 2.6	ND 2.6	ND 2.6	ND 2.6	ND 2.6
Chloroform	ug/L		ND 0.11	ND 0.50	ND 0.11	ND 1.00	ND 0.50	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
Dibromoacetic Acid	ug/L		ND 0.22	DNQ 0.23	ND 0.22	ND 0.22	ND 0.22	ND 0.22	ND 0.22	ND 0.22	ND 0.22	ND 0.22	ND 0.22
Dibromochloromethane	ug/L		ND 0.06	ND 0.50	ND 0.06	ND 1.00	ND 0.50	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06
Dichloroacetic Acid	ug/L		ND 0.32	DNQ 0.94	DNQ 1.00	DNQ 0.71	DNQ 0.73	DNQ 0.69	DNQ 0.79	1.1	DNQ 0.93	DNQ 0.59	ND 0.32
Haloacetic Acid (five) (HAA5)	ug/L		ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
Monobromoacetic Acid	ug/L		ND 0.32	DNQ 0.65	ND 0.32	ND 0.32	ND 0.32	ND 0.32	ND 0.32	ND 0.32	ND 0.32	ND 0.32	ND 0.32
Monochloroacetic Acid	ug/L		ND 0.34	ND 0.34	ND 0.34	DNQ 0.78	ND 0.34	ND 0.34	ND 0.34	ND 0.34	ND 0.34	ND 0.34	ND 0.34
Trichloroacetic Acid	ug/L		ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26	ND 0.26

*Laboratory must report bromofom, chloroform, dichlorobromomethane, and dichlorodibromomethane to make up the total trihalomethanes for MCL determination.

**Please see letter of explanation dated October 23, 2020 from BSK; see Appendix F, Q3 2020 AWPf Report.

**Figure 80a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Disinfection Byproducts
Monthly Chlorite (ug/L)**

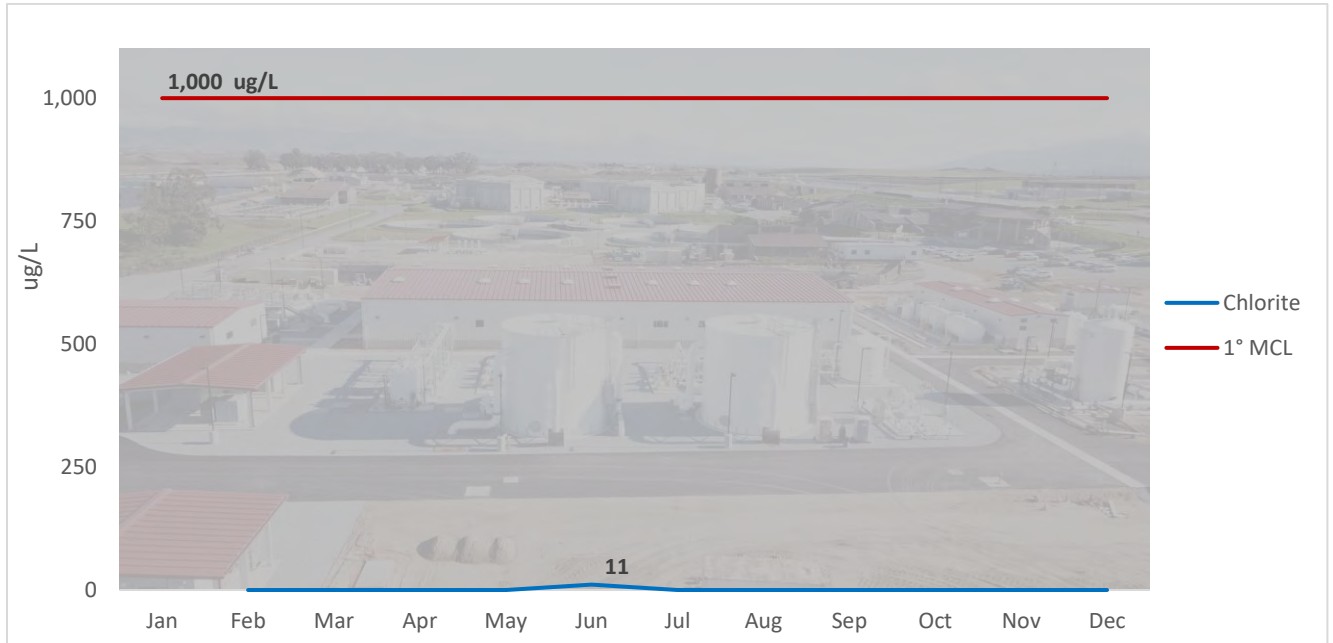


**Figure 80b. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Disinfection Byproducts
Monthly Dichloroacetic Acid (ug/L)**

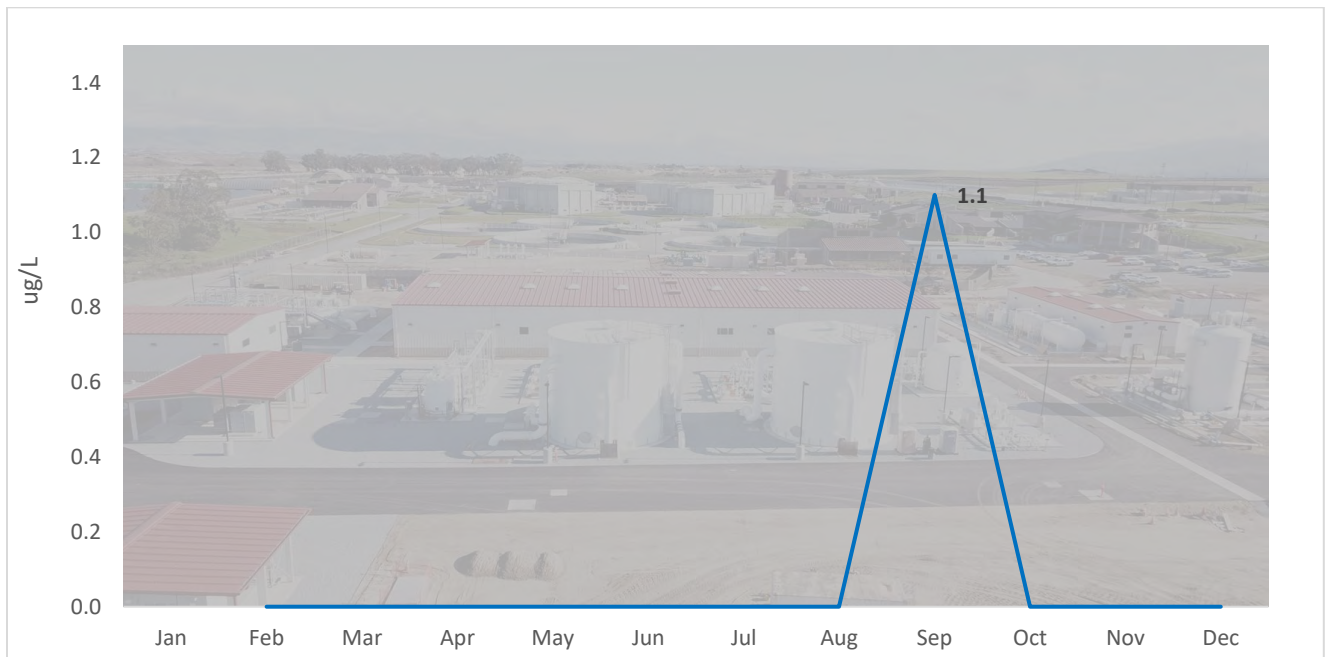


**Table 81. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
General Physical and General Minerals**

Pollutant (4x/Year)	UOM	Result:			
		Q1	Q2	Q3	Q4
General Physical and General Minerals					
Asbestos	MFL	ND 0.22	ND 0.20	ND 0.20	ND 0.20
Calcium	mg/L	8.5	9.1	17.1	11.7
Chloride	mg/L	7.7	9.6	10.7	33.0
Copper	ug/L	ND 5.00	ND 5.00	ND 5.00	ND 5.00
Iron	mg/L	ND 0.01	DNQ 0.01	0.03	DNQ 0.02
Manganese	ug/L	ND 1.00	2.0	1.0	2.0
Potassium	mg/L	ND 0.91	ND 0.91	1.0	DNQ 1.42
Sodium	mg/L	8.8	11.0	13.0	20.3
Sulfate	mg/L	1.4	0.4	1.1	0.5
Zinc	ug/L	ND 5.00	ND 5.00	ND 5.00	ND 5.00
Color	Units	ND 2.00	ND 2.00	ND 2.00	ND 2.00
Corrosivity	--	-2.23	-2.28	-0.32	-0.81
Foaming Agents	mg/L	ND 0.03	ND 0.05	ND 0.05	ND 0.05
Odor	Ton	1.0	1.7	1.0	1.3
Specific Conductance	uS/cm	108.5	106.3	135.0	174.3
Total Dissolved Solids	mg/L	47.0	50.0	69.0	85.7
Total Hardness	mg/L	21.5	23.3	31.8	30.3

**Figure 81a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
General Physical and General Minerals
Quarterly Calcium, Potassium, Sodium & Hardness (mg/L)**

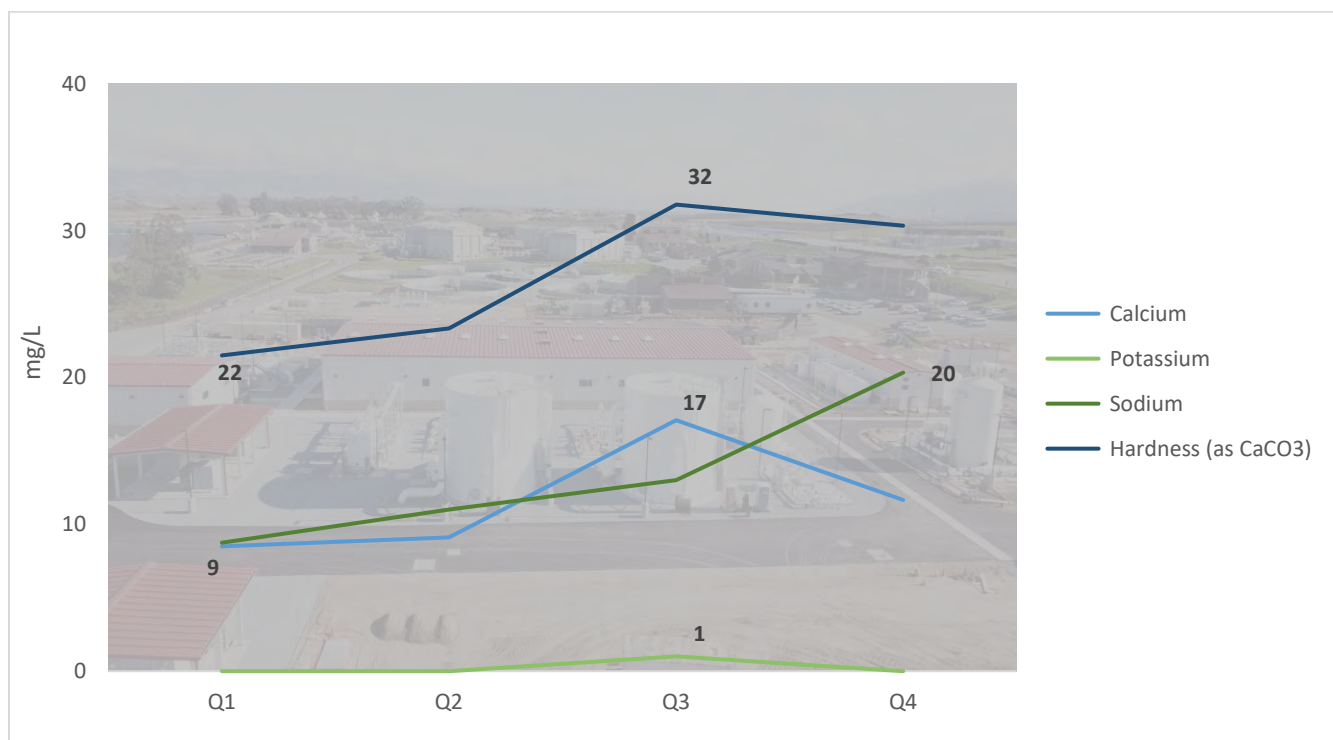


Figure 81b. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
General Physical and General Minerals
Quarterly Chloride & Sulfate (mg/L)

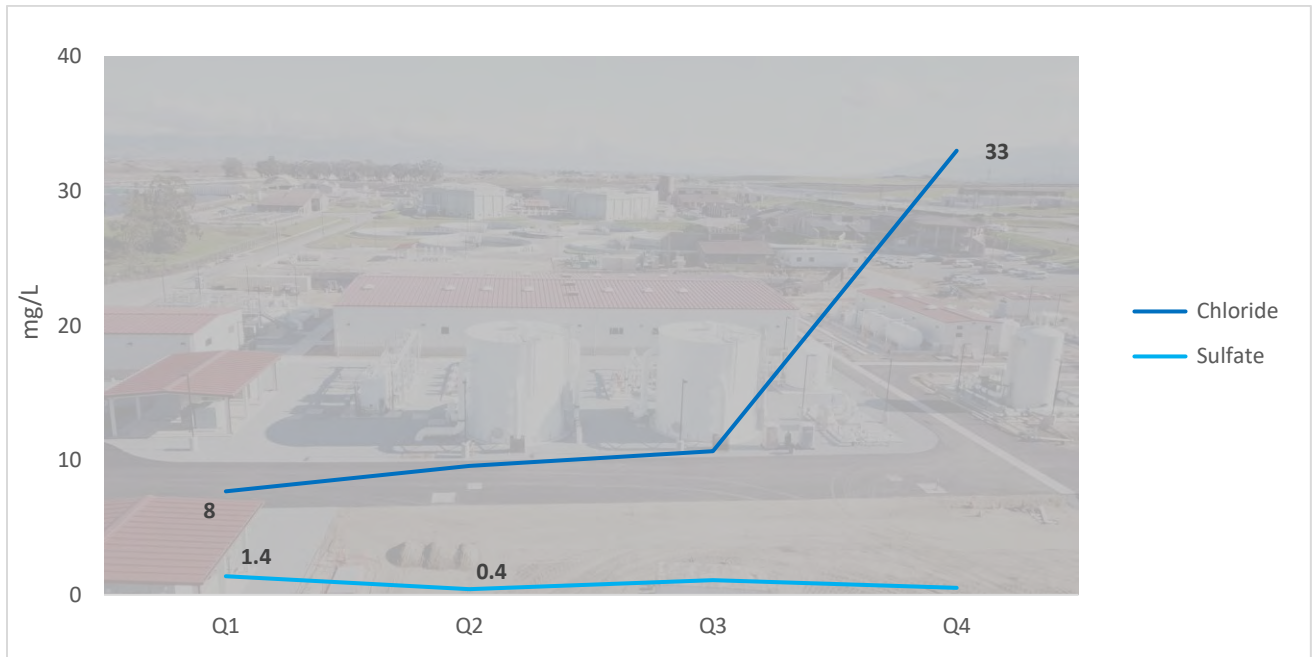


Figure 81c. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
General Physical and General Minerals
Quarterly Iron (mg/L), & Copper, Manganese, and Zinc (ug/L)

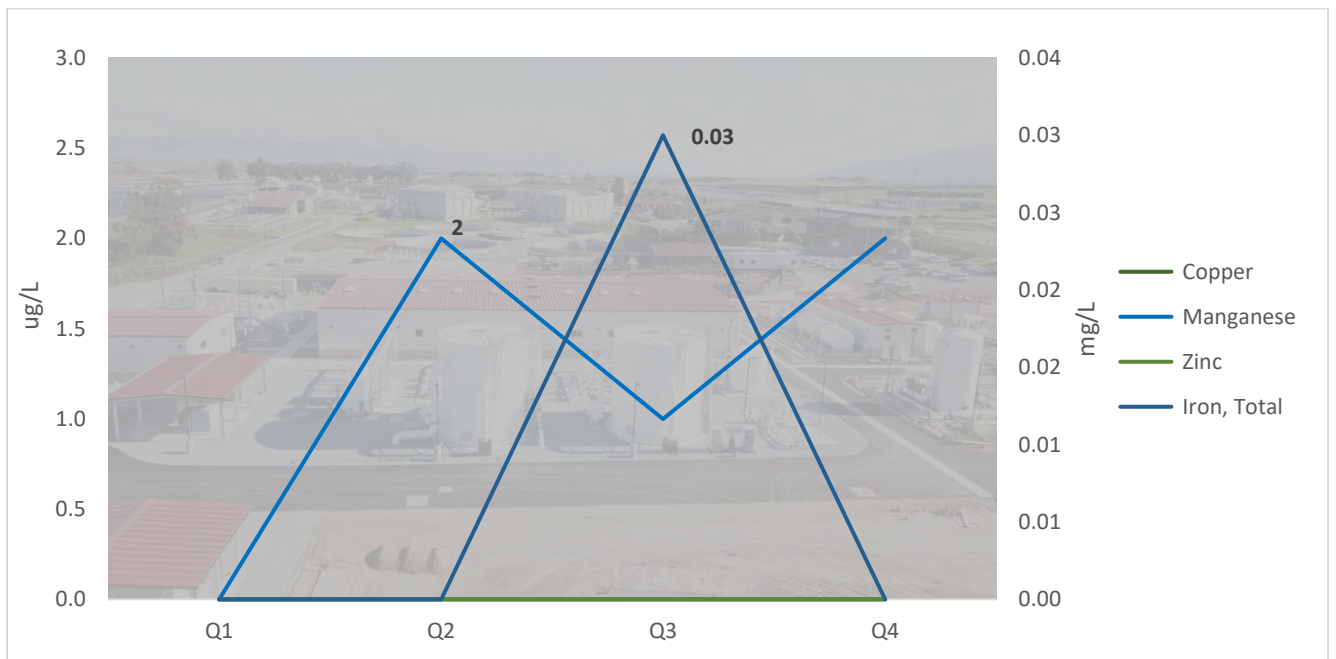


**Figure 81d. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
General Physical and General Minerals
Quarterly Odor (TON)**

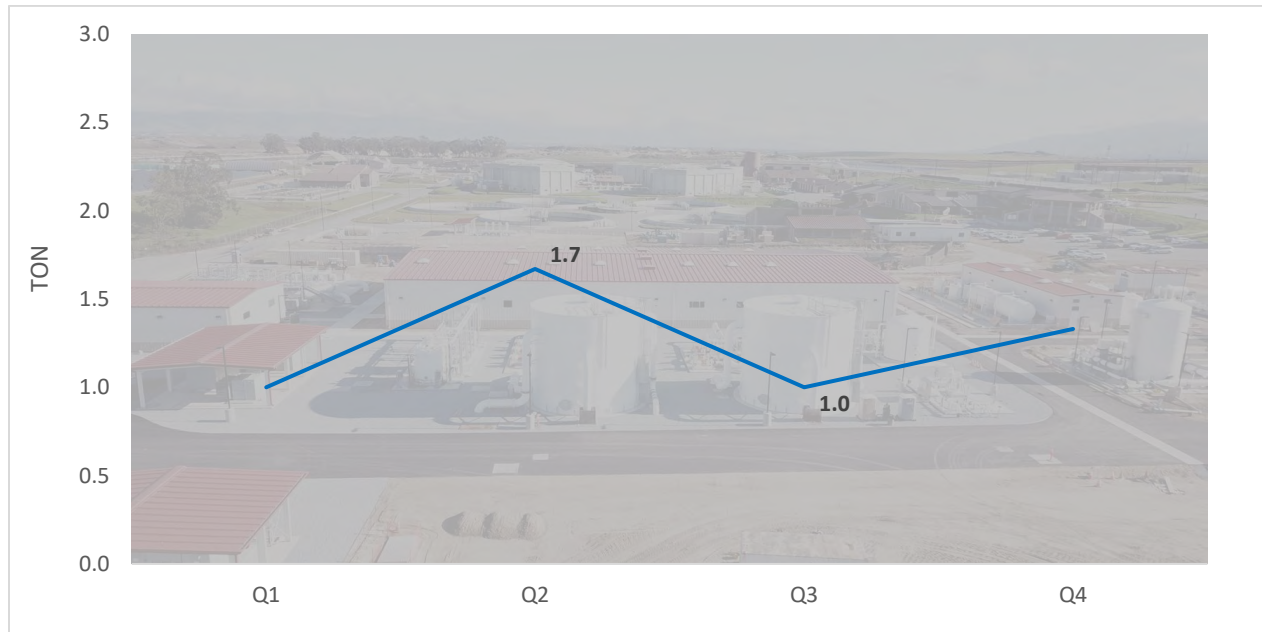


**Figure 81e. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
General Physical and General Minerals
Quarterly Corrosivity (LSI)**

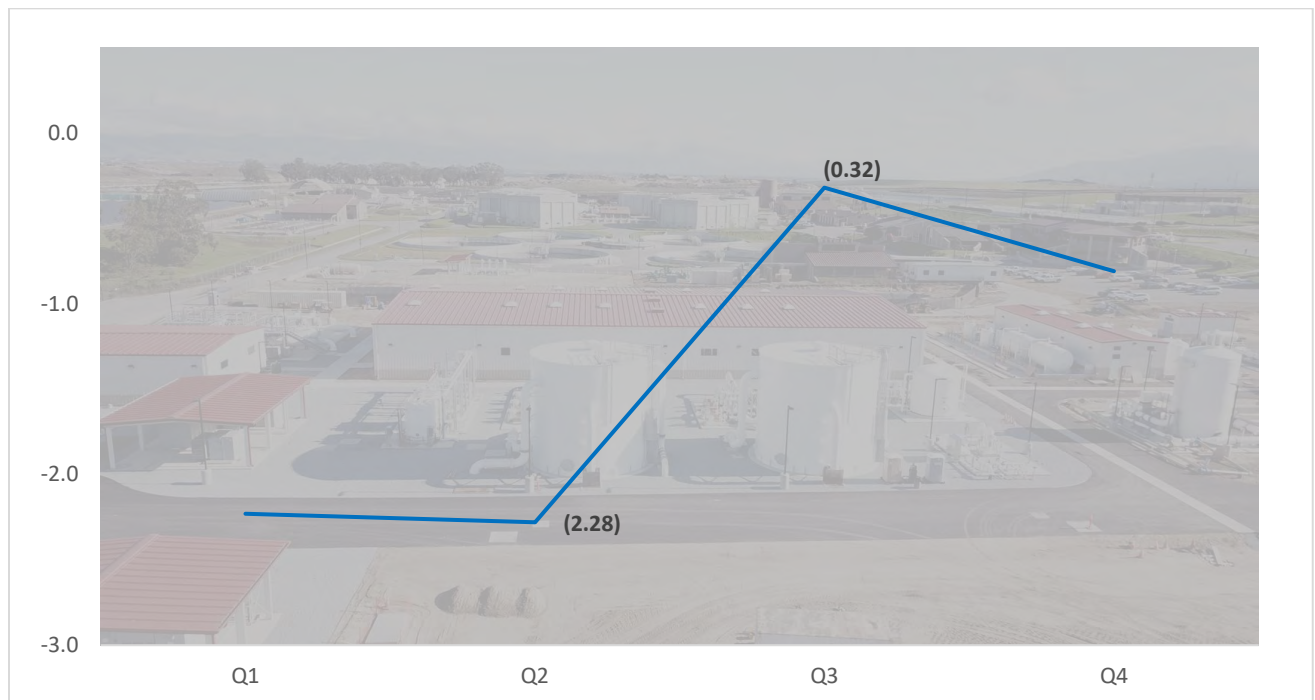


**Table 82. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents with Notification Levels**

Pollutant (Monthly)	UOM	Result:											
		January	February	March	April	May	June	July	August	September	October	November	December
Constituents with Notification Levels													
Boron	ug/L		86	184	180	240	200	156	320	201	247	265	227
n-Butylbenzene	ug/L		ND 0.06	ND 0.50	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06
sec-Butylbenzene	ug/L		ND 0.10	ND 0.50	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10
tert-Butylbenzene	ug/L		ND 0.09	ND 0.50	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
Carbon disulfide	ug/L		ND 0.09	ND 0.50	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
Chlorate	ug/L		260	290	480	390	370	280	635	700	820	640	124.5
2-Chlorotoluene	ug/L		ND 0.06	ND 0.50	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06	ND 0.06
4-Chlorotoluene	ug/L		ND 0.12	ND 0.50	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.12
Diazinon	ug/L		ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03	ND 2.20E-03
Dichlorodifluoromethane (Freon 12)	ug/L		ND 0.10	ND 0.50	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10
1,4-Dioxane	ug/L		ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
Ethylene glycol	ug/L		ND 1200	ND 5000	ND 1200	ND 1200	ND 1200	ND 1200	ND 1200	ND 1200	ND 1200	ND 1200	ND 1200
Formaldehyde	ug/L		10.6	11	12	10	12	22	24	22	21	20	11
HMX	ug/L		ND 0.05	ND 10.00	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Isopropylbenzene	ug/L		ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08	ND 0.08
Manganese	ug/L		ND 1.0	ND 1.0	ND 4.5	ND 4.5	2.0	ND 1.0	ND 1.0	1.0	ND 1.0	ND 1.0	2.0
Methyl isobutyl ketone (MIBK)	ug/L		ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68	ND 0.68
Naphthalene	ug/L		ND 0.15	ND 0.50	ND 0.15	ND 0.19	ND 0.30	ND 0.01	ND 0.19	ND 0.15	ND 0.15	ND 0.19	ND 0.15
N-Nitrosodiethylamine (NDEA)	ug/L		ND 1.49E-03	ND 5.00E-03	ND 1.49E-03	ND 1.57E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03
n-Nitrosodimethylamine (NDMA)	ug/L		ND 9.62E-04	ND 2.00E-03	ND 9.62E-04	ND 1.01E-03	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04
N-Nitrosodi-n-propylamine (NDPA)	ug/L		ND 8.43E-04	ND 2.00E-03	ND 8.43E-04	ND 8.85E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04
Perfluorooctane sulfonate (PFOS)	ug/L		ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04
Perfluorooctanoic acid (PFOA)	ug/L		ND 3.80E-04	ND 4.30E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04
Propachlor	ug/L		ND 5.60E-03	ND 5.60E-03	ND 5.60E-03	DNQ 6.70E-03	ND 5.60E-03	ND 5.60E-03	ND 5.60E-03	ND 5.60E-03	ND 5.60E-03	ND 5.00E-03	ND 5.00E-03
n-Propylbenzene	ug/L		ND 0.09	ND 0.50	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
RDX	ug/L		ND 0.05	ND 0.10	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Tertiary butyl alcohol (TBA)	ug/L		ND 0.88	ND 0.50	ND 0.88	ND 0.88	ND 0.88	ND 0.88	ND 0.88	3.9	ND 0.88	ND 0.88	ND 0.88
1,2,4-Trimethylbenzene	ug/L		ND 0.11	ND 0.50	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11	ND 0.11
1,3,5-Trimethylbenzene	ug/L		ND 0.07	ND 5.00	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07	ND 0.07
2,4,6-Trinitrotoluene (TNT)	ug/L		ND 0.05	ND 5.00	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Vanadium	ug/L		ND 0.03	ND 0.10	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03

**Figure 82a. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Constituents with Notification Levels
 Monthly Boron (ug/L)**

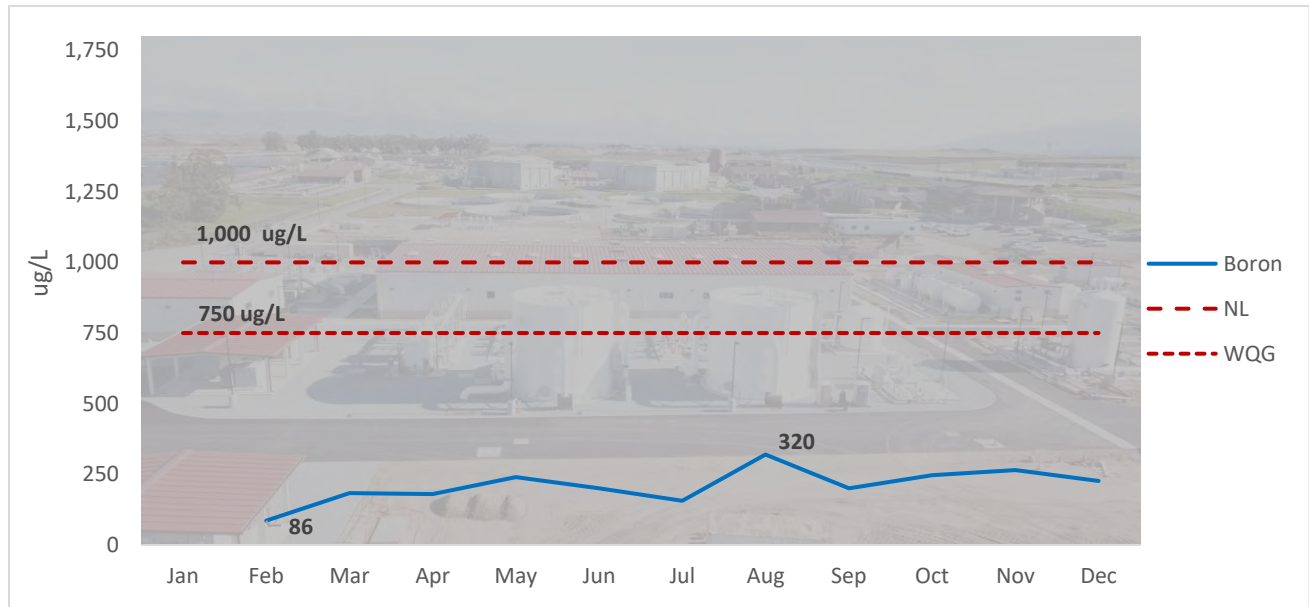
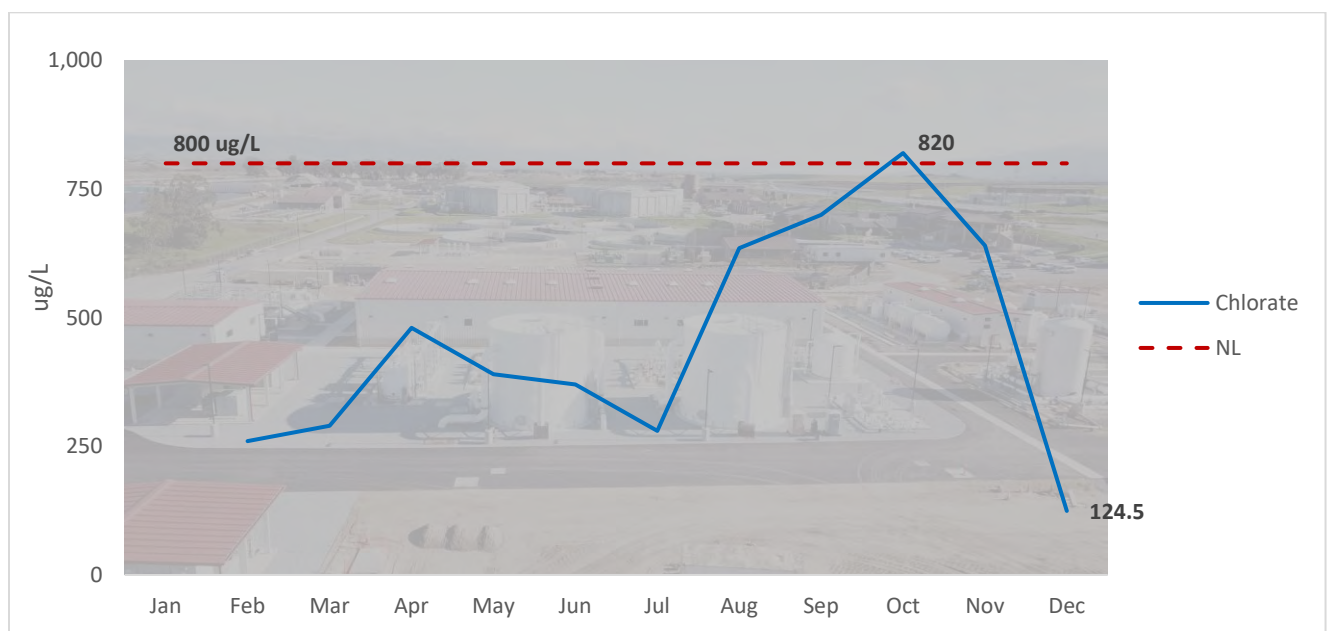


**Figure 82b. AWPf Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Constituents with Notification Levels
 Monthly Chlorate (ug/L)**



**See Section 6.0 for a discussion of November chlorate NL exceedance.*

Figure 82c. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents with Notification Levels
Monthly Formaldehyde (ug/L)

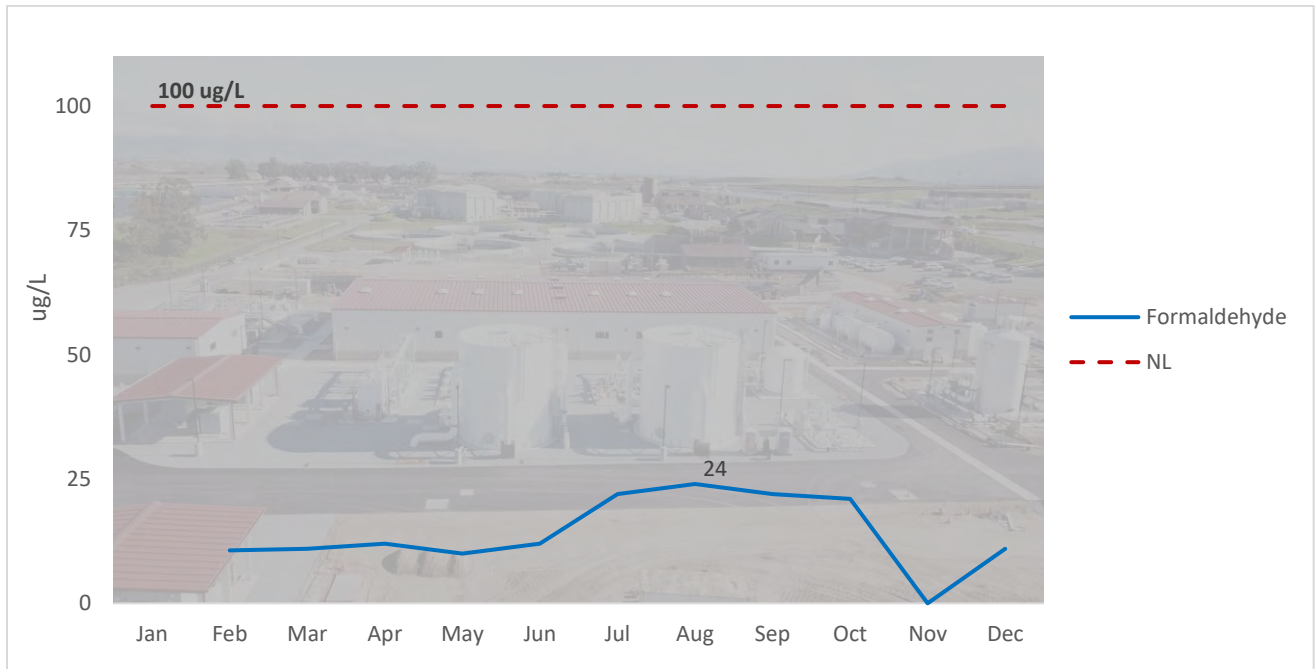


Figure 82d. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents with Notification Levels
Monthly Manganese (ug/L)

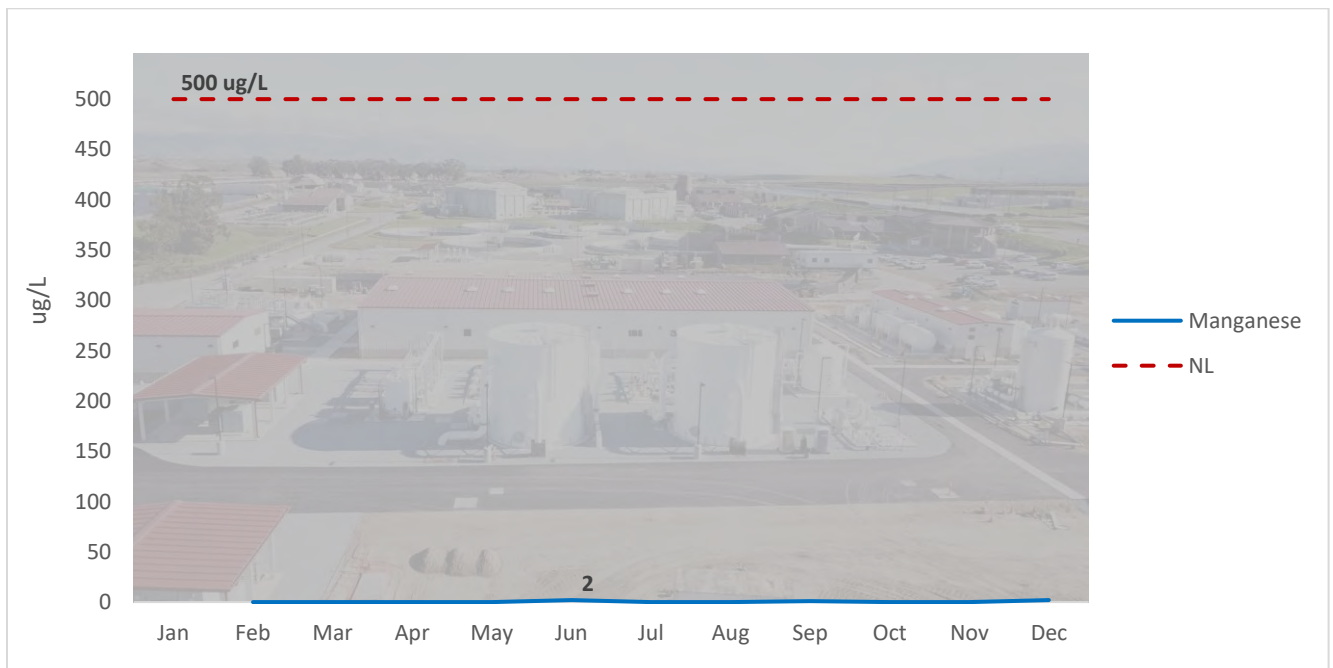


Figure 82e. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents with Notification Levels
Monthly TBA (ug/L)

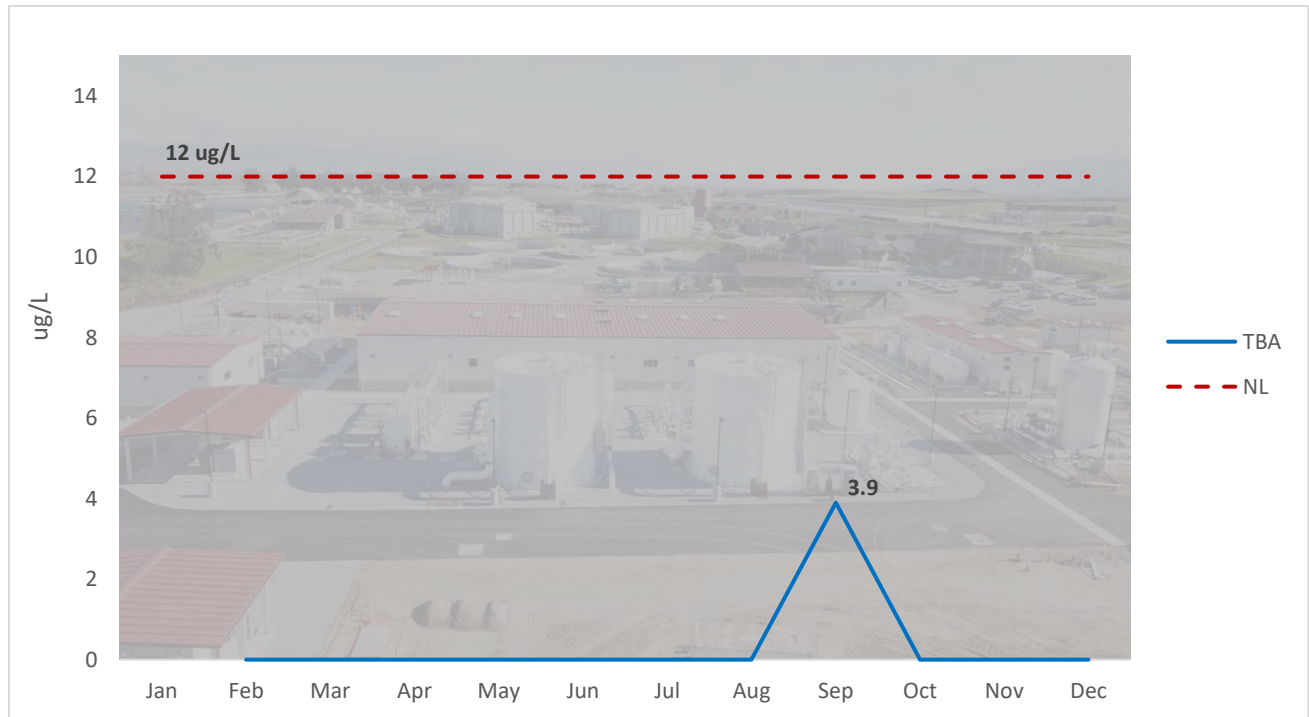


**Table 83. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Remaining Priority Pollutants**

Pollutant (4/Year)	UOM	Result:			
		Q1	Q2	Q3	Q4
Pesticides					
Aldrin	ug/L	ND 0.04	ND 0.04	ND 0.04	ND 0.04
Dieldrin	ug/L	ND 0.02	ND 4.20E-03	ND 0.02	ND 4.20E-03
4,4'DDT	ug/L	ND 0.03	ND 0.03	ND 0.03	ND 0.03
4,4'DDE	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
4,4'DDD	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Endosulfan I (-alpha)	ug/L	ND 0.06	ND 0.06	ND 0.06	ND 0.06
Endosulfan II (-beta)	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Endosulfan Sulfate	ug/L	ND 0.04	ND 0.10	ND 0.04	ND 0.04
Endrin aldehyde	ug/L	ND 0.10	ND 0.10	ND 0.08	ND 0.08
Alpha-BHC	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Beta-BHC	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Delta-BHC	ug/L	ND 0.03	ND 0.03	ND 0.03	ND 0.03
Acid Extractables					
2,4,6-Trichlorophenol	ug/L	ND 0.97	ND 0.96	ND 0.97	ND 0.96
P-Chloro-M-Cresol/4-Chloro-3-methylphenol	ug/L	ND 0.97	ND 0.96	ND 0.97	ND 0.96
2-Chlorophenol	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
2,4-Dichlorophenol	ug/L	ND 0.97	ND 0.96	ND 0.97	ND 0.96
2,4-Dimethylphenol	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
2-Nitrophenol	ug/L	ND 4.8	ND 4.8	ND 4.8	ND 4.8
4-Nitrophenol	ug/L	ND 4.8	ND 4.8	ND 4.8	ND 4.8
2,4-Dinitrophenol	ug/L	ND 4.80	ND 4.80	ND 4.80	ND 4.80
4,6-Dinitro-O-Cresol	ug/L	ND 0.88	ND 0.88	ND 0.88	ND 0.88
Phenol	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Metals					
Chromium (III)	ug/L	ND 1	ND 4.5	ND 1	ND 1
Base/Neutral, Extractables					
Acenaphthene	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Benzidine	ug/L	ND 4.8	ND 4.8	ND 4.8	ND 4.8
Hexachloroethane	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Bis(2-chloroethyl)ether	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
2-Chloronaphthalene	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
1,3-Dichlorobenzene	ug/L	ND 0.19	ND 0.50	ND 0.19	ND 0.19
3,3-Dichlorobenzidine	ug/L	ND 4.8	ND 4.8	ND 4.8	ND 4.8
2,4-Dinitrotoluene	ug/L	ND 0.01	ND 0.01	ND 0.01	ND 0.19
2,6-Dinitrotoluene	ug/L	ND 0.04	ND 0.04	ND 0.04	ND 0.19
1,2-Diphenylhydrazine (azobenzene)	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Fluoranthene	ug/L	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Chlorophenyl Phenyl Ether	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05
4-Bromophenyl Phenyl Ether	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Bis (2-chloroisopropyl) ether	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Bis (2-chloroethoxy) methane	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Hexachlorobutadiene	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Isophorone	ug/L	ND 0.02	ND 0.05	ND 0.02	ND 0.02
Nitrobenzene	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
N-Nitrosodiphenylamine	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Bis(2-ethyl-hexyl)phthalate	ug/L	ND 4.80	ND 3.40	ND 0.11	ND 3.40
Butyl Benzyl Phthalate	ug/L	ND 0.06	ND 0.06	ND 0.06	ND 0.06
Di-n-butyl phthalate	ug/L	ND 0.07	ND 0.07	ND 0.07	ND 0.07
Di-N-Octyl Phthalate	ug/L	ND 0.03	ND 0.03	ND 0.04	ND 0.04
Diethyl phthalate	ug/L	ND 0.05	ND 0.05	ND 1.60	ND 1.60
Dimethyl phthalate	ug/L	ND 0.04	ND 0.04	ND 0.04	ND 0.04
Benzo(A)Anthracene	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Benzo(B)Fluoranthene	ug/L	ND 0.01	ND 0.01	ND 0.01	ND 0.01

Pollutant (4/Year)	UOM	Result:			
		Q1	Q2	Q3	Q4
Base/Neutral, Extractables (cont.)					
Benzo(K)Fluoranthene	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Chrysene	ug/L	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Acenaphthylene	ug/L	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Anthracene	ug/L	ND 0.02	ND 0.02	ND 0.02	ND 0.02
Benzo(ghi)Perylene	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Fluorene	ug/L	ND 0.01	ND 0.05	ND 0.01	ND 0.01
Phenanthrene	ug/L	ND 8.00E-03	ND 8.00E-03	ND 8.00E-03	ND 8.00E-03
Dibenzo(A,H)Anthracene	ug/L	ND 0.04	ND 0.04	ND 0.04	ND 0.04
Indeno(1,2,3-CD)Pyrene	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05
Pyrene	ug/L	ND 0.19	ND 0.19	ND 0.19	ND 0.19
Volatile Organics					
Acrolein	ug/L	ND 2.2	ND 5	ND 2.2	ND 2.2
Acrylonitrile	ug/L	ND 1.3	ND 2.0	ND 1.3	ND 1.3
Chlorobenzene	ug/L	ND 0.50	ND 0.07	ND 0.07	ND 0.07
Chloroethane	ug/L	ND 0.08	ND 0.08	ND 0.08	ND 0.08
1,1-Dichloroethylene	ug/L	ND 0.50	ND 0.11	ND 0.11	ND 0.11
Methyl chloride	ug/L	ND 0.11	ND 0.11	ND 0.11	ND 0.11
Methyl bromide	ug/L	ND 0.12	ND 0.12	ND 0.12	ND 0.12
2-Chloroethyl Vinyl Ether	ug/L	ND 0.8	ND 0.8	ND 0.8	ND 0.8

**Figure 83. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Remaining Priority Pollutants – N/A**

All monitoring results were ND.

3.3.3 RO Feed Water (Prior to RO)

**Table 84a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents of Emerging Concern**

Pollutant (4/Year)	UOM	Relevance/ Indicator Type	Type of Sample	Frequency	Result:							
					Q1		Q2		Q3		Q4	
					Prior to RO	AWPF Recycled Water	Prior to RO	AWPF Recycled Water	Prior to RO	AWPF Recycled Water	Prior to RO	AWPF Recycled Water
1,4-Dioxane	ug/L	Health	Grab	Quarterly	NA	ND 8.50E-02	NA	ND 8.50E-02	NA	ND 8.50E-02	NA	ND 8.50E-02
n-Nitrosodimethylamine (NDMA)	ng/L	Health & Performance	Grab	Quarterly	No Data*	ND 9.62E-04	No Data*	ND 9.62E-04	0.04	ND 9.62E-04	0.04	ND 9.62E-04
Perfluorooctane sulfonate (PFOS)	ug/L	Health	Grab	Quarterly	NA	ND 4.30E-04	NA	ND 4.30E-04	NA	ND 4.30E-04	NA	ND 4.30E-04
Perfluorooctanoic acid (PFOA)	ug/L	Health	Grab	Quarterly	NA	ND 3.80E-04	NA	ND 3.80E-04	NA	ND 3.80E-04	NA	ND 3.80E-04
n-Nitrosomorpholine (NMOR)	ng/L	Health	Grab	Quarterly	NA	ND 6.09E-04	NA	ND 6.39E-04	NA	ND 6.09E-04	NA	ND 6.09E-04
Sucralose	ng/L	Performance	Grab	Quarterly	56	ND 4.86E-02	31	ND 4.86E-02	55	ND 4.86E-01	58	ND 4.86E-02
Sulfamethoxazole	ng/L	Performance	Grab	Quarterly	0.36	ND 3.21E-03	0.38	ND 3.21E-03	0.99	ND 3.21E-03	0.47	ND 3.21E-03

*See letter of explanation dated May 13, 2020 from Eurofins; see Appendix F, Q2 2020 AWPf Report.

**Table 84b. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents of Emerging Concern- Removal Efficiency**

Pollutant (4/Year)	UOM	Relevance/ Indicator Type	Type of Sample	Frequency	Removal Percentage
					Annual
					Removal %*
n-Nitrosodimethylamine (NDMA)	ug/L	Health & Performance	Grab	Quarterly	97.6
Sucralose	ug/L	Performance	Grab	Quarterly	99.9
Sulfamethoxazole	ug/L	Performance	Grab	Quarterly	99.4

Removal Percentage = $\frac{(X_{in}-X_{out})}{X_{in}}(100)$

X_{in} - Concentration in recycled water prior to a treatment process

X_{out} - Concentration in recycled water after a treatment process

*For ND results, the MDL was used in calculations.

**Figure 84a. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents of Emerging Concern
Quarterly NDMA (ng/L)**



Figure 84b. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents of Emerging Concern
Quarterly Sucralose (ng/L)

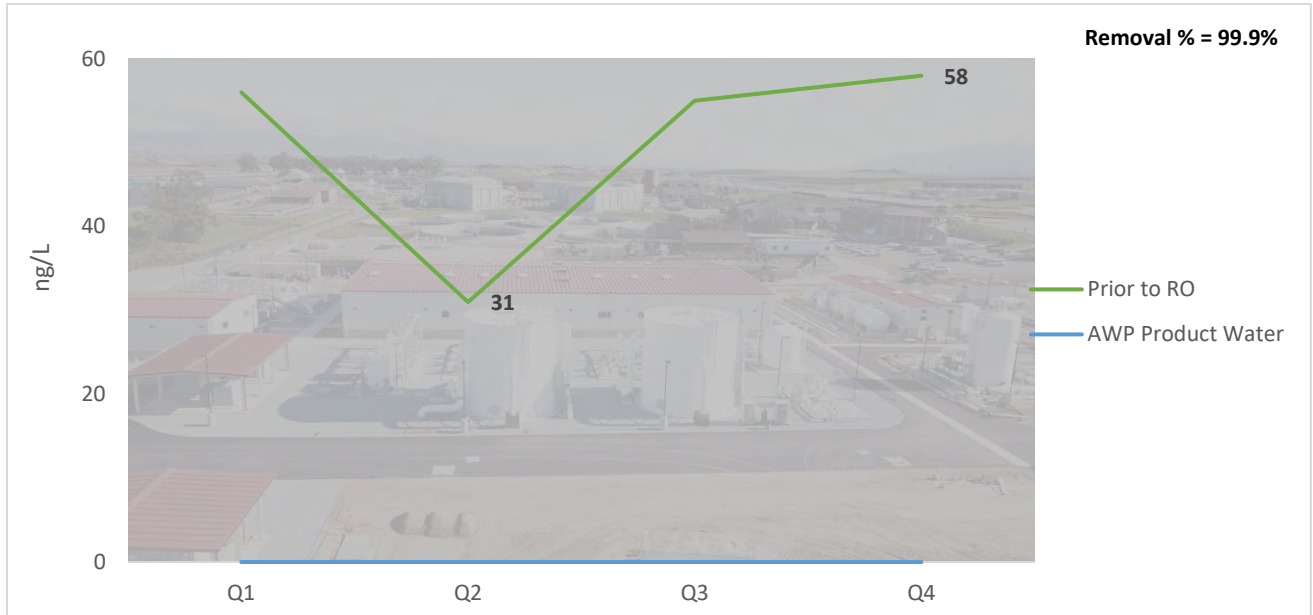


Figure 84c. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Constituents of Emerging Concern
Quarterly Sulfamethoxazole (ng/L)



**Table 85. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
DDW Specified Chemicals**

Constituent (4/Year)	UOM	Type of Sample	Minimum Frequency	Result:											
				Q1			Q2			Q3			Q4		
				Prior to RO	Prior to AOP	AWPF Recycled Water	Prior to RO	Prior to AOP	AWPF Recycled Water	Prior to RO	Prior to AOP	AWPF Recycled Water	Prior to RO	Prior to AOP	AWPF Recycled Water
DCPA	ug/L	Grab	Quarterly	0.38	ND 1.00E-01	ND 1.00E-01	0.46	ND 1.00E-01	ND 4.40E-02	0.53	ND 2.10E-02	ND 2.10E-02	0.34	ND 2.10E-02	ND 2.10E-02
Albuterol	ug/L	Grab	Quarterly	NA	NA	ND 2.54E-03	NA	NA	ND 2.54E-03	NA	NA	ND 2.54E-03	NA	NA	ND 2.54E-03
Caffeine	ug/L	Grab	Quarterly	NA	NA	ND 3.85E-03	NA	NA	0.03	NA	NA	ND 3.85E-03	NA	NA	ND 3.85E-03
Carbadox	ug/L	Grab	Quarterly	NA	NA	ND 2.10E-03	NA	NA	ND 2.10E-03	NA	NA	ND 2.10E-03	NA	NA	ND 2.10E-03
Chloropicrin	ug/L	Grab	Quarterly	ND 6.50E-02	ND 6.50E-02	1.9	ND 6.50E-02	ND 6.50E-02	1.1	ND 6.50E-02	ND 6.50E-02	1.8	ND 6.50E-02	ND 6.50E-02	1.7
Chloropyrifos	ug/L	Grab	Quarterly	NA	NA	ND 1.90E-02	NA	NA	ND 1.90E-02	NA	NA	ND 1.90E-02	NA	NA	ND 1.90E-02
Chlorothalonil	ug/L	Grab	Quarterly	NA	NA	ND 1.60E-02	NA	NA	ND 1.60E-02	NA	NA	ND 1.60E-02	NA	NA	ND 1.60E-02
Erythromycin	ug/L	Grab	Quarterly	NA	NA	ND 3.59E-03	NA	NA	ND 3.59E-03	NA	NA	ND 3.59E-03	NA	NA	ND 3.59E-03
Fluoxetine	ug/L	Grab	Quarterly	NA	NA	ND 5.00E-03	NA	NA	ND 3.34E-03	NA	NA	ND 3.34E-03	NA	NA	ND 3.34E-03
Iohexol	ug/L	Grab	Quarterly	NA	NA	ND 8.93E-03	NA	NA	ND 8.93E-02	NA	NA	ND 8.93E-03	NA	NA	ND 8.93E-03
Quinoline	ug/L	Grab	Quarterly	0.03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03	ND 2.50E-03
Triclosan	ug/L	Grab	Quarterly	NA	NA	ND 1.04E-02	NA	NA	ND 1.04E-02	NA	NA	ND 1.04E-02	NA	NA	ND 1.04E-02

Figure 85a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
DDW Specified Chemicals
Quarterly DCPA (ug/L)

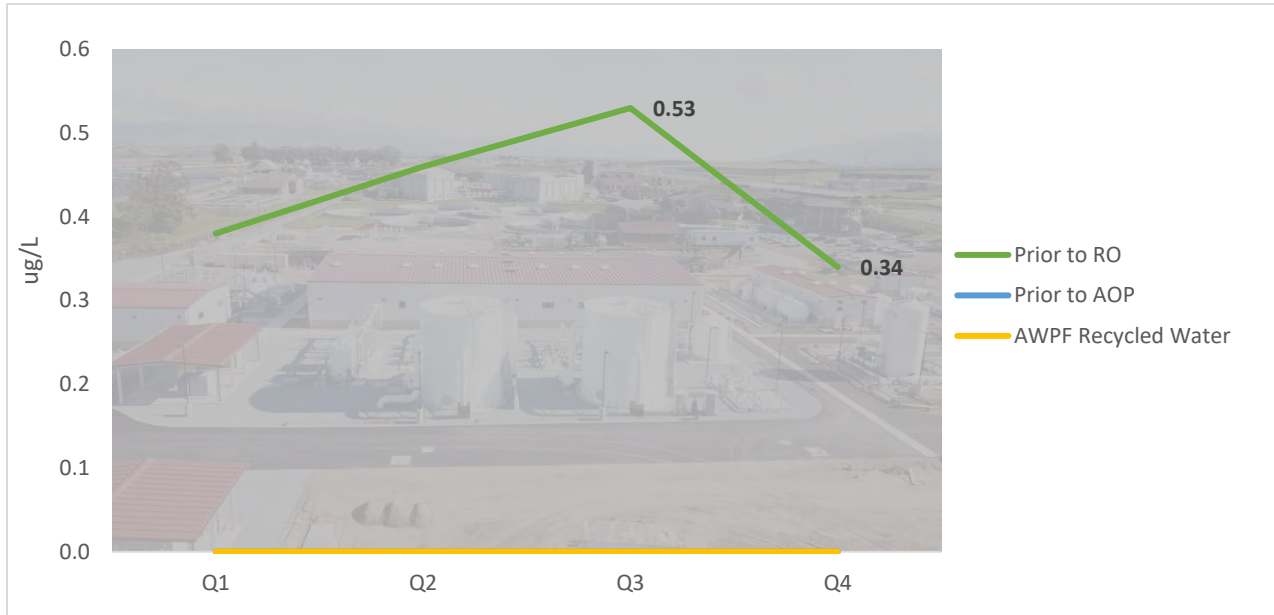


Figure 85b. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
DDW Specified Chemicals
Quarterly Chloropicrin (ug/L)

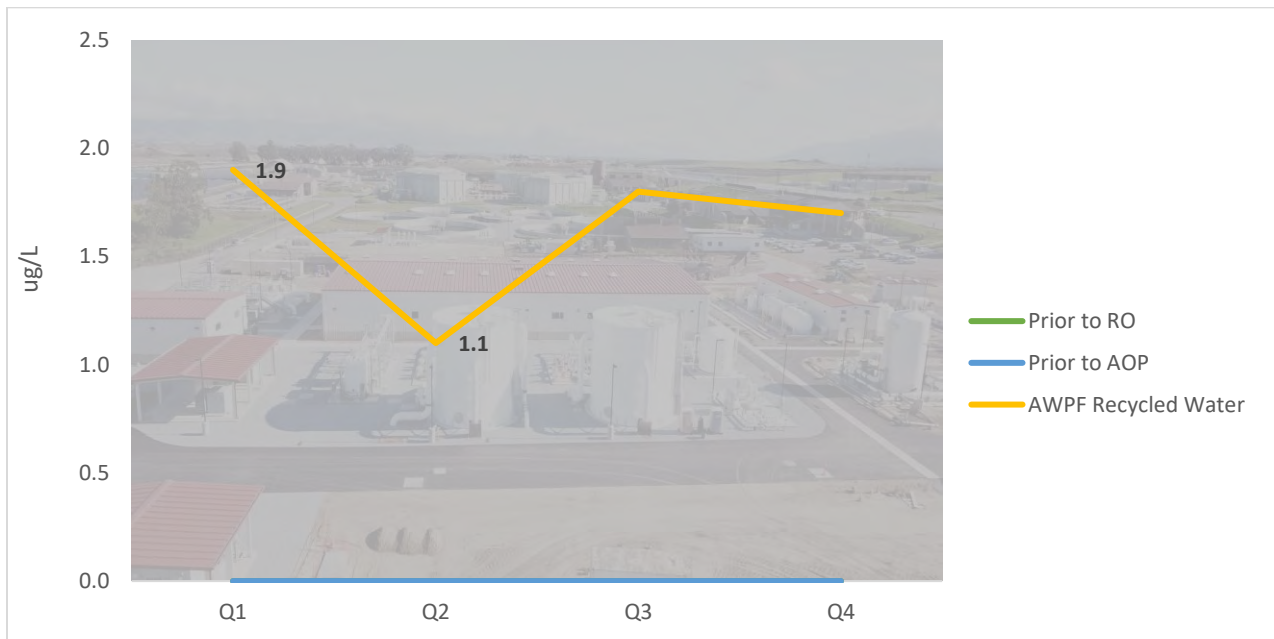


Figure 85c. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
DDW Specified Chemicals
Quarterly Quinoline (ug/L)

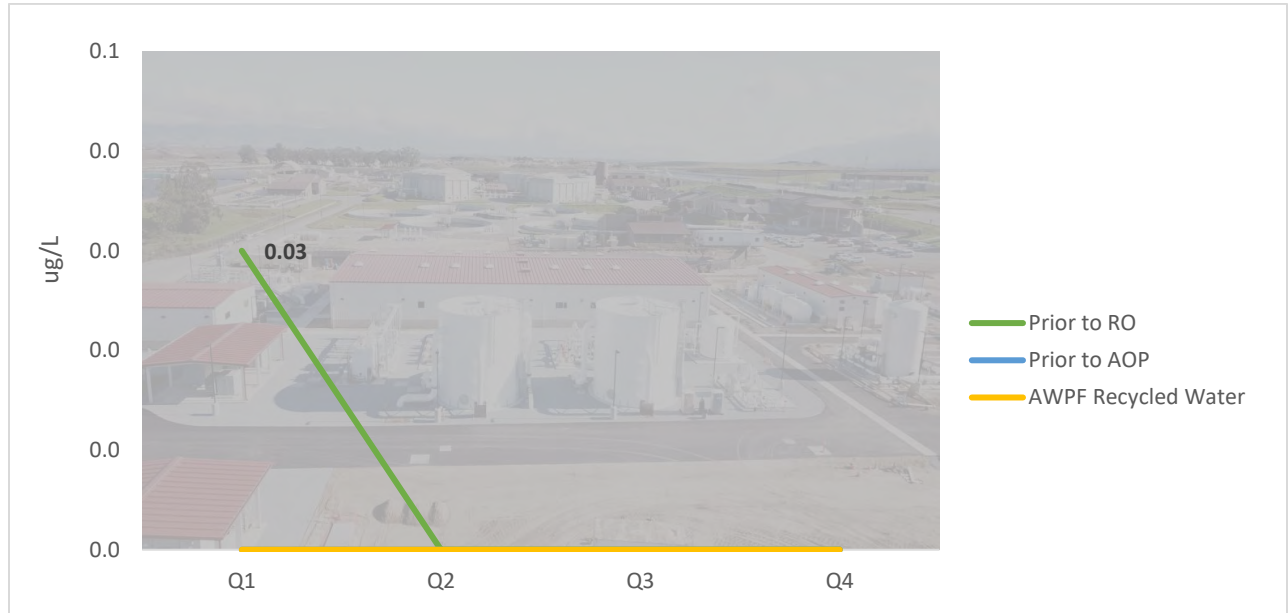


**Table 86a. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Surrogates for CECs – Initial Assessment Phase**

Pollutant (4/Year)	UOM	Type of Sample	Minimum Frequency	Result:							
				Q1		Q2		Q3		Q4	
				Prior to RO	AWPF Recycled Water	Prior to RO	AWPF Recycled Water	Prior to RO	AWPF Recycled Water	Prior to RO	AWPF Recycled Water
Electrical Conductivity	uS/cm	Online	Continuous	1740.9	121.2	1758.6	130.3	1768.5	158.4	1782.6	244.8
UV Absorbance	cm-1	Grab	Quarterly	0.152	0.017	0.146	0.023	0.146	0.025	0.156	0.014
Total Organic Carbon (TOC)	mg/L	Grab	Quarterly	12.28	0.14	14.50	0.13	17.77	0.21	17.10	0.08

**Table 86b. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Surrogates for CECs- Initial Assessment Phase
Removal Efficiency**

Pollutant (4/Year)	UOM	Type of Sample	Minimum Frequency	Removal Percentage
				Annual Average
				Removal %
Electrical Conductivity	uS/cm	Online	Continuous*	90.5
UV Absorbance	cm-1	Grab	Quarterly	86.5
Total Organic Carbon (TOC)	mg/L	Grab	Quarterly	99.0

*Based on Daily Average values

$$\text{Removal Percentage} = ([X_{\text{in}} - X_{\text{out}}] / X_{\text{in}}) (100)$$

X_{in} - Concentration in recycled water prior to a treatment process

X_{out} - Concentration in recycled water after a treatment process

**Figure 86a. AWP Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Surrogates for CECs – Initial Assessment Phase
 Quarterly Electrical Conductivity (uS/cm)**

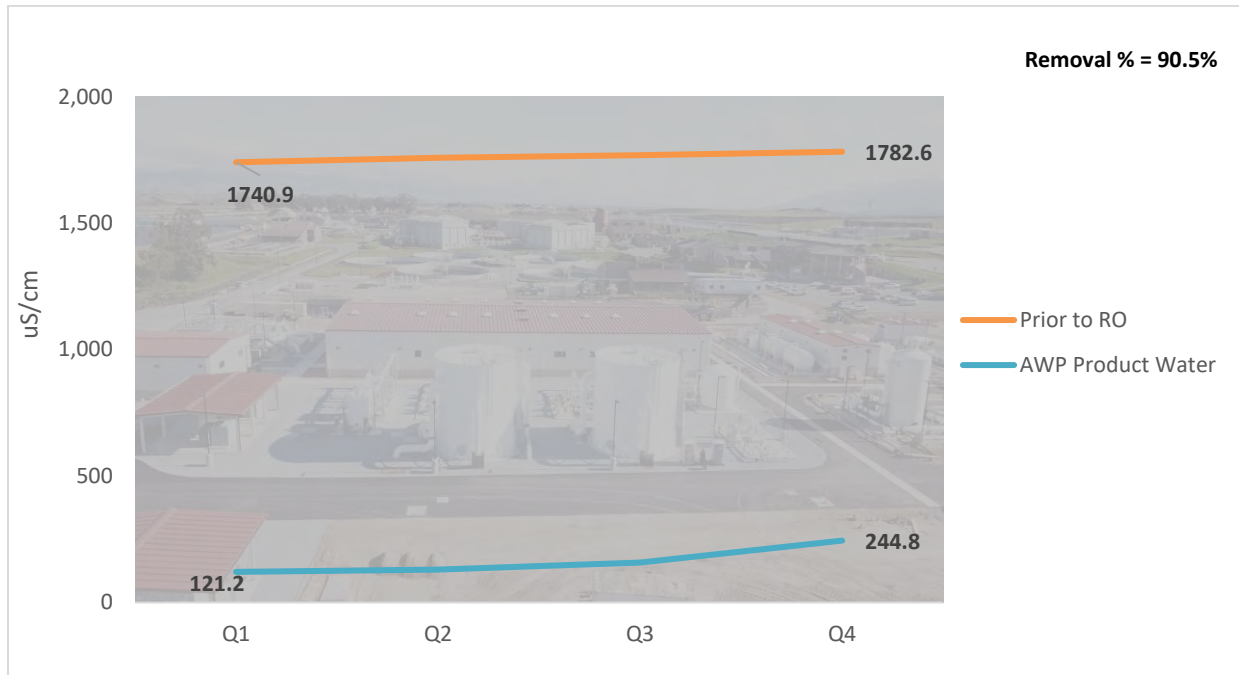


**Figure 86b. AWP Product Water Monitoring
 Recycled Water Discharge Limits Monitoring
 Surrogates for CECs – Initial Assessment Phase
 Quarterly UV Absorbance cm-1**

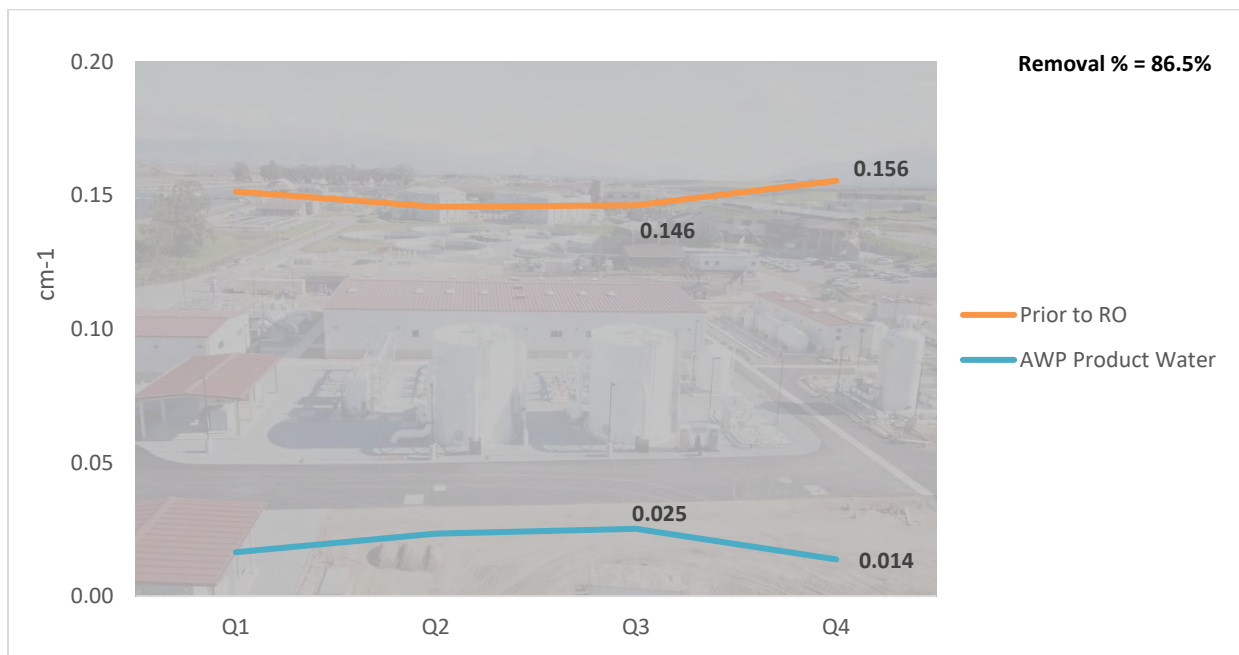


Figure 86c. AWP Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Surrogates for CECs – Initial Assessment Phase
Quarterly TOC (mg/L)

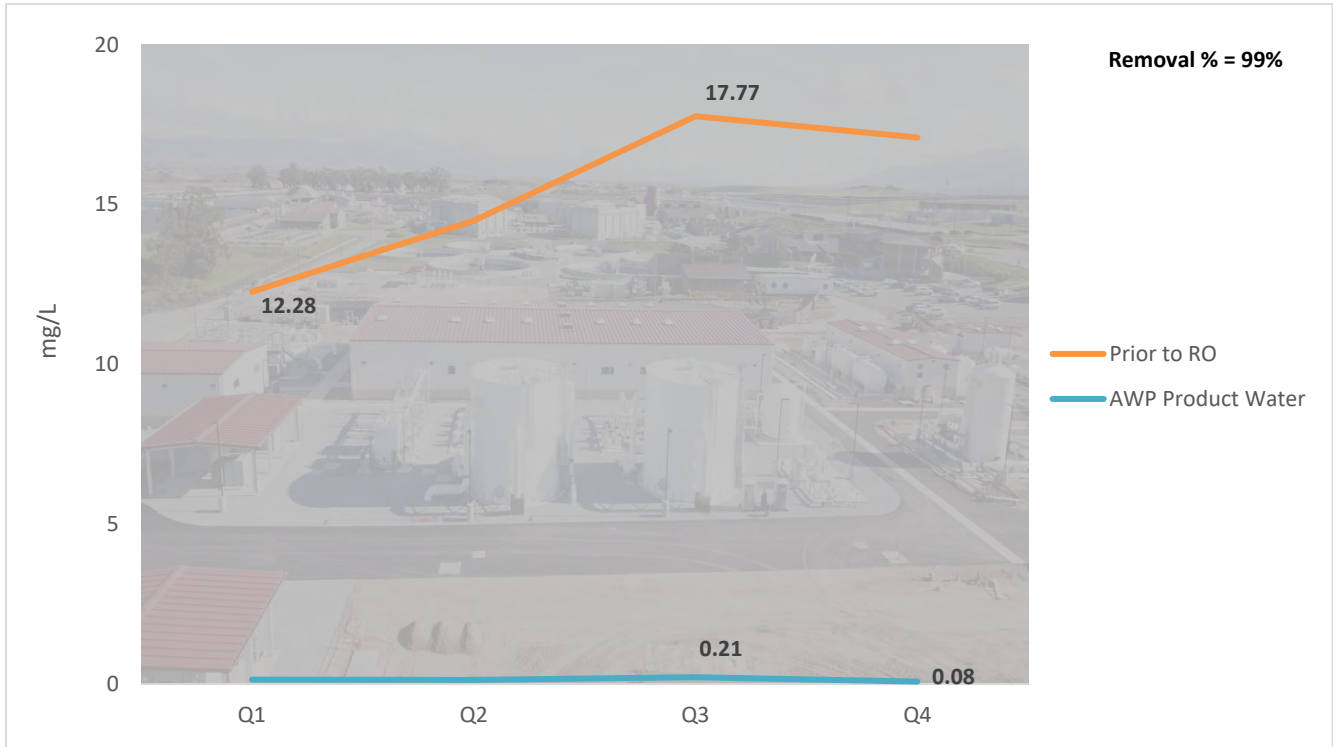


**Table 87. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Bioanalytical Screening Tools**

Constituent (4/Year)	UOM	Type of Sample	Frequency	Reporting Limit ng/L	Monitoring Trigger Level ng/L	Result:*			
						Q1	Q2	Q3	Q4
						AWPF Recycled Water	AWPF Recycled Water	AWPF Recycled Water	AWPF Recycled Water
Estrogen receptor- α (ER- α)	N/A	Grab	Quarterly	0.5	3.5	N/A	N/A	N/A	N/A
Aryl-hydrocarbon receptor (AhR)	N/A	Grab	Quarterly	0.5	0.5	N/A	N/A	N/A	N/A

**No data for 2020. PWM Bioanalytical QAPP still in review as of the date of this report.*

**Figure 87. AWPf Product Water Monitoring
Recycled Water Discharge Limits Monitoring
Bioanalytical Screening Tools – N/A**

**No data for 2020. The PWM Bioanalytical QAPP was still in review as of the date of this report.*

3.3.4 Groundwater

Analytical results of compliance samples collected during the monitoring period as outlined in Tables M-14 through M-16 are presented herein. See **Section 6.0** for a discussion of detections of monitored chemicals or contaminants, observed trends in the monitoring wells, and historic water quality in the Seaside Basin. Note: groundwater sample analyses are conducted by outside laboratories contracted by M1W. Additionally, per MRP-31:

If any of the monitoring results indicate that an MCL has been exceeded coliforms are present in the monitoring wells at the M1W groundwater injection project as a result of the use of the recycled water, M1W must notify DDW and Central Coast Water Board within 72 hours of receiving the results and make note of any positive finding in the next monitoring report submitted to the Central Coast Water Board.

Note: Per MRP-11 regarding reporting analytical data (only providing quantifiable results in graphical format; for parameters with mixed results, ND and DNQ results treated as zero):

j. For reporting compliance with numerical limitations, analytical data must be reported using the following reporting protocols:

- i. Sample results greater than or equal to the Minimum Reporting Level must be reported “as measured” by the laboratory (i.e., the measured chemical concentration in the sample); or*
- ii. Sample results less than the Minimum Reporting Level, but greater than or equal to the laboratory’s Minimum Detection Limit (MDL), must be reported as “Detected, but Not Quantified”, “DNQ”. The laboratory must write the estimated chemical concentration of the sample next to “DNQ”; or*
- iii. Sample results less than the laboratory’s MDL must be reported as “Not-Detected”, or ND and provide the relevant MDL.*

Table M-14: Groundwater Monitoring				
Constituents/Parameters	Units	Type of Sample	Minimum Frequency of Analysis	Reference Table Number
Water level elevation ¹	Feet	NA	Quarterly	M-14
Chlorine residual	mg/L	Grab	Quarterly	M-14
Chloride	mg/L	Grab	Quarterly	M-14
Nitrate-N	mg/L	Grab	Quarterly	M-14
Nitrite-N	mg/L	Grab	Quarterly	M-14
Nitrate plus Nitrite	mg/L	Grab	Quarterly	M-14
pH	pH units	Grab	Quarterly	M-14
Sodium	mg/L	Grab	Quarterly	M-14
Sulfate	mg/L	Grab	Quarterly	M-14
TOC	mg/L	Grab	Quarterly	M-14
Total coliform	MPN/100 mL	Grab	Quarterly	M-14
BOD ₅ 20°C	mg/L	Grab	Semiannually	M-14
Oil and grease	mg/L	Grab	Quarterly	M-14
Total nitrogen	mg/L	Grab	Quarterly	M-14
Total Suspended Solids	mg/L	Grab	Semiannually	M-14
Turbidity	NTU	Grab	Quarterly	M-14
Inorganics with primary MCLs	µg/L	Grab	Monthly	M-4

¹Water level elevations must be measured to the nearest 0.01 feet and referenced to mean sea level.



Table M-14: Groundwater Monitoring

Constituents/parameters with secondary MCLs				
Radioactivity	pci/L	Grab	Quarterly	M-15
Regulated organics	µg/L	Grab	Quarterly	M-15
Disinfection byproducts (DBPs)	µg/L	Grab	Quarterly	M-15
General physical	-	Grab	Monthly	M-16
General minerals	µg/L	Grab	Monthly	M-16
Chemicals with NLS	µg/L	Grab	Quarterly	M-15
N-Nitrosopyrrolidine	µg/L	Grab	Annually	M-14
Remaining priority pollutants	µg/L	Grab	Quarterly	M-15
Silver	mg/L	Grab	Quarterly	M-14

Table M-15: Groundwater Monitoring Frequency

Constituent	Frequency
Radioactivity	
Gross Alpha Particle Activity (including Radium-226 but excluding radon and uranium)	Quarterly
Gross Beta Particle Activity	Quarterly
Radium-226	Quarterly
Radium-226 & Radium-228 (Combined)	Quarterly
Radium-228	Quarterly
Strontium-90	Quarterly
Tritium	Quarterly
Uranium	Quarterly
Organic Chemicals	
(a) Volatile Organic Chemicals	
1,1,1-Trichloroethane	Quarterly
1,1,2,2-Tetrachloroethane	Quarterly
1,1,2-Trichloro-1,2,2-Trifluoroethane	Quarterly
1,1,2-Trichloroethane	Quarterly
1,1-Dichloroethane	Quarterly
1,1-Dichloroethene (1,1 DCE)	Quarterly
1,2,4-Trichlorobenzene	Quarterly
1,2-Dichlorobenzene	Quarterly
1,2-Dichloroethane (1,2 DCA)	Quarterly
1,2-Dichloropropane	Quarterly
1,3-Dichloropropene	Quarterly
1,4-Dichlorobenzene	Quarterly
Benzene	Quarterly
Carbon Tetrachloride (CTC)	Quarterly
cis-1,2-Dichloroethylene	Quarterly
Dichloromethane	Quarterly
Ethylbenzene	Quarterly
Methyl-tert-butyl-ether (MTBE)	Quarterly
Monochlorobenzene	Quarterly
Styrene	Quarterly
Tetrachloroethylene (PCE)	Quarterly
Toluene	Quarterly
trans-1,2-Dichloroethylene	Quarterly

Table M-15: Groundwater Monitoring Frequency

Trichloroethylene (TCE)	Quarterly
Trichlorofluoro-methane	Quarterly
Vinyl Chloride	Quarterly
Xylenes (m, p)	Quarterly
(b) Synthetic organic chemical	
1,2-Dibromo-3-Chloropropane (DBCP)	Quarterly
1,2,3-Trichloropropane	Quarterly
2,3,7,8-TCDD (Dioxin)	Quarterly
2,4,5-TP (Silvex)	Quarterly
2,4-Dichlorophenoxyacetic acid (2,4-D)	Quarterly
2,3,5,6-tetrachloroterephthalate (DCPA)	Quarterly
Alachlor	Quarterly
Albuterol	Quarterly
Atrazine	Quarterly
Bentazon	Quarterly
Benzo (a) pyrene	Quarterly
Caffeine	Quarterly
Carbadox	Quarterly
Carbofuran	Quarterly
Chlordane	Quarterly
Chloroplatin	Quarterly
Dalapon	Quarterly
DI (2-ethylhexyl) adipate	Quarterly
DI (2-ethylhexyl) phthalate	Quarterly
Dinoseb	Quarterly
Diquat	Quarterly
Endothal	Quarterly
Endrin	Quarterly
Erythromycin	Quarterly
Ethylene Dibromide (EDB)	Quarterly

Table M-15: Groundwater Monitoring Frequency

Dibromochloro-methane	Quarterly
Dichloroacetic Acid	Quarterly
Haloacetic Acid (Five) (HAA5)	Quarterly
Monobromoacetic Acid	Quarterly
Monochloroacetic Acid	Quarterly
Total Trihalomethanes	Quarterly
Trichloroacetic Acid	Quarterly
Chemicals with Notification Levels	
1,2,4-Trimethylbenzene	Quarterly
1,3,5-Trimethylbenzene	Quarterly
1,4-Dioxane	Quarterly
2-Chlorotoluene	Quarterly
2,4,6-Trinitrotoluene (TNT)	Quarterly
4-Chlorotoluene	Quarterly
Boron	Quarterly
Carbon Disulfide	Quarterly
Chlorate	Quarterly
Diazinon	Quarterly
Dichlorodifluoro-methane (Freon 12)	Quarterly
Ethylene Glycol	Quarterly
Formaldehyde	Quarterly
HMX	Quarterly
Isopropylbenzene	Quarterly
Manganese	Quarterly
Methyl-isobutyl-keytone (MIBK)	Quarterly
Naphthalene	Quarterly
n-Butylbenzene	Quarterly
n-Nitrosodimethyl-amine (NDEA)	Quarterly
n-Nitrosodimethylamine (NDMA)	Quarterly
n-Nitrosodi-n-propylamine (NDPA)	Quarterly
Perfluorooctanoic acid	Quarterly
Perfluorooctane sulfonate (PFOS)	Quarterly
n-Propylbenzene	Quarterly



Table M-15: Groundwater Monitoring Frequency	
Fluoxetine	Quarterly
Glyphosate	Quarterly
Heptachlor	Quarterly
Heptachlor Epoxide	Quarterly
Hexachlorobenzene	Quarterly
Hexachlorocyclopentadiene	Quarterly
Iohexol	Quarterly
Lindane (Gamma BHC)	Quarterly
Methoxychlor	Quarterly
Molinate	Quarterly
Oxamyl	Quarterly
PCB 1016	Quarterly
PCB 1221	Quarterly
PCB 1232	Quarterly
PCB 1242	Quarterly
PCB 1248	Quarterly
PCB 1254	Quarterly
PCB 1260	Quarterly
Pentachlorophenol	Quarterly
Picloram	Quarterly
Quinoline	Quarterly
Simazine	Quarterly
Thiobencarb	Quarterly
Toxaphene	Quarterly
Triclosan	Quarterly
Disinfection Byproducts	
Bromate	Quarterly
Bromodichloro-methane	Quarterly
Bromoform	Quarterly
Chlorite	Quarterly
Chloroform	Quarterly
Dibromooacetic Acid	Quarterly

Table M-15: Groundwater Monitoring Frequency	
1,2,5,6-Dibenzanthracene (Dibenzo(a,h)anthracene)	Quarterly
1,2-Diphenylhydrazine	Quarterly
1,3-Dichlorobenzene	Quarterly
2,4-Dinitrotoluene	Quarterly
2,6-Dinitrotoluene	Quarterly
2-Chloronaphthalene	Quarterly
3,3'-Dichlorobenzidine	Quarterly
4-Bromophenyl phenyl ether	Quarterly
4-Chlorophenyl phenyl ether	Quarterly
Acenaphthene	Quarterly
Acenaphthylene	Quarterly
Anthracene	Quarterly
Benzidine	Quarterly
Benzo(a)anthracene	Quarterly
Benzo(b)fluoranthene	Quarterly
Benzo(k)fluoranthene	Quarterly
Bis(2-chloroethoxy)-methane	Quarterly
Bis(2-chloroethyl) ether	Quarterly
Bis(2-chloroisopropyl) ether	Quarterly
Butyl benzyl phthalate	Quarterly
Chrysene	Quarterly
Di(2-ethylhexyl) phthalate	Quarterly
Dimethyl phthalate	Quarterly
Di-n-butyl phthalate	Quarterly
Di-n-octyl phthalate	Quarterly
Fluoranthene	Quarterly
Fluorene	Quarterly
Hexachlorobutadiene	Quarterly
Hexachloroethane	Quarterly
Indeno(1,2,3-cd)pyrene	Quarterly
Isophorone	Quarterly
Nitrobenzene	Quarterly
n-Nitrosodi-n-propylamine	Quarterly
n-Nitrosodiphenylamine	Quarterly
Phenanthrene	Quarterly
Pyrene	Quarterly
1,1-Dichloroethylene	Quarterly
2-Chloroethyl vinyl ether	Quarterly

Table M-15: Groundwater Monitoring Frequency	
Propachlor	Quarterly
RDX	Quarterly
sec-Butylbenzene	Quarterly
tert-Butylbenzene	Quarterly
Tertiary-butyl-alcohol (TBA)	Quarterly
Vanadium	Quarterly
Remaining Priority Pollutants	
Pesticides	
4,4,4'-DDD	Quarterly
4,4,4'-DDE	Quarterly
4,4,4'-DDT	Quarterly
Aldrin	Quarterly
Alpha BHC	Quarterly
Alpha Endosulfan	Quarterly
Beta BHC	Quarterly
Beta Endosulfan	Quarterly
Chloropyrifos	Quarterly
Chlorothalonil	Quarterly
Chromium III	Quarterly
Chromium VI	Quarterly
Delta BHC	Quarterly
Dieldrin	Quarterly
Endosulfan Sulfate	Quarterly
Endrin Aldehyde	Quarterly
Acid Extractables	
2,4,6-Trichlorophenol	Quarterly
2,4-Dichlorophenol	Quarterly
2,4-Dimethylphenol	Quarterly
2,4-Dinitrophenol	Quarterly
2-Chlorophenol	Quarterly
2-Nitrophenol	Quarterly
4,6-Dinitro-o-Cresol (2-Methyl-4,6-Dinitrophenol)	Quarterly
4-Nitrophenol	Quarterly
p-Chloro-m-Cresol (3-Methyl-4-Chlorophenol)	Quarterly
Phenol	Quarterly
Base/Neutral Extractables	
1,12-Benzoperylene ((Benzo(g,h,i)-perylene))	Quarterly

Table M-15: Groundwater Monitoring Frequency	
1,2,5,6-Dibenzanthracene (Dibenzo(a,h) anthracene)	Quarterly
1,2-Diphenylhydrazine	Quarterly
1,3-Dichlorobenzene	Quarterly
2,4-Dinitrotoluene	Quarterly
2,6-Dinitrotoluene	Quarterly
2-Chloronaphthalene	Quarterly
3,3'-Dichlorobenzidine	Quarterly
4-Bromophenyl phenyl ether	Quarterly
4-Chlorophenyl phenyl ether	Quarterly
Acenaphthene	Quarterly
Acenaphthylene	Quarterly
Anthracene	Quarterly
Benzidine	Quarterly
Benzo(a)anthracene	Quarterly
Benzo(b)fluoranthene	Quarterly
Benzo(k)fluoranthene	Quarterly
Bis(2-chloroethoxy)-methane	Quarterly
Bis(2-chloroethyl) ether	Quarterly
Bis(2-chloroisopropyl) ether	Quarterly
Butyl benzyl phthalate	Quarterly
Chrysene	Quarterly
Di(2-ethylhexyl) phthalate	Quarterly
Dimethyl phthalate	Quarterly
Di-n-butyl phthalate	Quarterly
Di-n-octyl phthalate	Quarterly
Fluoranthene	Quarterly
Fluorene	Quarterly
Hexachlorobutadiene	Quarterly
Hexachloroethane	Quarterly
Indeno(1,2,3-cd) pyrene	Quarterly
Isophorone	Quarterly
Nitrobenzene	Quarterly
n-Nitrosodi-n-propylamine	Quarterly
n-Nitrosodiphenylamine	Quarterly
Phenanthrene	Quarterly
Pyrene	Quarterly
1,1-Dichloroethylene	Quarterly
2-Chloroethyl vinyl ether	Quarterly

Table M-15: Groundwater Monitoring Frequency	
Acrolein	Quarterly
Acrylonitrile	Quarterly
Chlorobenzene	Quarterly
Chloroethane	Quarterly
Methyl bromide	Quarterly
Methyl chloride	Quarterly

Table M-16: General Physical and General Minerals		
Constituent		
Asbestos	Potassium	Foaming Agents
Calcium	Sodium	Odor
Chloride	Sulfate	Specific Conductance
Copper	Zinc	Total Dissolved Solids
Iron	Color	Total Hardness
Manganese	Corrosivity	

Table 88. Groundwater Monitoring
Quarterly Monitoring

Constituents/ Parameters (4x/Year)	UOM	Q1							Q2							Q3							Q4						
		MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
Distance to Water (DTW)	ft-bgs	415.9	409.9	331.8	371.8	195.1	382.1	211.9	398.9	406.0	347.8	375.3	189.4	396.5	221.5	419.4	399.8	316.7	377.1	387.7	380.8	201.2	410.4	400.2	318.9	377.9	387.6	391.7	197.0
Chlorine Residual, DPD	mg/L	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	0.2	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	0.3	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.10
Chloride	mg/L	164.0	58.0	87.5	50.0	138.5	64.0	136.5	70.3	57.3	71.3	50.0	32.0	67.7	132.7	20.0	56.0	89.7	49.7	19.0	63.7	68.0	41.3	57.0	81.7	53.3	39.7	74.3	30.0
Nitrate (as N)	mg/L	ND 0.10	0.8	0.3	ND 0.10	ND 0.10	0.7	ND 0.10	0.6	0.8	0.3	ND 0.10	0.7	0.8	ND 0.10	1.1	0.7	0.2	ND 0.10	1.3	0.7	ND 0.10	1.6	0.6	0.3	ND 0.10	1.8	0.8	0.5
Nitrite (as N)	mg/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	0.3	ND 0.05	ND 0.05	0.5	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	0.3	ND 0.05	0.1	ND 0.05	0.3	ND 0.05	0.1
Nitrate+Nitrite (as N)	mg/L	ND 0.10	0.8	0.3	ND 0.10	ND 0.10	0.7	ND 0.10	0.6	0.8	0.3	ND 0.10	0.9	0.8	ND 0.10	1.6	0.7	0.2	ND 0.10	1.3	0.7	ND 0.10	1.2	0.6	0.4	ND 0.10	2.0	0.8	0.5
pH	Units	6.9	6.6	6.9	6.8	7.0	7.3	6.9	7.1	6.6	7.2	6.9	6.2	6.9	6.7	7.2	7.3	7.3	7.5	7.2	8.0	7.2	6.8	7.0	7.1	7.3	6.9	7.7	7.4
Sodium	mg/L	120.0	37.0	78.0	36.5	110.0	42.0	100.0	67.0	37.0	70.7	36.7	35.0	48.3	101.0	23.0	36.7	60.3	50.3	25.7	46.3	61.7	28.7	36.3	57.0	37.7	33.0	50.0	39.3
Sulfate	mg/L	130.5	5.7	50.5	16.0	96.5	6.5	116.5	21.3	5.7	44.7	16.0	13.3	8.8	113.0	6.4	5.4	41.3	16.0	7.1	7.5	60.3	0.9	5.9	37.3	16.7	4.5	9.6	22.0
TOC	mg/L	0.6	ND 0.30	0.4	0.7	0.6	0.4	0.5	0.6	ND 0.30	0.5	0.5	0.4	0.4	0.7	0.3	0.6	0.6	0.5	0.4	0.5	0.6	0.4	ND 0.30	0.4	0.4	ND 0.30	2.7	0.5
Total Coliform	MPN/100ml	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	29.5	1.0	ND 1.00	ND 1.00	2.0	ND 1.00	ND 1.00	13.5	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
Oil and Grease	mg/L	ND 1.40	ND 1.40	DNQ 2.40	DNQ 1.40	ND 1.40	ND 1.40	ND 1.40	DNQ 2.40	DNQ 2.60	DNQ 2.50	30.0	ND 1.40	DNQ 2.70	DNQ 4.90	DNQ 1.60	ND 1.40	ND 1.40	DNQ 1.40	ND 1.40	ND 1.40	13.0	DNQ 2.50	ND 1.40	ND 1.40	ND 1.40	DNQ 4.30	DNQ 3.70	ND 1.40
Total Nitrogen (as N)	mg/L	ND 0.2	DNQ 0.92	DNQ 0.42	ND 0.2	DNQ 0.52	DNQ 0.82	DNQ 0.35	1.2	DNQ 0.9	DNQ 0.36	ND 0.2	1.2	DNQ 0.84	DNQ 0.35	1.8	ND 1	ND 1	ND 1	1.9	ND 1	ND 1	2.1	DNQ 0.6	DNQ 0.37	ND 0.3	2.1	DNQ 0.94	1.0
Turbidity	NTU	0.2	0.1	0.2	0.8	8.2	5.9	0.1	6.8	0.2	0.1	2.4	1.0	5.0	0.1	0.1	0.8	0.1	3.9	1.3	0.1	0.3	0.2	0.1	0.2	0.7	1.0	0.3	0.5

**Figure 88a. Groundwater Monitoring
Quarterly Water Level Elevation (ft-bgs)**

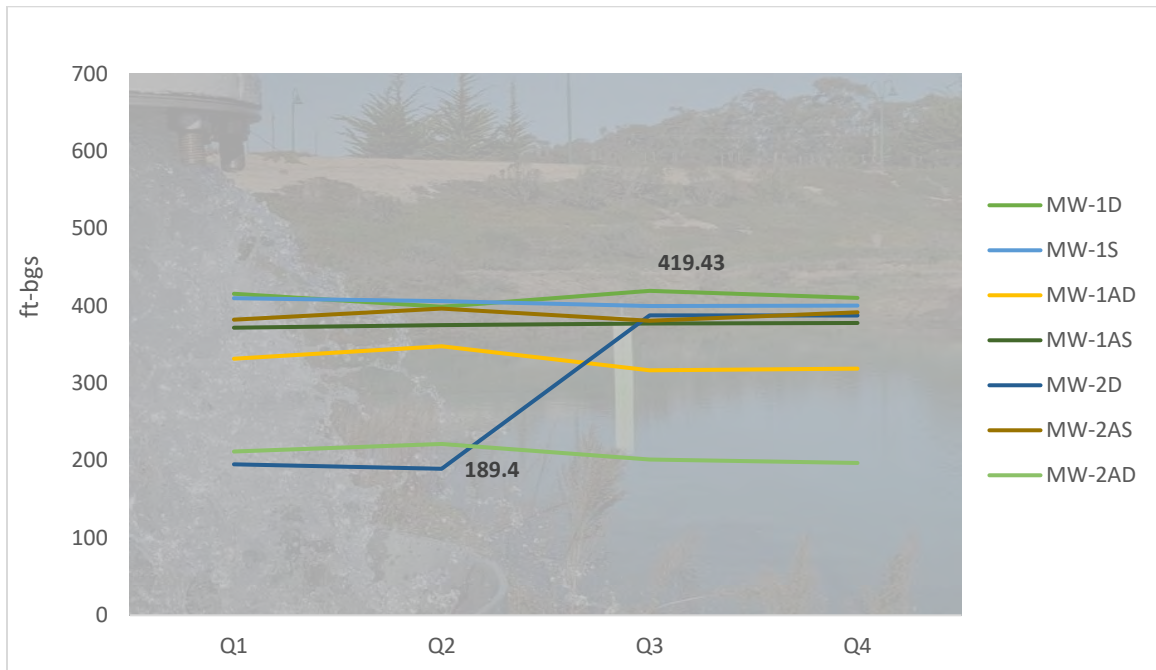


**Figure 88b. Groundwater Monitoring
Quarterly Chlorine Residual (mg/L)**

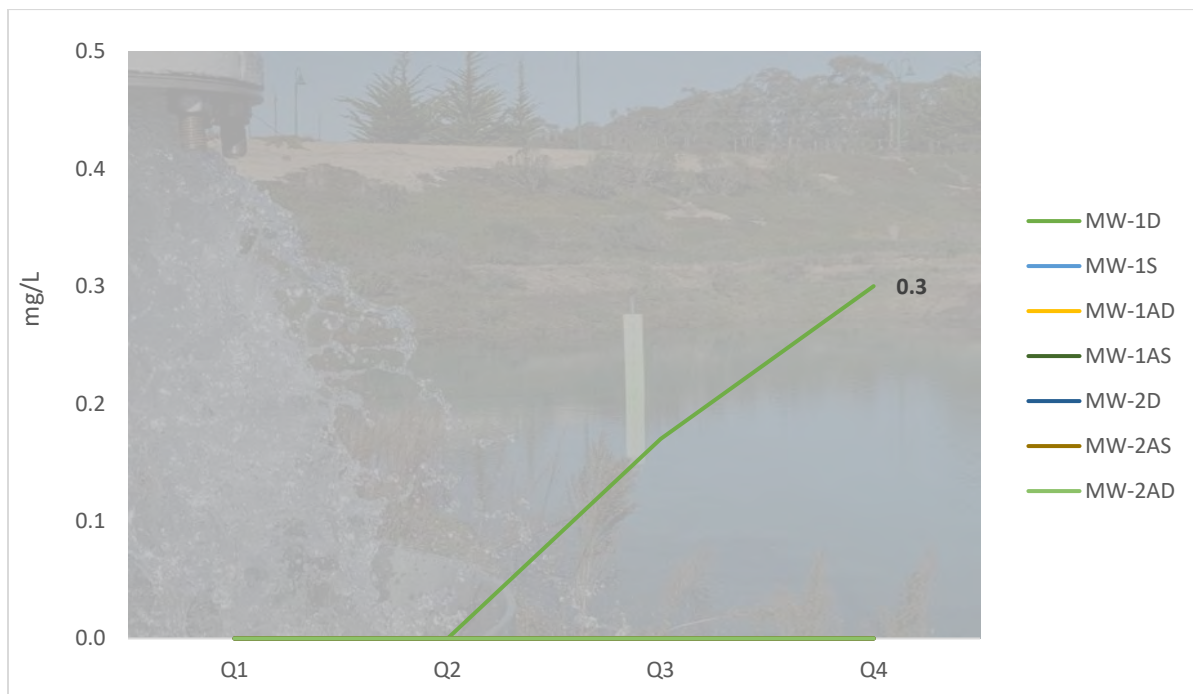


**Figure 88c. Groundwater Monitoring
Quarterly Chloride (mg/L)**

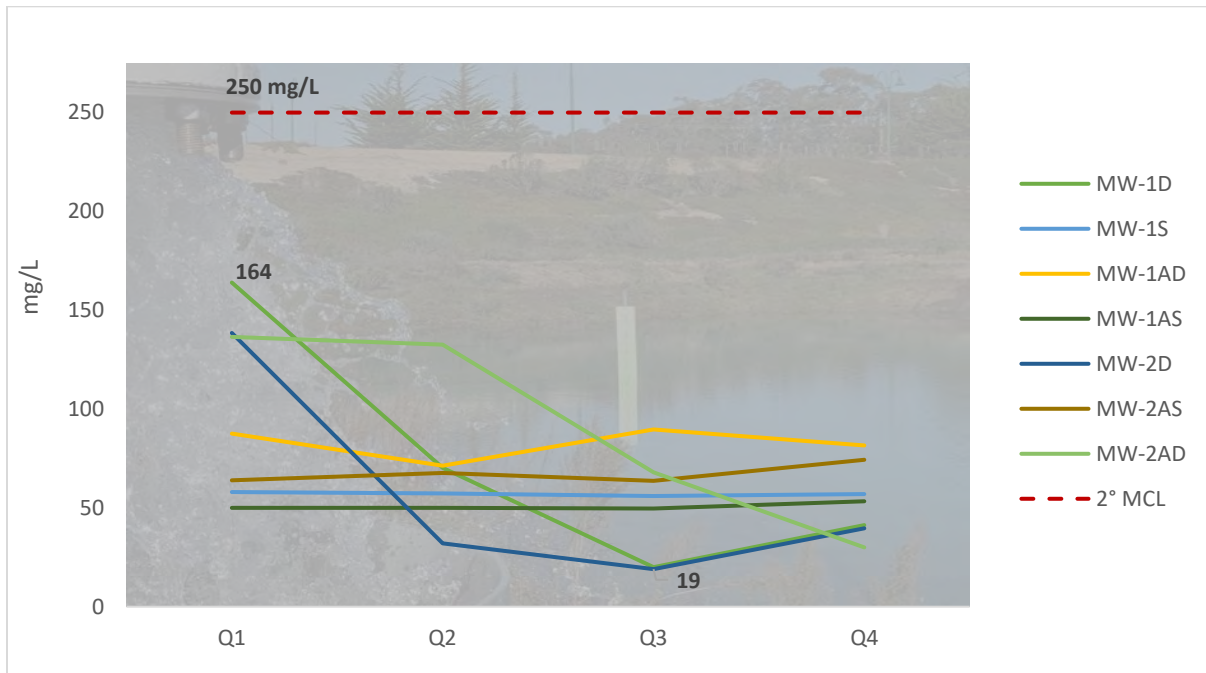


**Figure 88d. Groundwater Monitoring
Quarterly Nitrate-N (mg/L)**

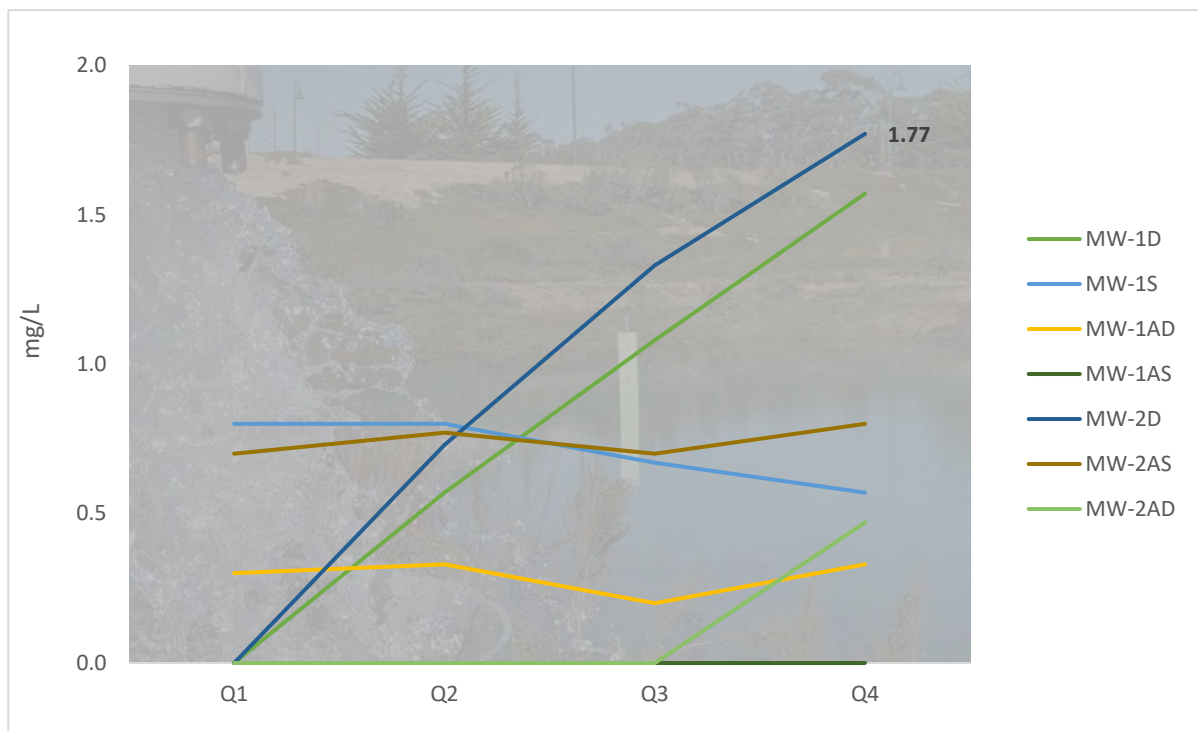


**Figure 88e. Groundwater Monitoring
Quarterly Nitrite-N (mg/L)**

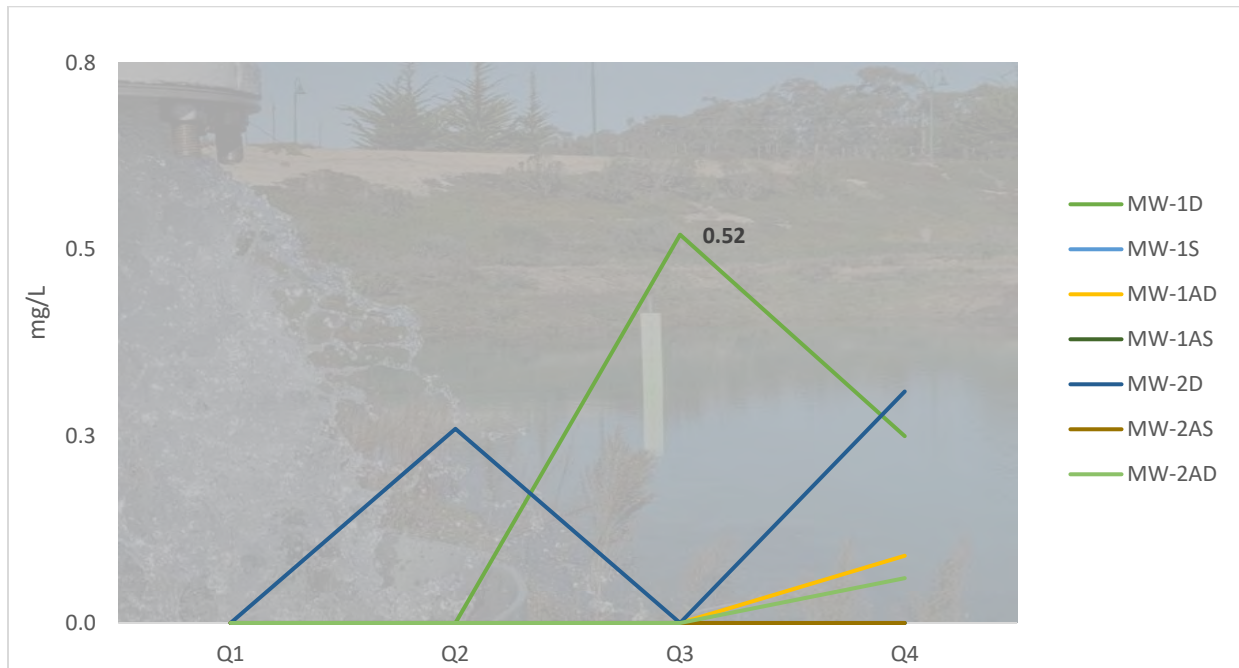


**Figure 88f. Groundwater Monitoring
Quarterly Nitrate + Nitrite (mg/L)**

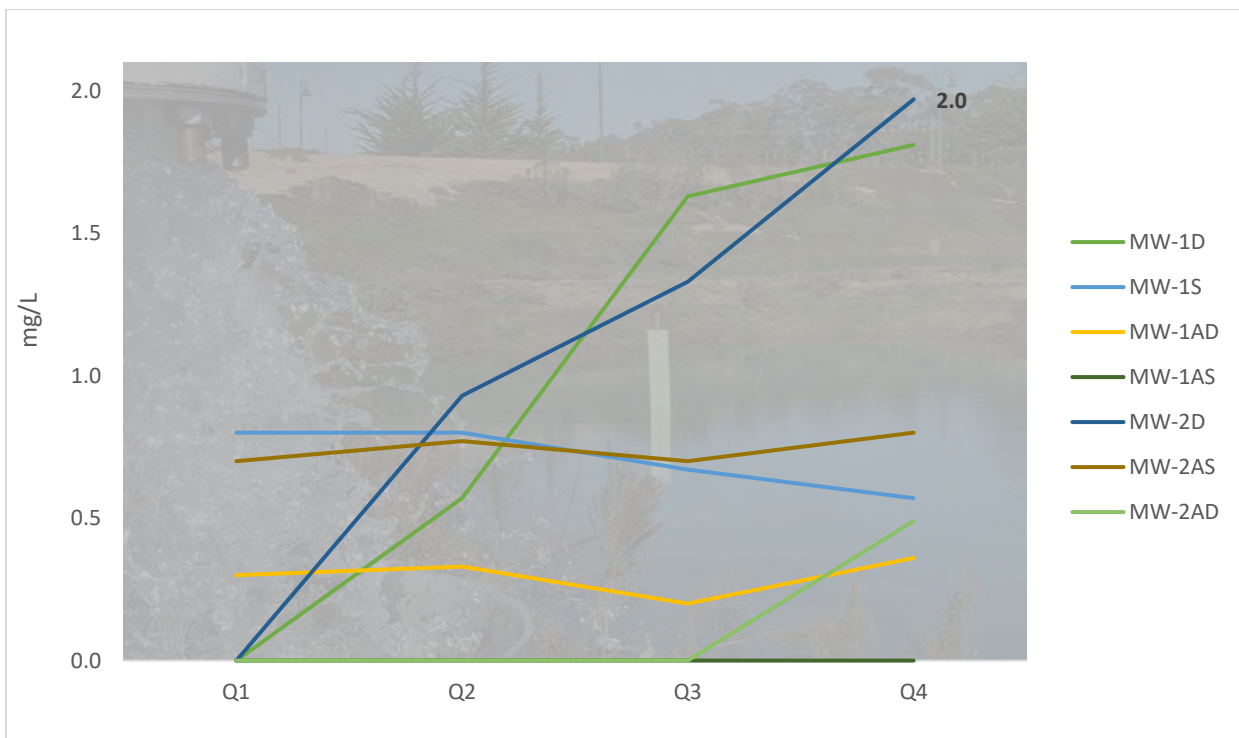


Figure 88g. Groundwater Monitoring Quarterly pH

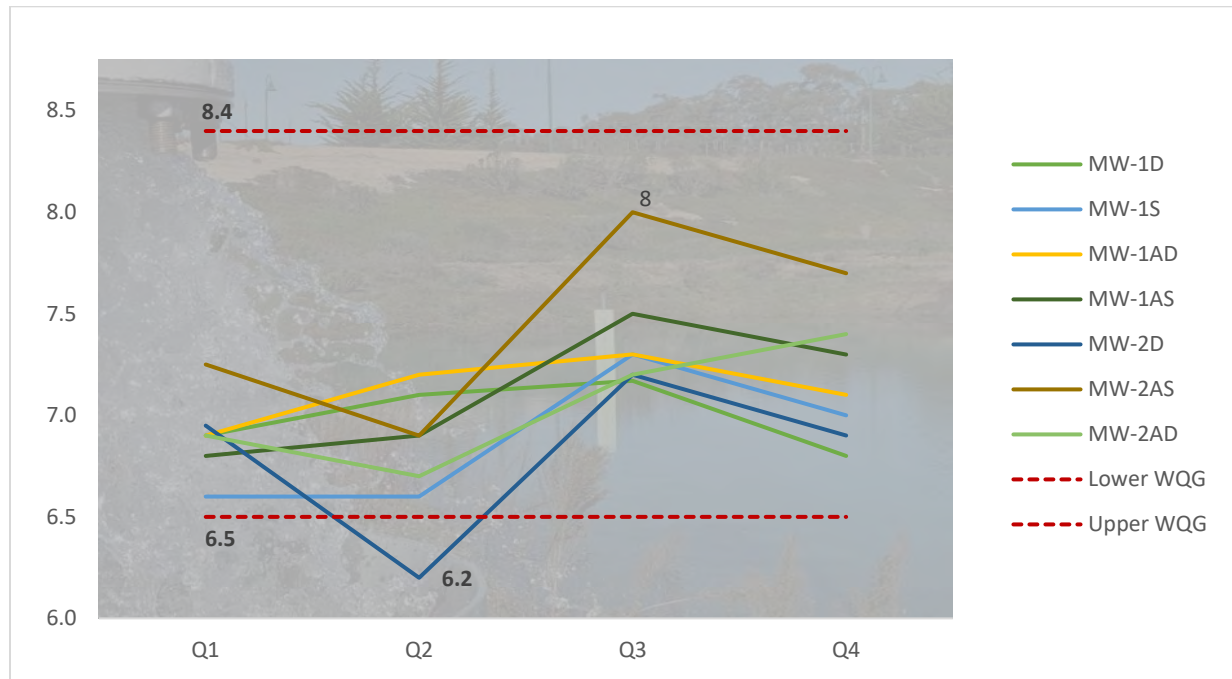


Figure 88h. Groundwater Monitoring Quarterly Sodium (mg/L)

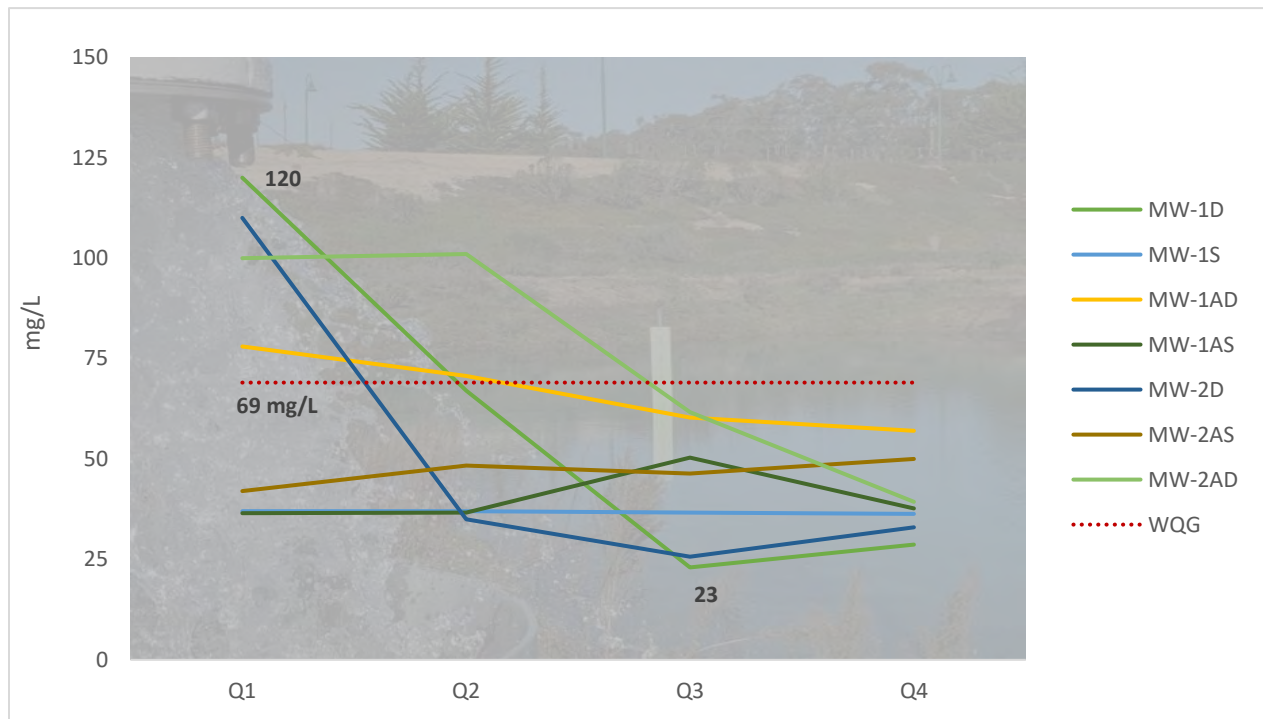


**Figure 88i. Groundwater Monitoring
Quarterly Sulfate (mg/L)**

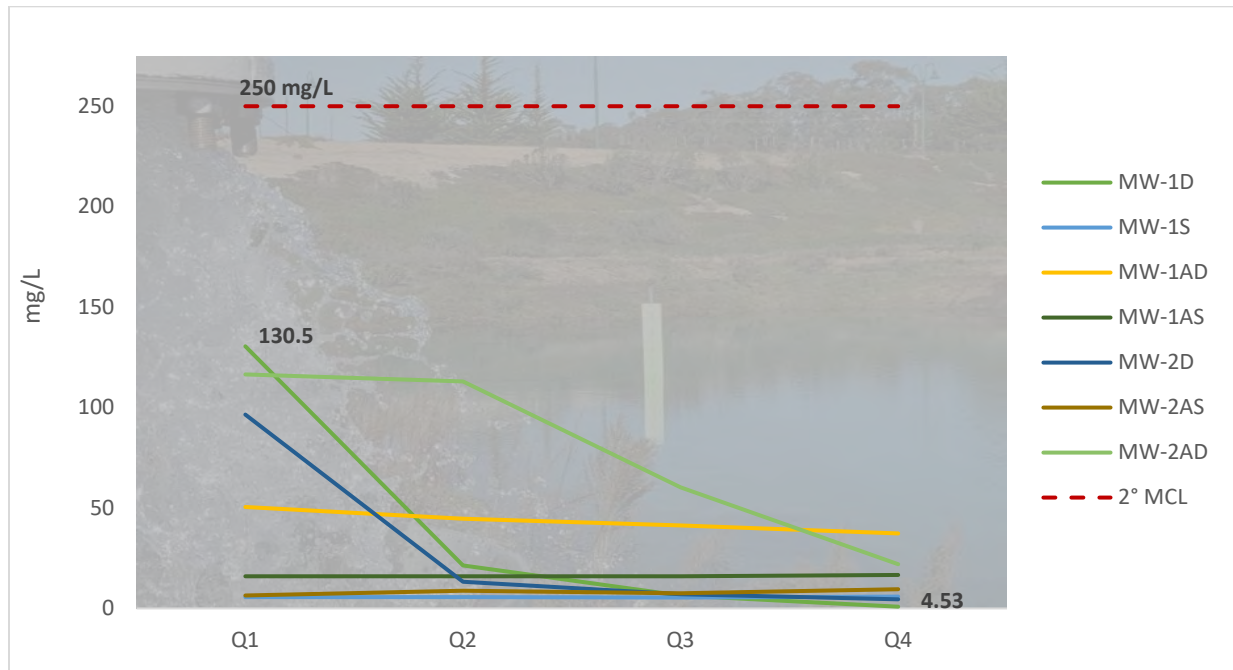


**Figure 88j. Groundwater Monitoring
Quarterly TOC (mg/L)**

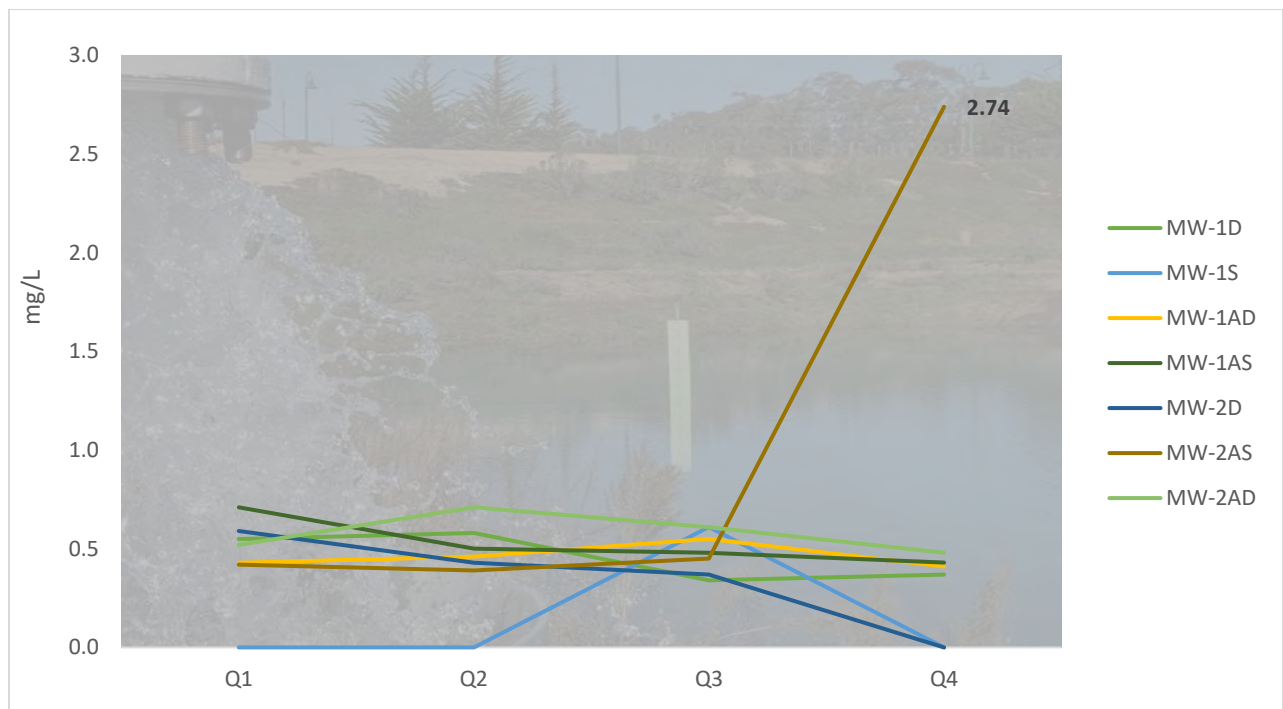


**Figure 88k. Groundwater Monitoring
Quarterly Total Coliform (MPN/100mL)**

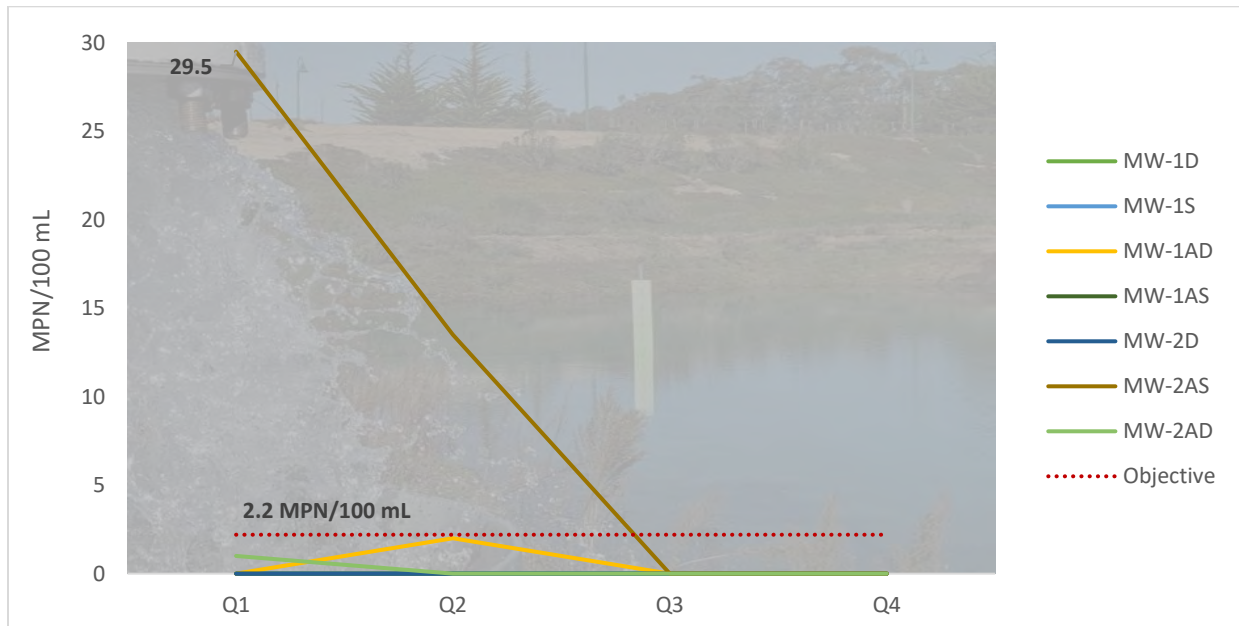
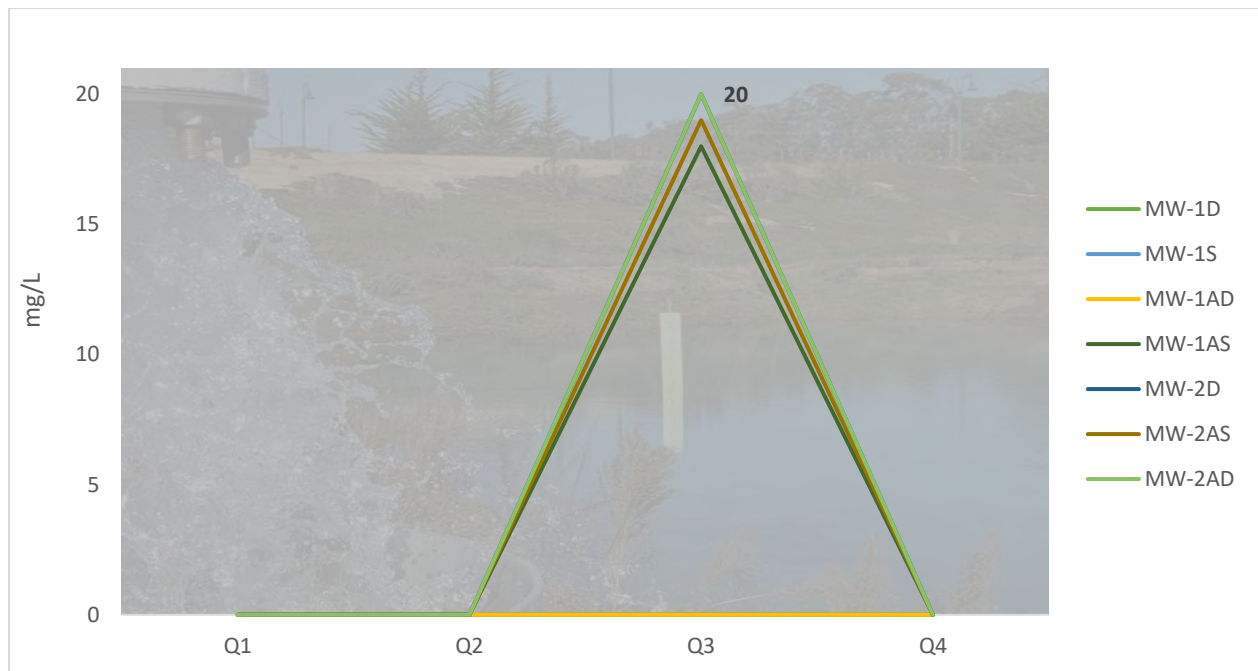


**Figure 88l. Groundwater Monitoring
Quarterly BOD₅ 20°C (mg/L)⁵**



⁵ BOD monitoring is required semi-annually; however, quarterly analyses were conducted.

**Figure 88m. Groundwater Monitoring
Quarterly Oil and Grease (mg/L)**

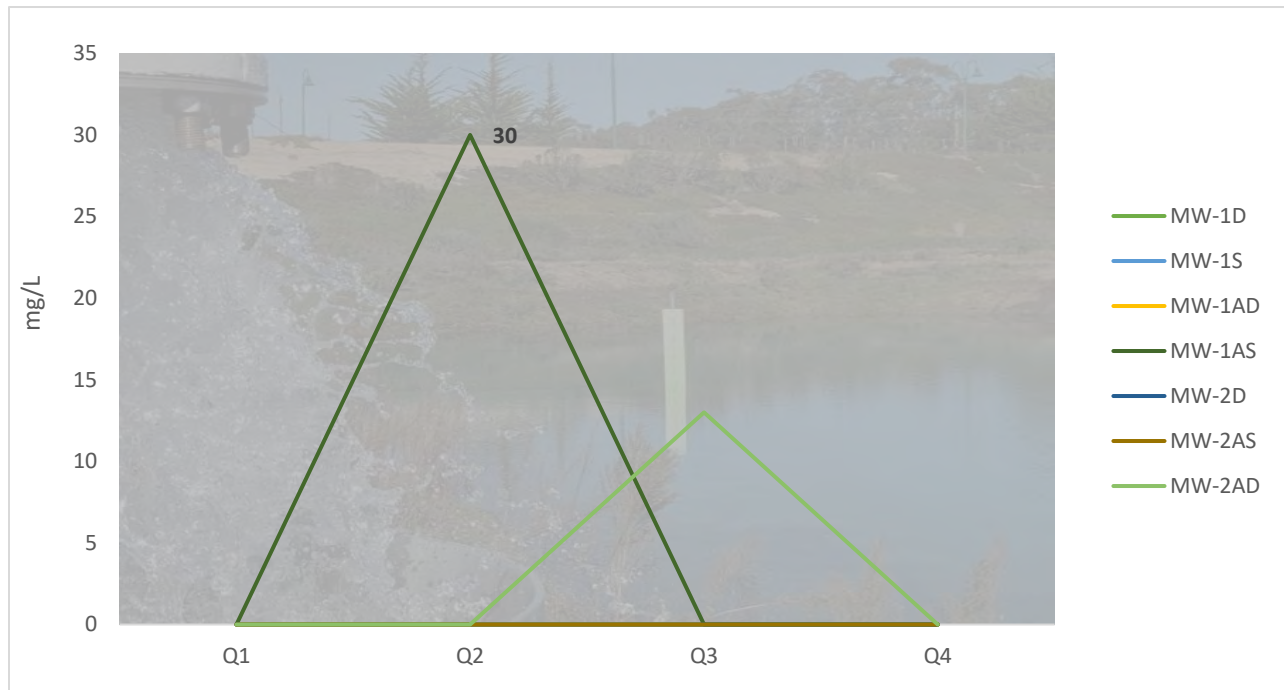


**Figure 88n. Groundwater Monitoring
Quarterly Total Nitrogen (mg/L)**

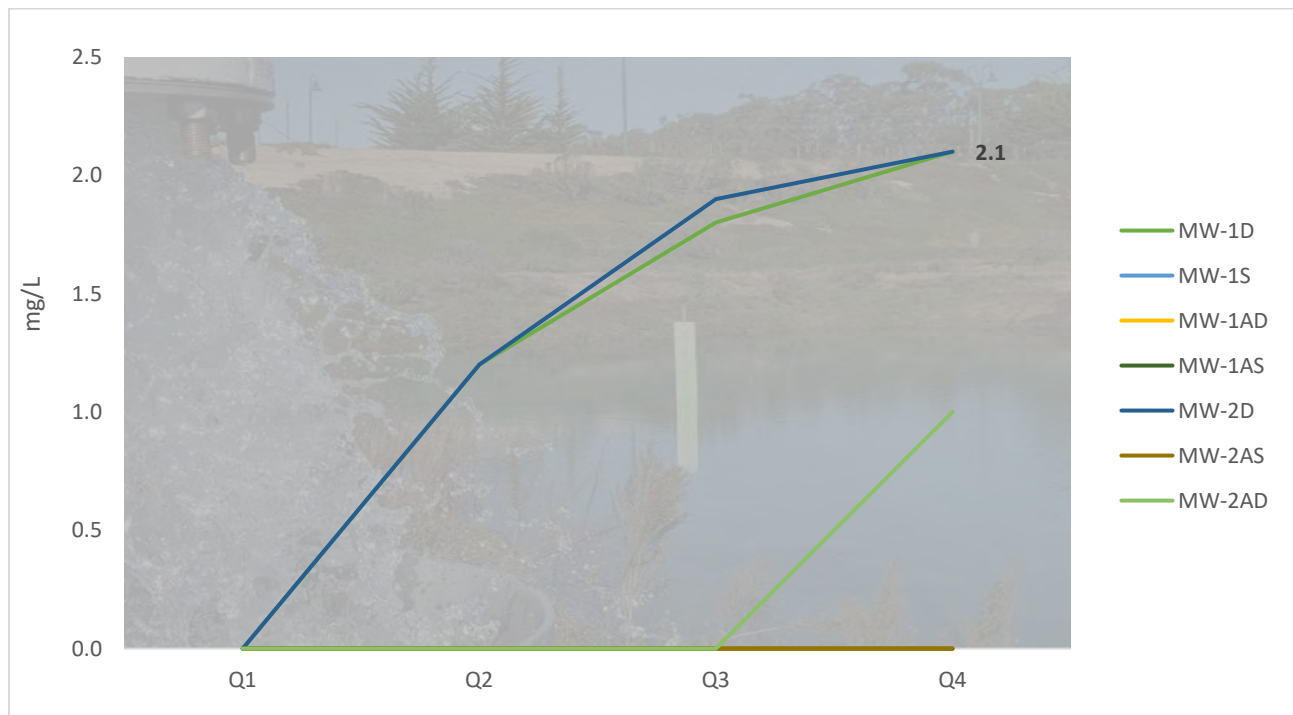


**Figure 88o. Groundwater Monitoring
Quarterly Turbidity (NTU)**

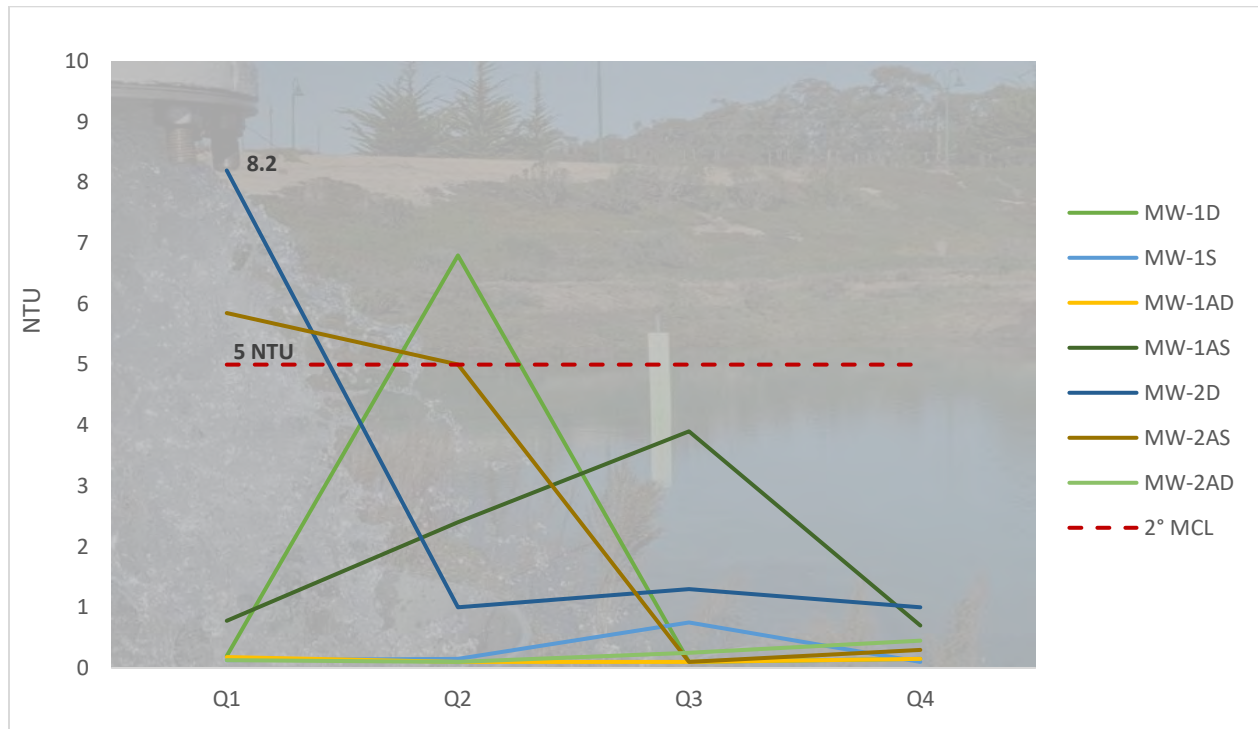


**Table 89. Groundwater Monitoring
Semi-Annual Monitoring**

Constituents/Parameters (2x/Year)	UOM	Semi-1							Semi-2						
		MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
BOD ₅ 20°C	mg/L	ND 6	DNQ 2.4	ND 6	ND 2	ND 2	ND 2	ND 2	DNQ 3.4	DNQ 3.2	ND 2	18	20	19	20
TSS	mg/L	ND 0.3	ND 0.3	ND 0.3	1.6	DNQ 0.4	DNQ 0.8	ND 0.3	ND 0.3	ND 0.3	DNQ 0.3	6.6	1.4	DNQ 0.7	ND 0.3

**Figure 89a. Groundwater Monitoring
Semi-Annual BOD₅ 20° C (mg/L)**



**Figure 89b. Groundwater Monitoring
Semi-Annual TSS (mg/L)**

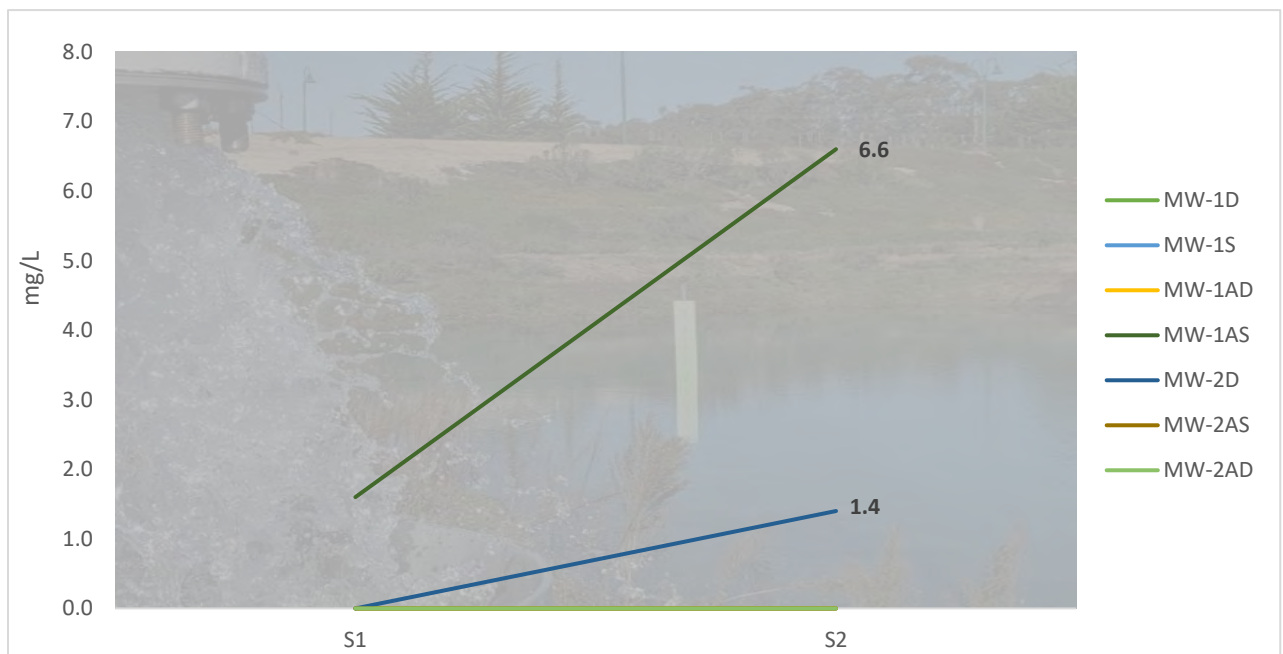


**Table 90. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Aluminum (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 5.00	ND 5.00	ND 5.00	41	ND 5.00	25	ND 5.00
March	ND 5.00	ND 5.00	ND 5.00	21	ND 5.00	770	ND 5.00
April	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00	DNQ 47.00	ND 23.00
May	ND 23.00	ND 23.00	ND 23.00	DNQ 33.00	DNQ 24.00	15	ND 23.00
June	5	ND 5.00	ND 5.00	12	28	66	ND 5.00
July	ND 5.00	6	ND 5.00	25	34	69	ND 5.00
August	ND 5.00	24	ND 5.00	179	62	31	ND 5.00
September	7	ND 5.00	ND 5.00	13	24	32	ND 5.00
October	5	23	ND 5.00	28	52	17	ND 5.00
November	7	ND 5.00	ND 5.00	19	37	16	ND 5.00
December	6	ND 5.00	ND 5.00	15	9	164	ND 5.00

**Figure 90. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Aluminum (ug/L)**

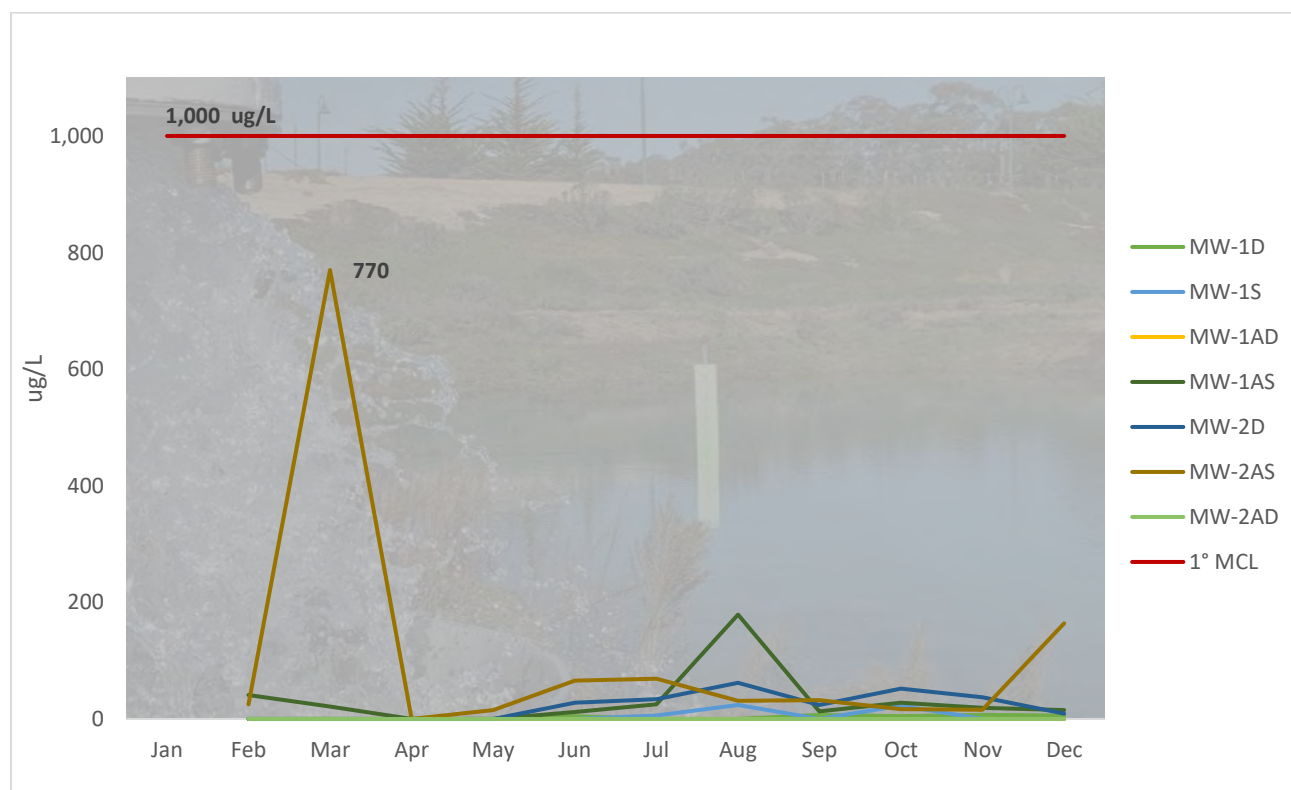


**Table 91. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Antimony (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
March	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 2.00	ND 1.00
April	ND 0.91	ND 0.91	ND 0.91	ND 0.91	DNQ 0.92	ND 0.91	ND 0.91
May	ND 0.91	ND 0.91	ND 0.91	ND 0.91	DNQ 1.30	ND 0.91	ND 0.91
June	ND 1.00	ND 1.00	ND 1.00	ND 1.00	2	ND 1.00	ND 1.00
July	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
August	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
September	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
October	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
November	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
December	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00

**Figure 91. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Antimony (ug/L)**

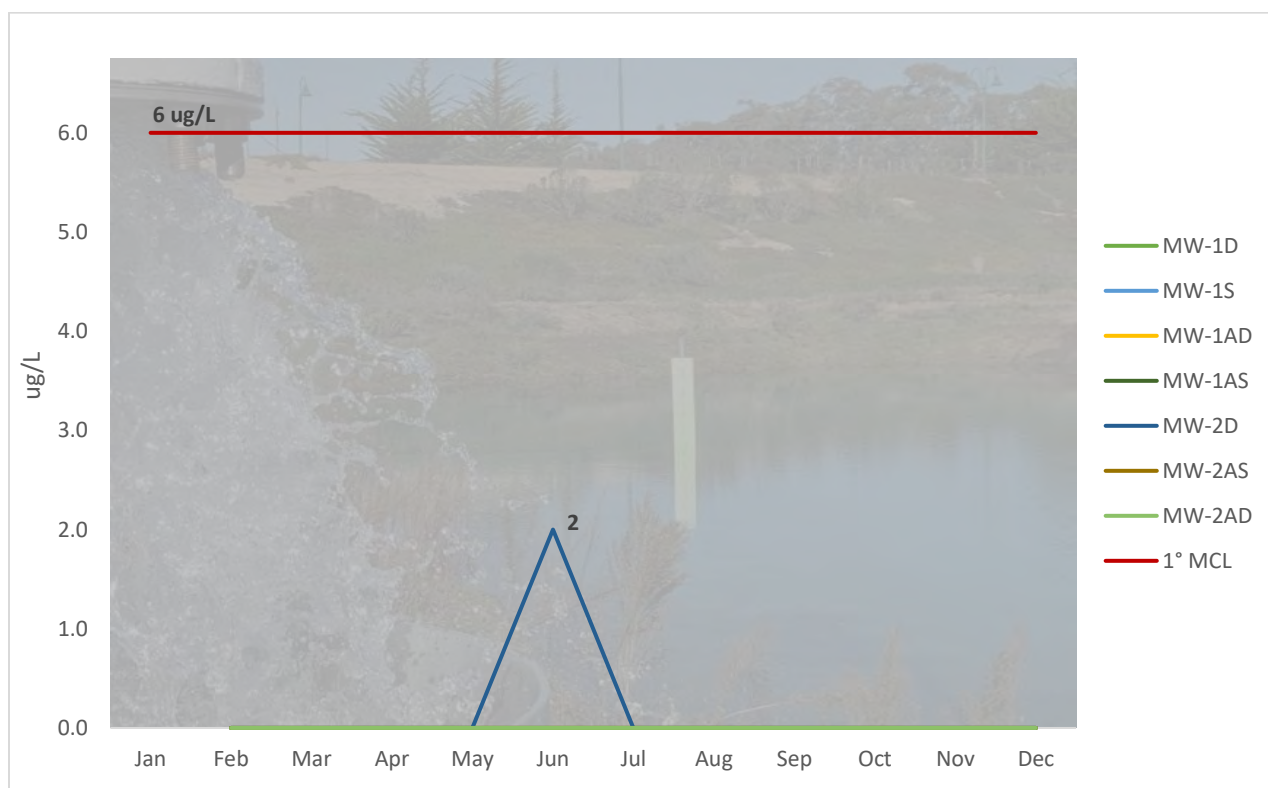
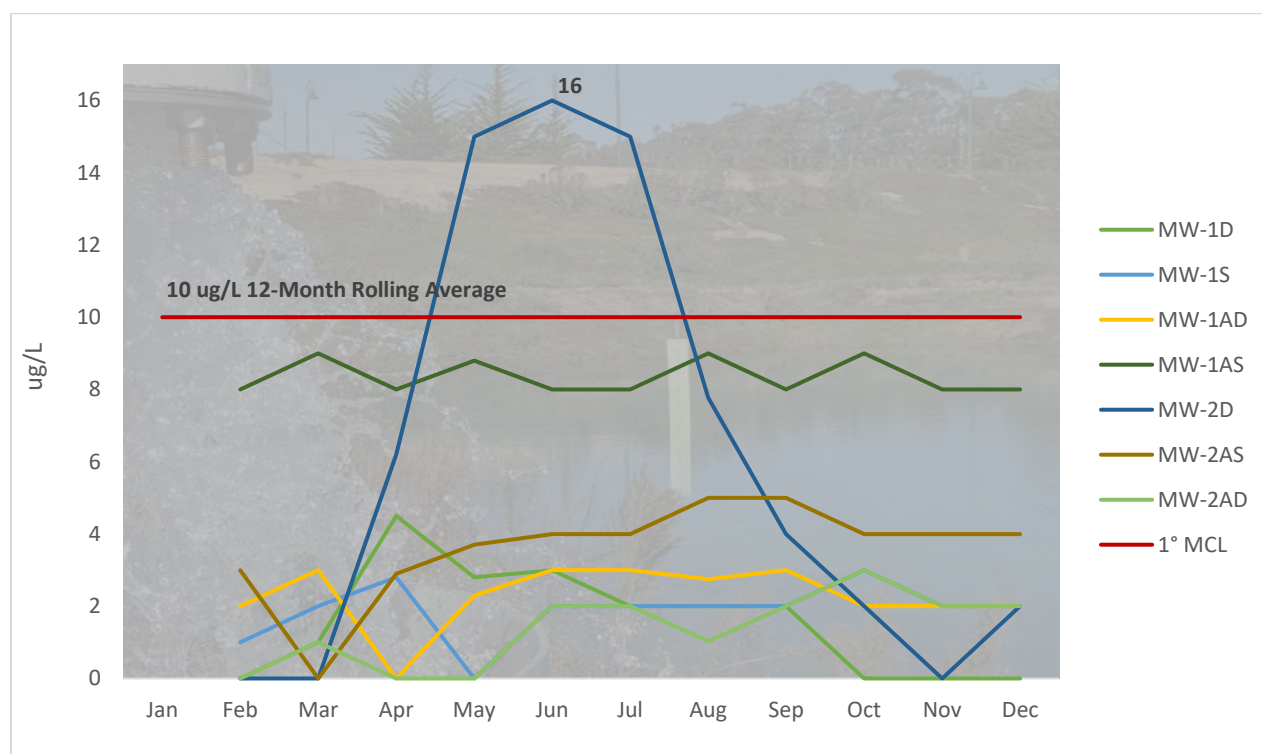


**Table 92. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Arsenic (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 1.00	1	2	8	ND 1.00	3	ND 1.00
March	1	2	3	9	ND 1.00	ND 1.00	1
April	4.5	2.8	DNQ 1.90	8	6.2	2.9	ND 1.20
May	2.8	DNQ 1.80	2.3	8.8	15	3.7	ND 1.20
June	3	2	3	8	16	4	2
July	2	2	3	8	15	4	2
August	2	2	2.75	9	7.77	5	1.03
September	2	2	3	8	4	5	2
October	ND 1.00	3	2	9	2	4	3
November	ND 1.00	2	2	8	ND 1.00	4	2
December	ND 1.00	2	2	8	2	4	2

*See Section 5.0 for further discussion.

**Figure 92. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Arsenic (ug/L)⁶**



⁶ 12-month rolling average is within regulatory limits (see Section 6.0 for a narrative discussion)

**Table 93. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Asbestos (MFL)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
March	ND 0.71	ND 0.73	ND 0.71	ND 0.71	ND 0.71	ND 0.73	ND 0.71
April	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
May	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
June	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
July	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.19	ND 0.20
August	ND 0.20	ND 0.20	ND 0.20	ND 0.19	ND 0.20	ND 0.20	ND 0.20
September	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
October	ND 0.20	ND 0.20	ND 0.20	0.2	ND 0.19	ND 0.20	ND 0.20
November	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
December	ND 0.20	ND 0.20	ND 0.20	ND 0.19	ND 0.20	ND 0.19	ND 0.20

**Figure 93. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Asbestos (MFL)**

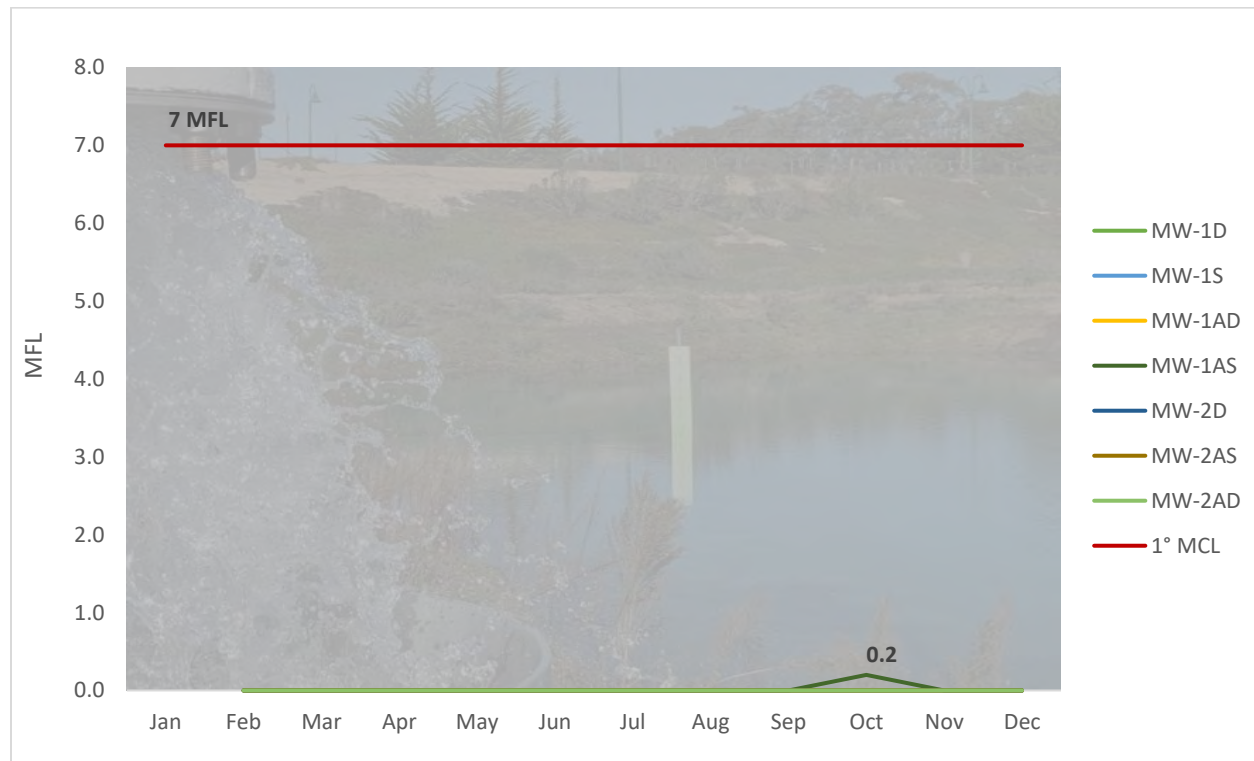


**Table 94. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Barium (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	74	12	60	62	77	47	69
March	83	11	72	71	82	66	78
April	110	ND 23.00	57	60	DNQ 37.00	63	68
May	100	ND 23.00	65	68	DNQ 35.00	52	75
June	39	12	67	61	28	48	75
July	42	10	63	58	25	45	72
August	15	14	71	65	25	62	37
September	9	12	55	54	28	55	23
October	17	13	48	66	38	70	20
November	13	12	43	59	ND 1.00	67	18
December	13	12	36	56	33	50	33

**Figure 94. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Barium (ug/L)**

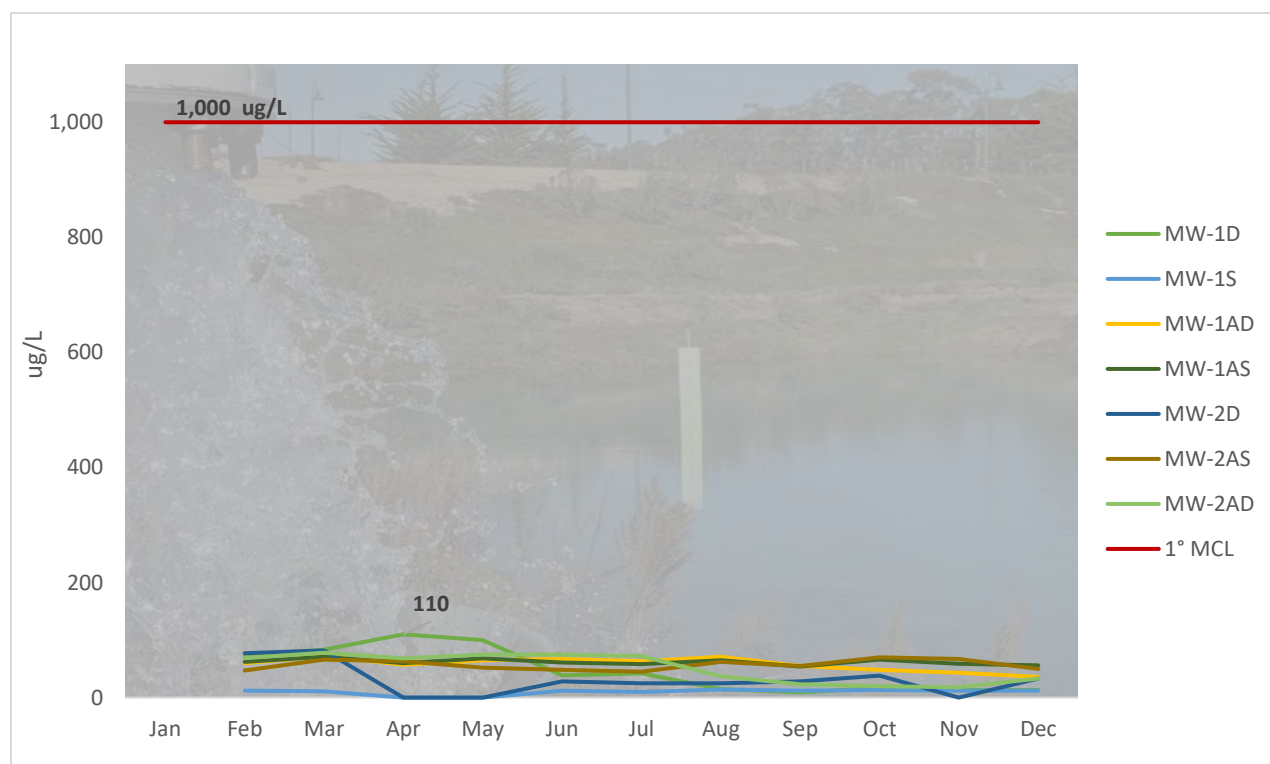


**Table 95. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Beryllium (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
March	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
April	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45
May	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45
June	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
July	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
August	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
September	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
October	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
November	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
December	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

**Figure 95. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Beryllium (ug/L) – N/A**

All monitoring results were ND.

**Table 96. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Cadmium (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
March	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
April	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45
May	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45
June	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
July	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
August	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
September	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
October	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
November	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
December	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

**Figure 96. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Cadmium (ug/L) – N/A**

All monitoring results were ND.

**Table 97. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Chromium (Total) (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	2	6	2	ND 1.00	2	7	2
March	3	6	2	ND 1.00	4	14	2
April	ND 4.50	DNQ 6.40	ND 4.50	ND 4.50	ND 4.50	DNQ 7.20	ND 4.50
May	ND 4.50	DNQ 5.50	ND 4.50	ND 4.50	ND 4.50	DNQ 7.20	ND 4.50
June	1	5	2	ND 1.00	ND 1.00	8	3
July	ND 1.00	4	ND 1.00	ND 1.00	ND 1.00	6	ND 1.00
August	ND 1.00	6	2	ND 1.00	ND 1.00	6	ND 1.00
September	ND 1.00	5	ND 1.00	ND 1.00	ND 1.00	6	ND 1.00
October	1	5	1	ND 1.00	ND 1.00	6	ND 1.00
November	ND 1.00	4	ND 1.00	ND 1.00	ND 1.00	5	ND 1.00
December	ND 1.00	4	1	ND 1.00	ND 1.00	6	ND 1.00

**Figure 97. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Chromium (Total) (ug/L)**

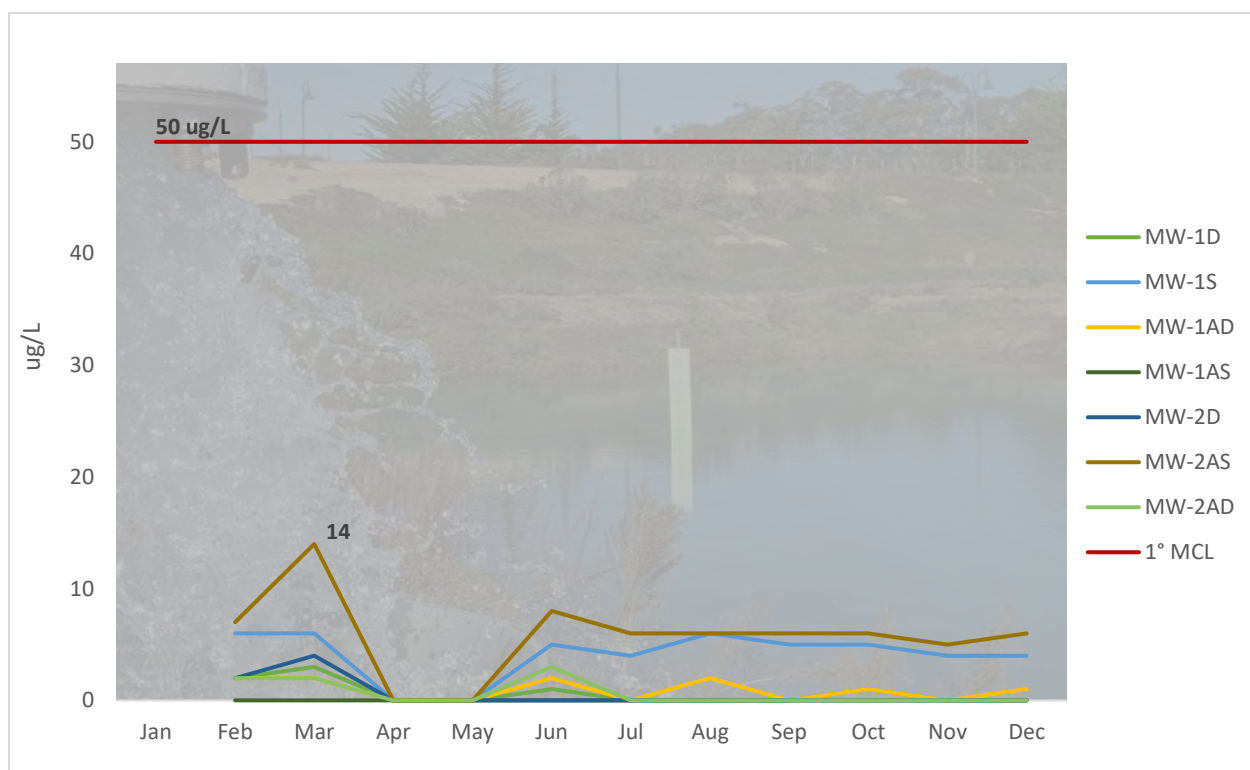


**Table 98. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Cyanide (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2
March	30	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2
April	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2
May	ND 2.2	DNQ 3.1	ND 2.2	DNQ 2.2	ND 2.2	ND 2.2	ND 2.2
June	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2
July	20	ND 2.2	DNQ 2.2	40	ND 2.2	ND 2.2	ND 2.2
August	ND 2.2	DNQ 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2
September	ND 2.2	ND 2.2	ND 2.2	DNQ 2.4	DNQ 3.4	ND 2.2	DNQ 2.5
October	DNQ 2.5	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2
November	ND 2.2	ND 2.2	DNQ 3.8	ND 2.2	ND 2.2	ND 2.2	ND 2.2
December	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2	ND 2.2

**Figure 98. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Cyanide (mg/L)**

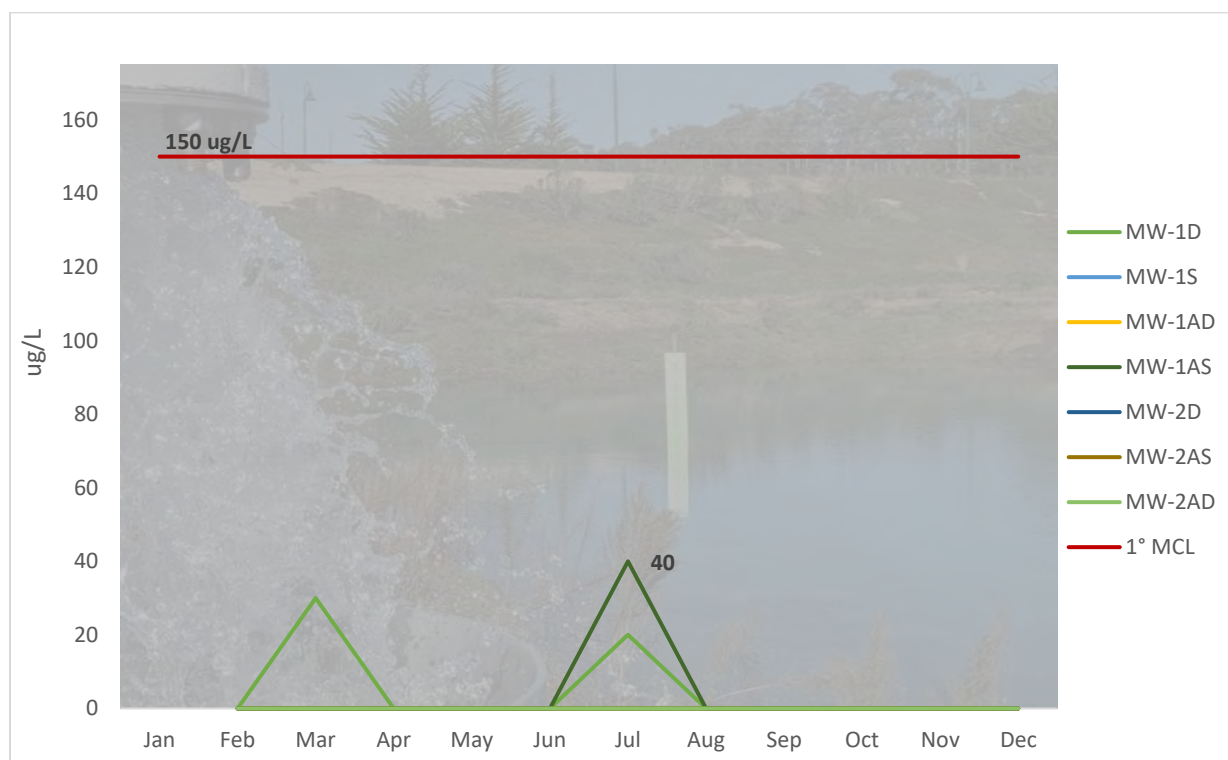


**Table 99. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Fluoride (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	0.26	ND 0.10	0.37	ND 0.10	0.23	0.1	0.23
March	0.25	ND 0.10	0.38	ND 0.10	0.23	ND 0.10	0.24
April	0.3	ND 0.05	0.38	ND 0.05	0.3	ND 0.05	0.24
May	ND 0.10	ND 0.10	0.29	ND 0.10	0.25	ND 0.10	0.22
June	ND 0.10	0.24	ND 0.10	ND 0.10	0.27	ND 0.10	0.16
July	ND 0.10	ND 0.10	ND 0.10	ND 0.10	0.23	0.1	0.22
August	ND 0.10	ND 0.10	0.23	ND 0.10	0.21	ND 0.10	0.34
September	ND 0.10	ND 0.10	0.35	ND 0.10	0.22	ND 0.10	0.55
October	0.13	ND 0.10	0.63	ND 0.10	0.19	ND 0.10	0.99
November	0.13	ND 0.10	0.65	ND 0.10	0.19	ND 0.10	1.02
December	ND 0.10	ND 0.10	0.82	ND 0.10	0.25	0.12	0.86

**Figure 99. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Fluoride (mg/L)**

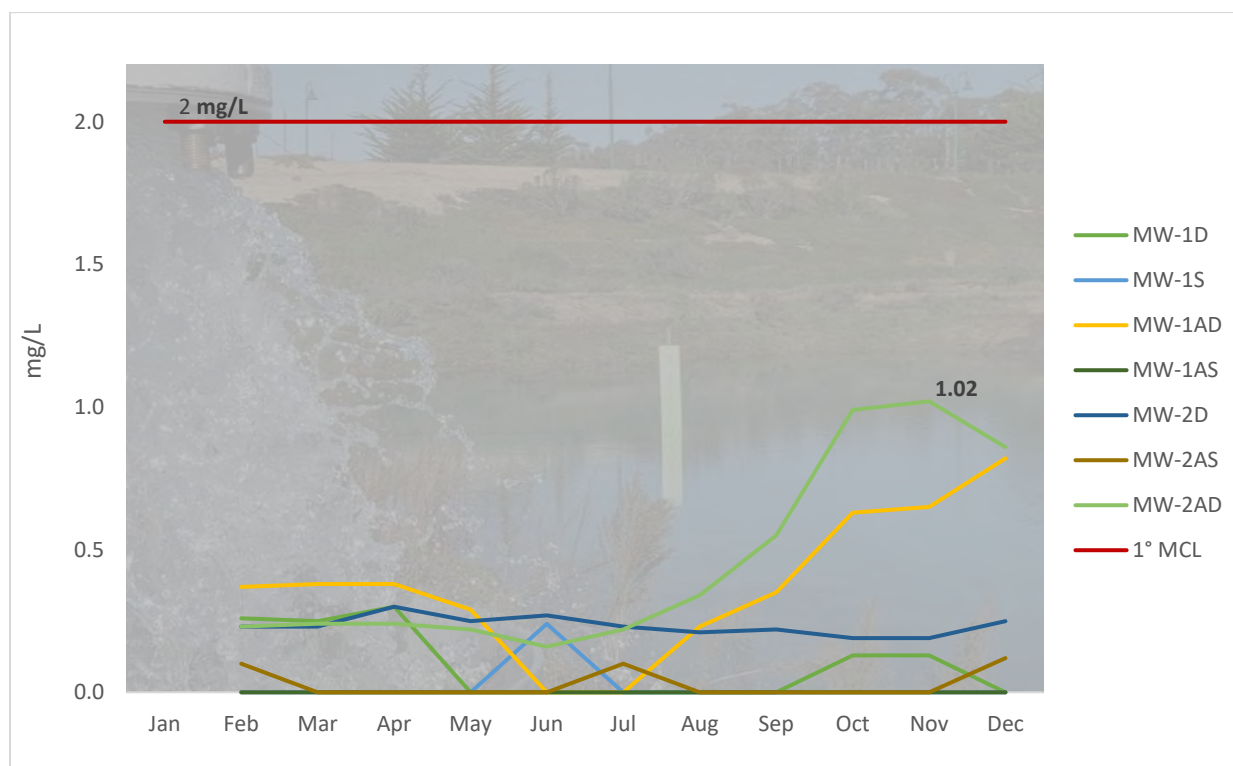


**Table 100. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Mercury (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
March	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 2.00	ND 1.00
April	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
May	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09
June	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
July	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
August	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
September	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
October	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
November	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
December	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

**Figure 100. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Mercury (ug/L) – N/A**

All monitoring results were ND.

**Table 101. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nickel (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	2	ND 1.00	1	ND 1.00	2	ND 1.00	1
March	2	ND 1.00	2	ND 1.00	2	2	2
April	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50
May	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50
June	ND 1.00	ND 1.00	2	ND 1.00	ND 1.00	ND 1.00	2
July	ND 1.00	ND 1.00	2	ND 1.00	ND 1.00	ND 1.00	2
August	ND 1.00	ND 1.00	2	ND 1.00	ND 1.00	ND 1.00	ND 1.00
September	ND 1.00	ND 1.00	2	ND 1.00	ND 1.00	ND 1.00	ND 1.00
October	ND 1.00	ND 1.00	1	1	ND 1.00	ND 1.00	ND 1.00
November	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
December	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00

**Figure 101. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nickel (ug/L)**

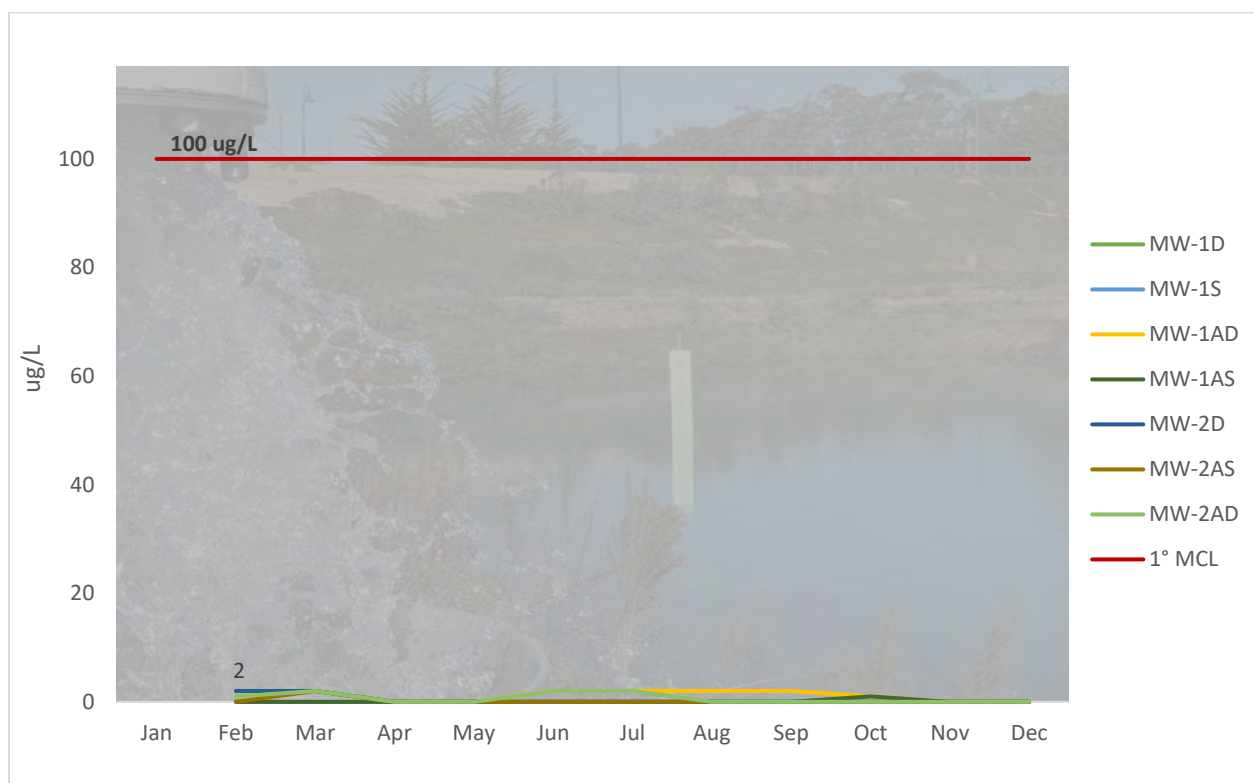


**Table 102. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nitrate (as Nitrogen) (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.10	0.8	0.3	ND 0.10	ND 0.10	0.7	ND 0.10
March	ND 0.10	0.8	0.3	ND 0.10	ND 0.10	0.7	ND 0.10
April	0.2	0.8	0.3	ND 0.05	0.5	0.9	ND 0.05
May	0.6	0.8	0.3	ND 0.10	0.8	0.7	ND 0.10
June	0.9	0.8	0.4	ND 0.10	0.9	0.7	ND 0.10
July	0.7	0.7	0.3	ND 0.10	1.2	0.7	ND 0.10
August	1.2	0.7	0.2	ND 0.10	1.4	0.7	ND 0.10
September	1.2	0.6	0.1	ND 0.10	1.4	0.7	ND 0.10
October	1.5	0.6	0.2	ND 0.10	2.2	0.8	0.5
November	1.2	0.5	0.2	ND 0.10	1.8	0.8	0.6
December	2	0.6	0.6	ND 0.10	1.3	0.8	0.3

**Figure 102. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nitrate (as N) (mg/L)**

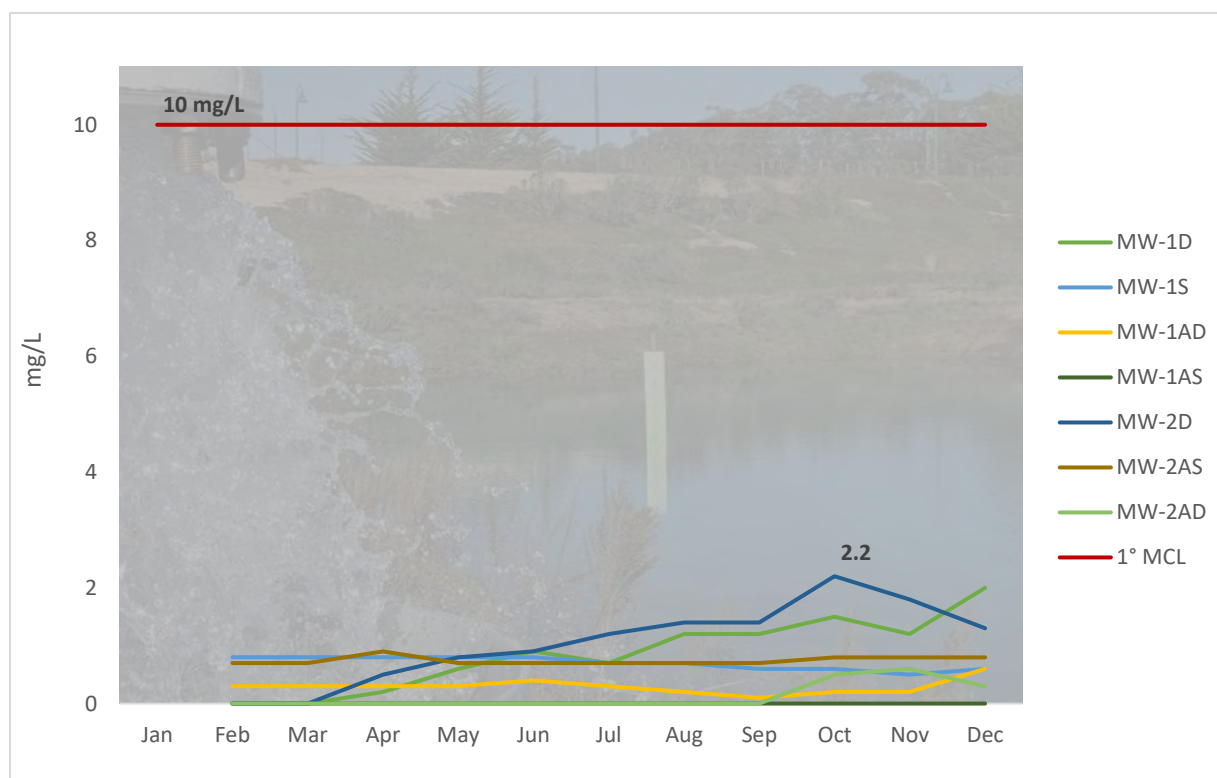


**Table 103. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nitrite (as Nitrogen) (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
March	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
April	ND 0.01	ND 0.01	ND 0.01	ND 0.01	0.45	ND 0.01	ND 0.01
May	ND 0.05	ND 0.05	ND 0.05	ND 0.05	0.06	ND 0.05	ND 0.05
June	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
July	0.06	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
August	0.29	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
September	0.86	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
October	0.06	ND 0.05	ND 0.05	ND 0.05	0.17	ND 0.05	ND 0.05
November	0.16	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	0.06
December	0.52	ND 0.05	0.09	ND 0.05	0.44	ND 0.05	ND 0.05

**Figure 103. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nitrite (as Nitrogen) (mg/L)**

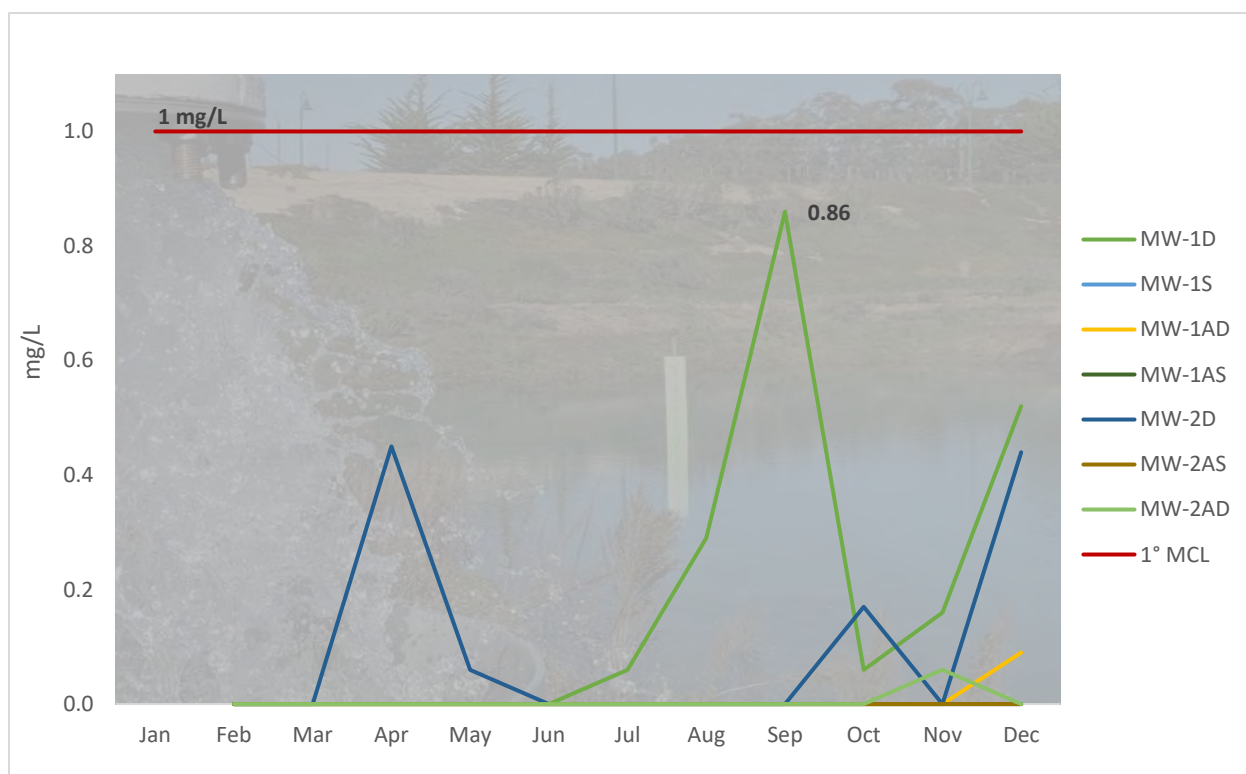


**Table 104. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nitrate + Nitrite (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.10	0.8	0.3	ND 0.10	ND 0.10	0.7	ND 0.10
March	ND 0.10	0.8	0.3	ND 0.10	ND 0.10	0.7	ND 0.10
April	0.2	0.8	0.3	ND 0.10	1	0.9	ND 0.10
May	0.6	0.8	0.3	ND 0.10	0.9	0.7	ND 0.10
June	0.9	0.8	0.4	ND 0.10	0.9	0.7	ND 0.10
July	0.8	0.7	0.3	ND 0.10	1.2	0.7	ND 0.10
August	1.5	0.7	0.2	ND 0.10	1.4	0.7	ND 0.10
September	2.1	0.6	0.1	ND 0.10	1.4	0.7	ND 0.10
October	1.56	0.6	0.2	ND 0.10	2.37	0.8	0.5
November	1.36	0.5	0.2	ND 0.10	1.8	0.8	0.66
December	2.52	0.6	0.69	ND 0.10	1.74	0.8	0.3

**Figure 104. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Nitrate + Nitrite (mg/L)**

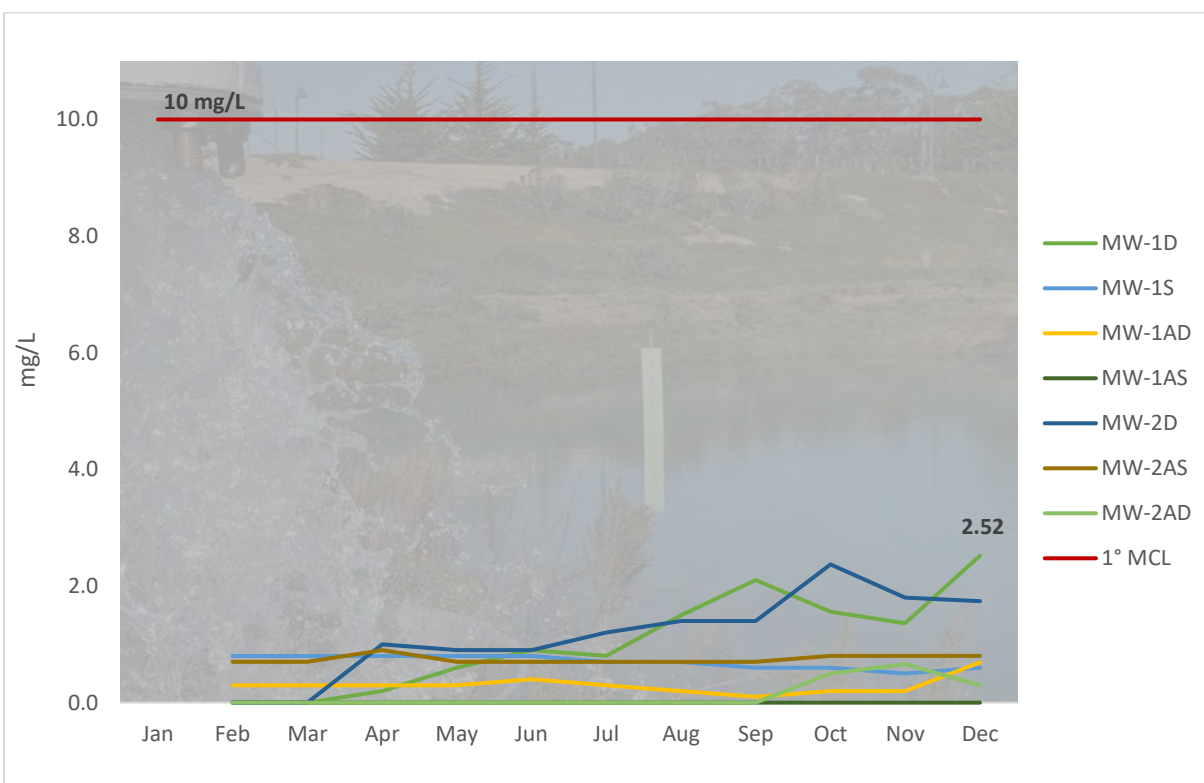


**Table 105. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Perchlorate (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
March	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
April	ND 1.20	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
May	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
June	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	No Data*	ND 0.61
July	ND 0.61	ND 0.61	ND 2.00	ND 0.61	ND 0.61	ND 0.61	ND 2.00
August	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 1.20	ND 0.61	ND 0.61
September	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
October	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
November	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61	ND 0.61
December	ND 0.81	ND 0.81	ND 0.81	ND 0.81	ND 0.81	ND 0.81	ND 0.81

**See letter of explanation dated July 30, 2020 from MCHD; see Appendix F, Q2 2020 AWPf Report.

**Figure 105. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Perchlorate (ug/L) – N/A**

All monitoring results were ND.

**Table 106. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Selenium (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50
March	ND 2.50	ND 2.50	3	ND 2.50	ND 2.50	ND 5.00	ND 2.50
April	DNQ 1.50	DNQ 1.30	3	DNQ 1.10	2.9	3.1	ND 0.91
May	DNQ 1.20	DNQ 0.96	2	DNQ 1.20	2.7	DNQ 1.90	DNQ 0.95
June	ND 2.50	ND 2.50	4	ND 2.50	ND 2.50	ND 2.50	ND 2.50
July	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50
August	ND 2.50	ND 2.50	4	ND 2.50	ND 2.50	4	ND 2.50
September	ND 2.50	ND 2.50	4	ND 2.50	ND 2.50	4	ND 2.50
October	ND 2.50	ND 2.50	2.6	ND 2.50	ND 2.50	4.8	ND 2.50
November	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	4.5	ND 2.50
December	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50	ND 2.50

**Figure 106. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Selenium (ug/L)**

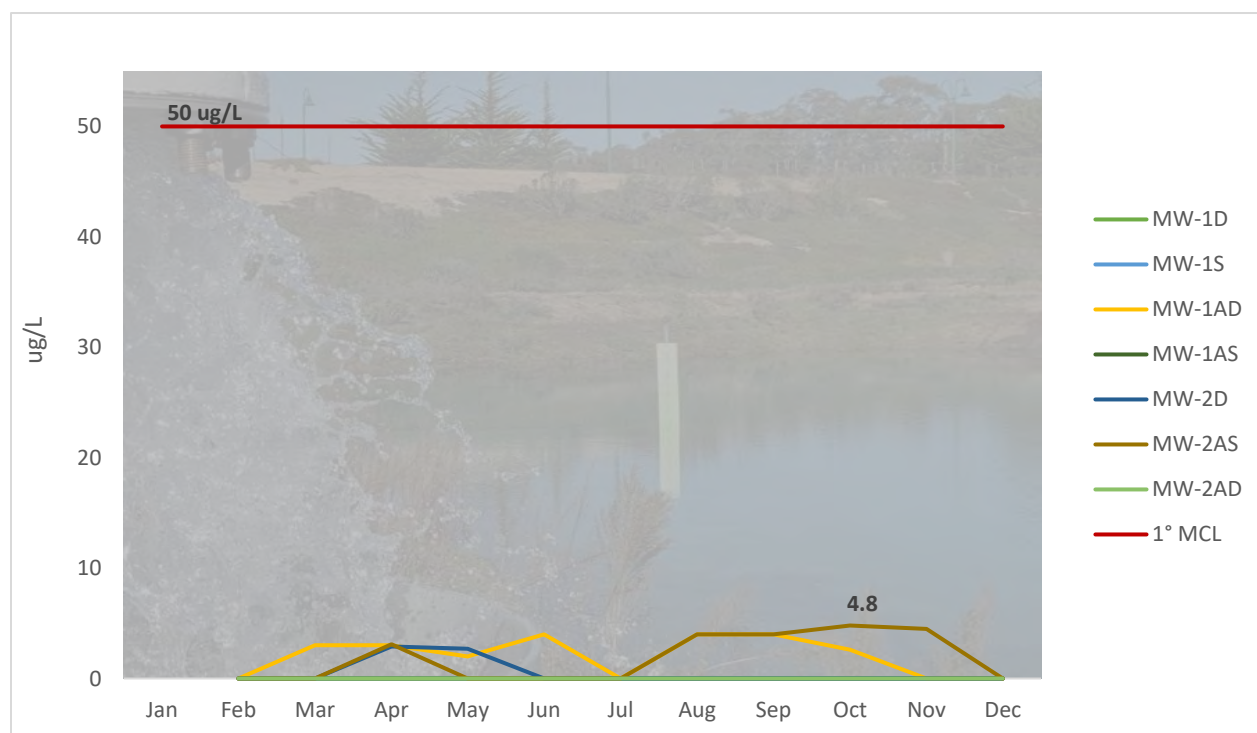


**Table 107 Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Thallium (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
March	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 2.00	ND 1.00
April	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45
May	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45	ND 0.45
June	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
July	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
August	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
September	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
October	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
November	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00	ND 1.00
December	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

**Figure 107. Groundwater Monitoring
Inorganics with Primary MCLs
Monthly Thallium (ug/L) - N/A**

All monitoring results were ND.

Table 108. Groundwater Monitoring

[illegible]

2020 PWM/GWR Annual Summary Report
April 30, 2021

2020 PWM/GWR Annual Summary Report
April 30, 2021

Constituents/Parameters (4x/Year)	UOM	Q1							Q2							Q3							Q4						
		MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
Organic Chemicals, Chemicals with Notification Levels																													
1,2,4-Trimethylbenzene	ug/L	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	
1,3,5-Trimethylbenzene	ug/L	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	
1,4-Dioxane	ug/L	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	ND 0.09	
2-Chlorotoluene	ug/L	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	
2,4,6-Trinitrotoluene (TNT)	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	
4-Chlorotoluene	ug/L	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	
Boron	mg/L	180.0	ND 60.00	DNQ 79.00	ND 60.00	260.0	DNQ 69.00	150.0	310.0	ND 60.00	DNQ 68.00	ND 60.00	230.0	ND 60.00	150.0	240.0	ND 60.00	DNQ 86.00	ND 60.00	260.0	DNQ 62.00	DNQ 90.00	230.0	ND 60.00	ND 60.00	ND 60.00	250.0	ND 60.00	DNQ 76.00
Carbon disulfide	ug/L	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	
Chlorate	ug/L	ND 6.0	ND 6.0	ND 6.0	ND 6.0	ND 6.0	ND 6.0	ND 6.0	300	ND 6.0	DNQ 14	ND 6.0	330	DNQ 7.2	ND 6.0	630	ND 6.0	DNQ 11	ND 6.0	570	DNQ 11	96	487	ND 6.0	110	ND 6.0	770	ND 6.0	330
Diazinon	ug/L	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	
Dichlorodifluoromethane (Freon 12)	ug/L	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	
Ethylene glycol	mg/L	ND 40.00	ND 40.00	ND 40.00	ND 40.00	DNQ 200.00	DNQ 150.00	320.0	ND 40.00	ND 40.00	ND 40.00	ND 40.00	DNQ 48.00	ND 40.00	ND 40.00	DNQ 72.00	ND 40.00	DNQ 57.00	DNQ 43.00	ND 40.00	DNQ 78.00	ND 40.00	DNQ 160.00	DNQ 67.00	DNQ 60.00	DNQ 110.00	DNQ 91.00	DNQ 76.00	DNQ 83.00
Formaldehyde	ug/L	6.1	ND 0.86	DNQ 4.50	6.4	7.2	DNQ 2.20	6.8	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	ND 3.00	22.0	ND 3.00	ND 3.00	ND 3.00	ND 3.00	
HMX	ug/L	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	
Isopropylbenzene	ug/L	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	
Manganese	ug/L	45.0	ND 1.00	64.5	36.5	71.0	20.0	60.5	16.3	ND 1.00	39.0	21.7	16.7	4.1	51.3	5.0	2.0	52.7	31.3	8.3	1.0	32.7	2.0	ND 1.00	32.0	37.7	7.5	2.0	10.7
Methyl isobutyl ketone (MIBK)	ug/L	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	
Naphthalene	ug/L	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	
n-Butylbenzene	ug/L	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	
N-Nitrosodiethylamine (NDEA)	ng/L	ND 1.49E-03	ND 1.49E-03	ND 1.57E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.58E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.50E-03	ND 1.57E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.58E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	ND 1.49E-03	
n-Nitrosodimethylamine (NDMA)	ng/L	ND 9.62E-04	ND 9.62E-04	ND 1.01E-03	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	0.0048	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	0.0036	ND 9.62E-04	ND 9.62E-04	0.0033	ND 1.01E-03	ND 9.62E-04	ND 9.62E-04	0.0021	ND 1.02E-03	ND 1.60E-03	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	ND 9.62E-04	
N-Nitrosodi-n-propylamine (NDPA)	ng/L	ND 8.43E-04	ND 8.43E-04	ND 8.85E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.00E-04	ND 8.00E-04	ND 8.00E-04	ND 8.00E-04	ND 8.00E-04	ND 8.00E-04	ND 8.00E-04	ND 8.40E-04	ND 8.80E-04	ND 8.00E-04	ND 8.40E-04	ND 8.00E-04	ND 8.90E-04	ND 8.00E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	ND 8.43E-04	
Perfluorooctanoic acid (PFOA)	ug/L	ND 3.80E-03	ND 3.80E-03	ND 3.80E-03	ND 3.80E-03	ND 3.80E-03	ND 3.80E-03	ND 3.80E-03	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	ND 3.80E-04	
Perfluorooctane sulfonate (PFOS)	ug/L	ND 4.30E-03	ND 4.30E-03	ND 4.30E-03	ND 4.30E-03	ND 4.30E-03	ND 4.30E-03	ND 4.30E-03	ND 4.30E-04	ND 6.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	ND 4.30E-04	
n-Propylbenzene	ug/L	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50			

2020 PWM/GWR Annual Summary Report
April 30, 2021

2020 PWM/GWR Annual Summary Report
April 30, 2021

Constituents/Parameters (4x/Year)	UOM	Q1							Q2							Q3							Q4						
		MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
Remaining Priority Pollutants, (c) Base/Neutral Extractables (cont.)																													
Monochlorobenzene	ug/L	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	
Chloroethane	ug/L	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	ND 0.30	
Methyl Bromide/BromoMethane	ug/L	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	
Methyl Chloride	ug/L	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	ND 0.40	
Silver																													
Silver	ug/L	ND 10.00	ND 10.00	ND 10.00	ND 10.00	ND 10.00	ND 10.00	ND 10.00	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 4.50	ND 10.00	ND 10.00	17	ND 10.00	18	ND 10.00	17	ND 10.00	ND 10.00	ND 10.00	ND 10.00	ND 10.00	ND 10.00	

Figure 108a. Groundwater Monitoring
Radioactivity
Quarterly Gross Alpha (pCi/L)

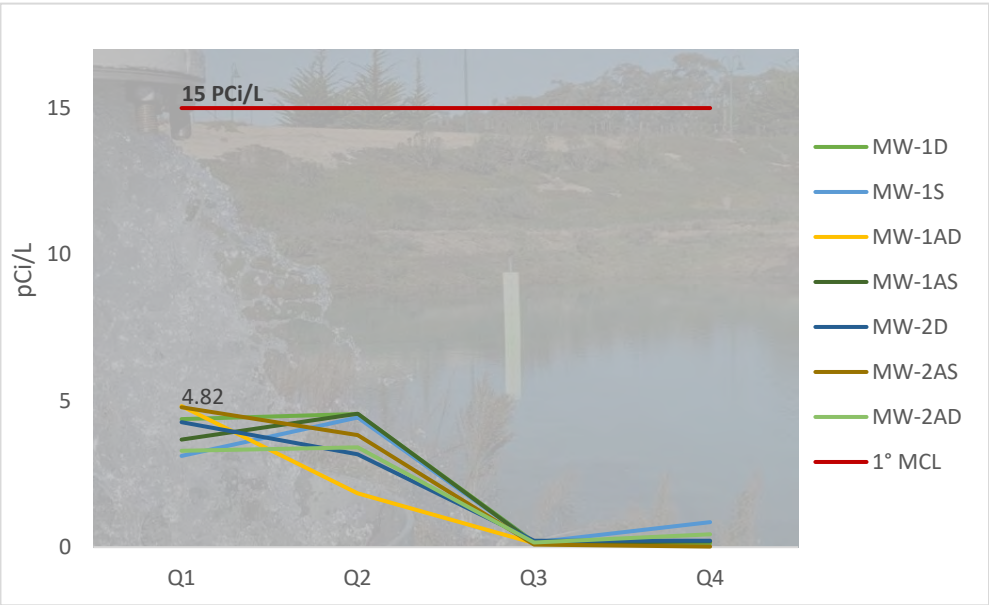


Figure 108b. Groundwater Monitoring
Radioactivity
Quarterly Gross Beta (pCi/L)

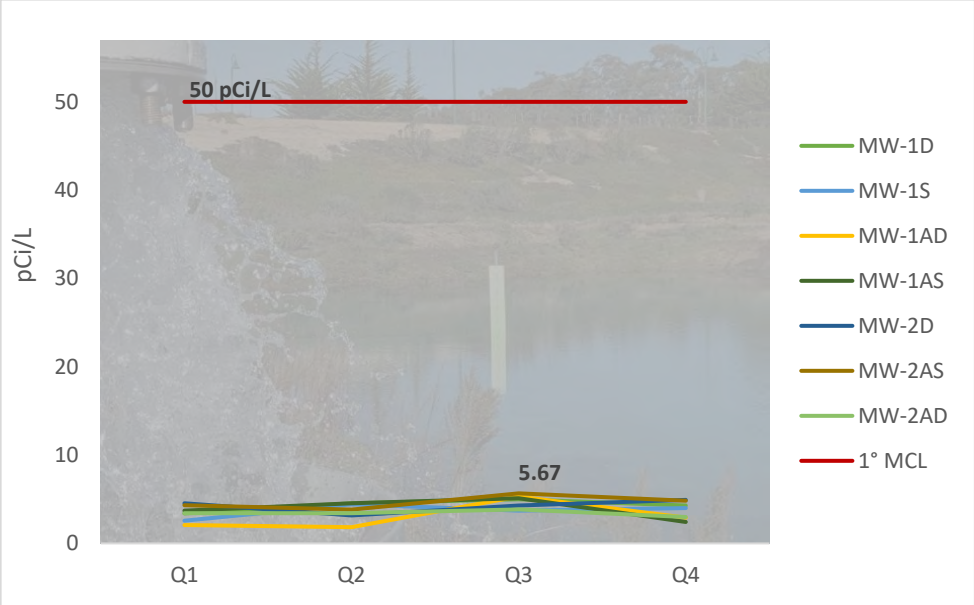


Figure 108c. Groundwater Monitoring
Radioactivity
Quarterly Combined Radium-226 and Radium-228 (pCi/L)

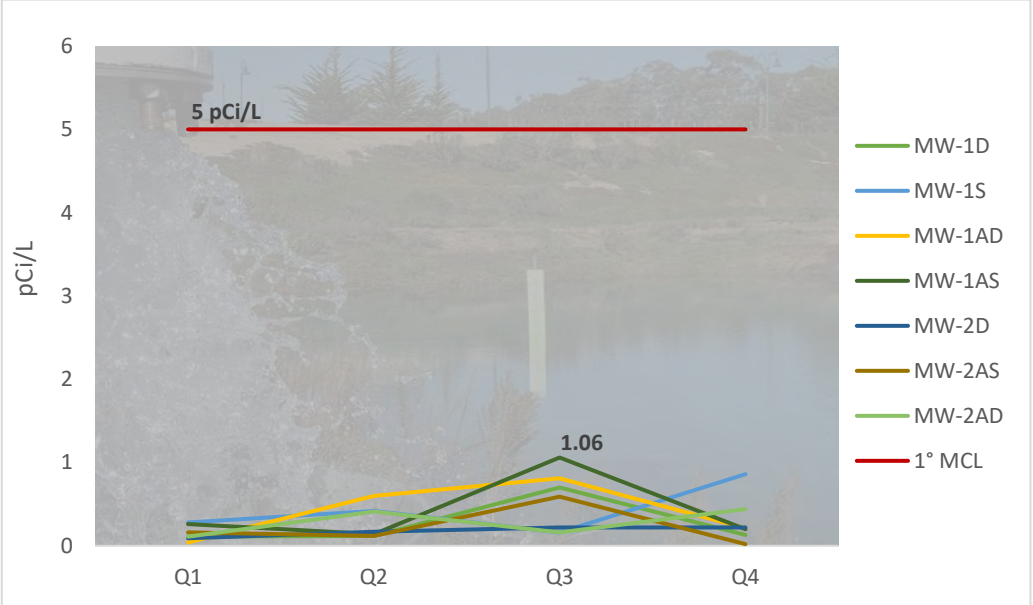


**Figure 108d. Groundwater Monitoring
Radioactivity
Quarterly Radium-226 (pCi/L)**

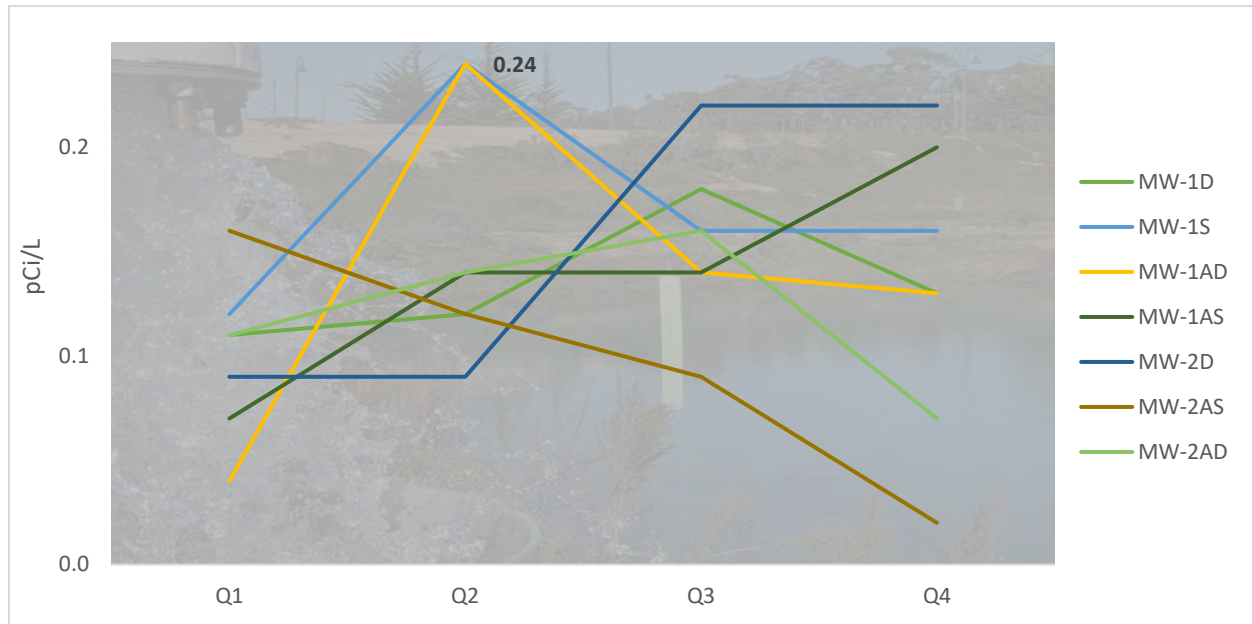


**Figure 108e. Groundwater Monitoring
Radioactivity
Quarterly Radium-228 (pCi/L)**

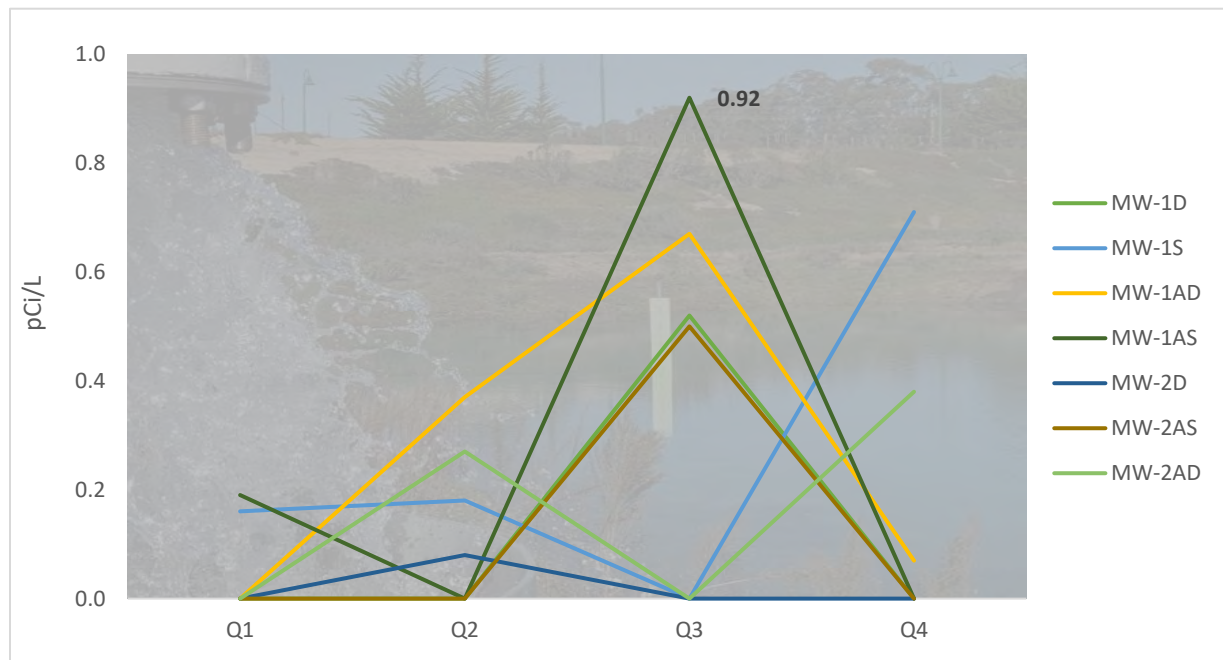


**Figure 108f. Groundwater Monitoring
 Radioactivity
 Quarterly Strontium-90 (pCi/L)**

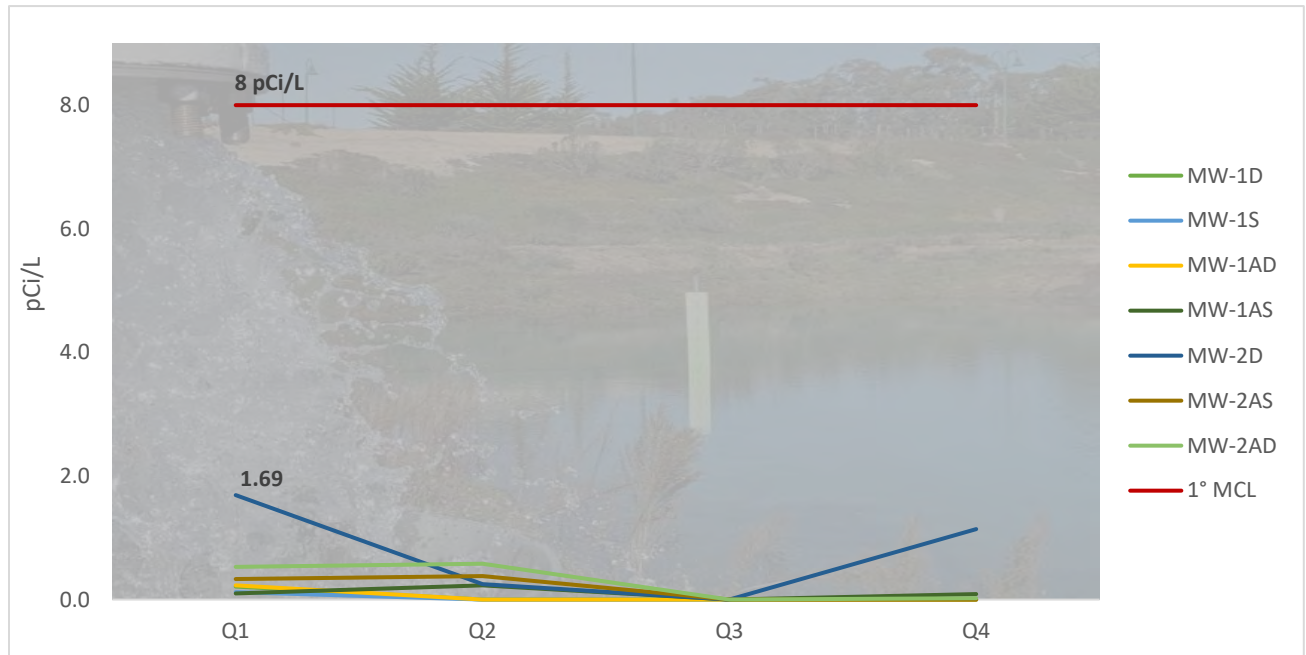


**Figure 108g. Groundwater Monitoring
 Radioactivity
 Quarterly Tritium (pCi/L)**

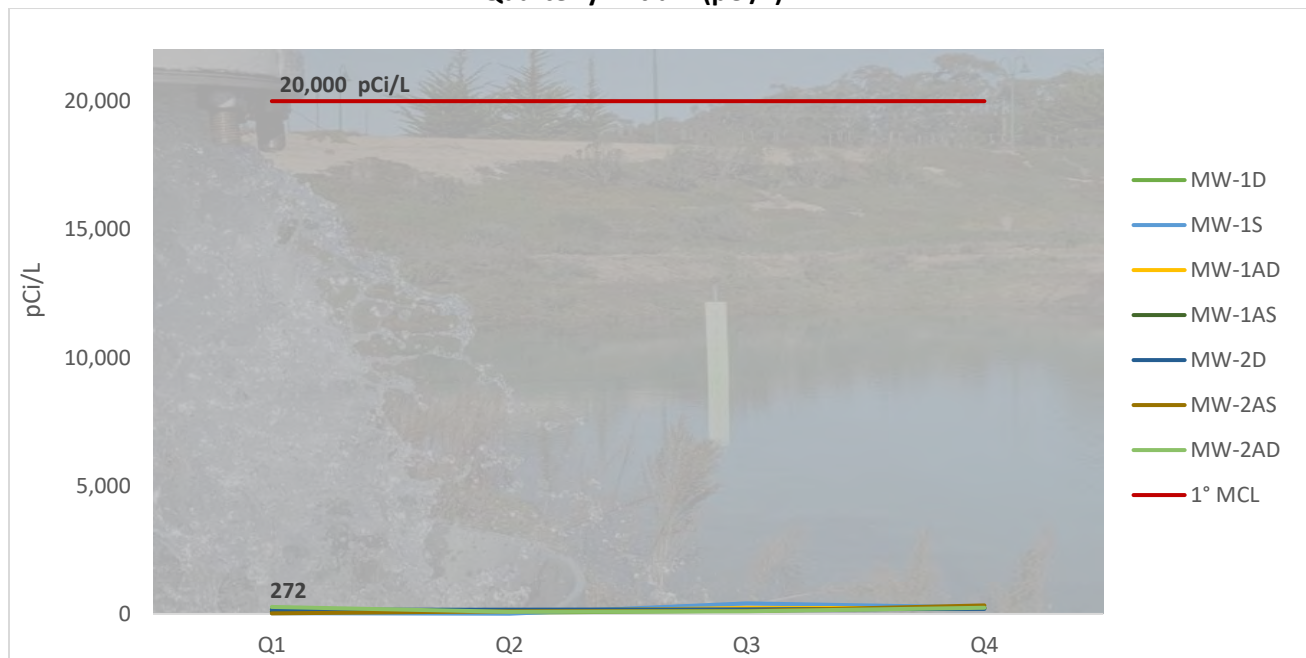


Figure 108h. Groundwater Monitoring
Volatile Organic Chemicals
Quarterly Toluene (ug/L)

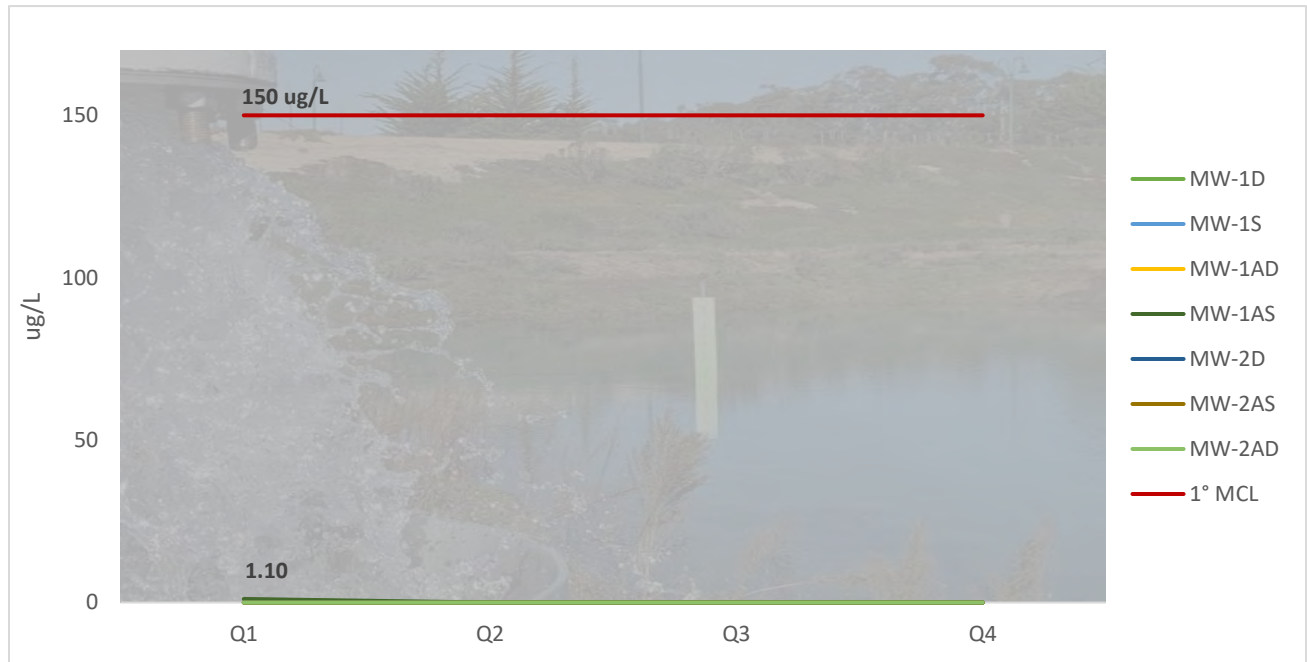


Figure 108i. Groundwater Monitoring
Synthetic Organic Chemicals
Quarterly Caffeine (ug/L)

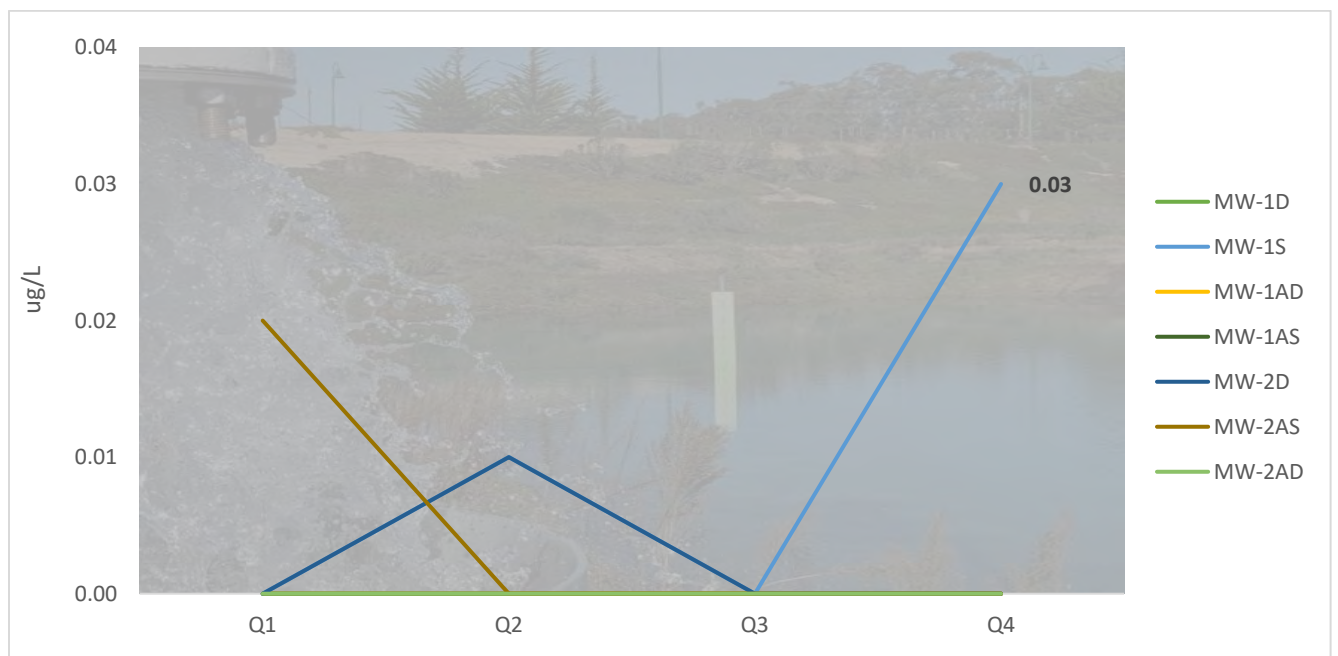


**Figure 108j. Groundwater Monitoring
Synthetic Organic Chemicals
Quarterly Erythromycin (ug/L)**

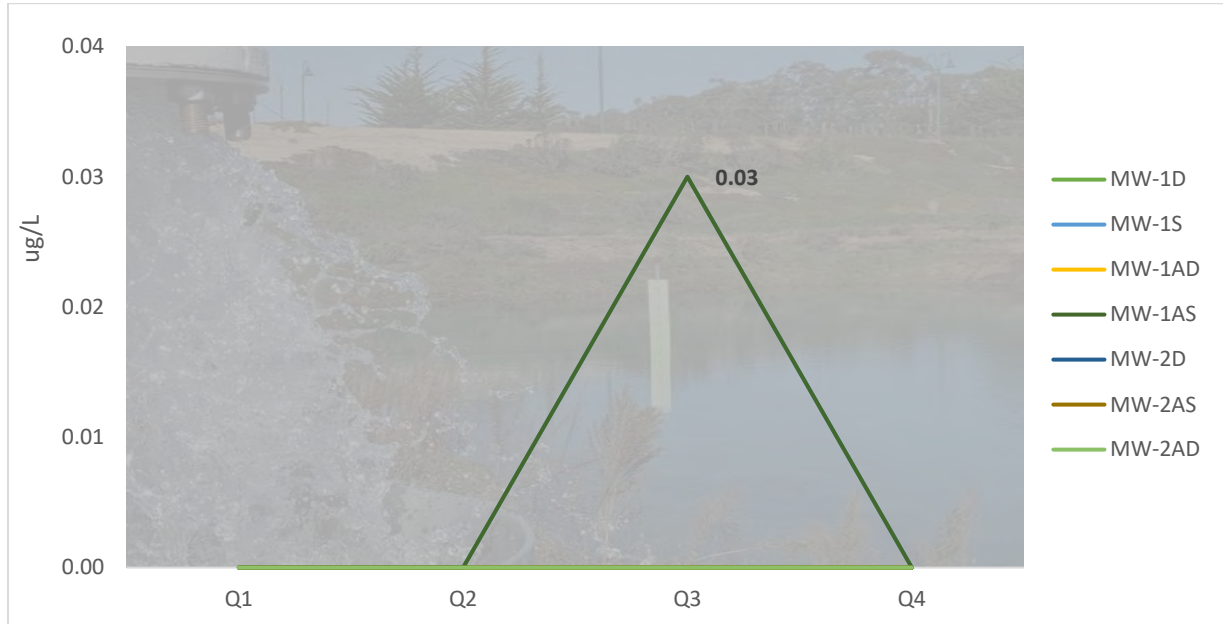


**Figure 108k. Groundwater Monitoring
Disinfection Byproducts
Quarterly Haloacetic Acid (Five) (HAA5) (ug/L)**

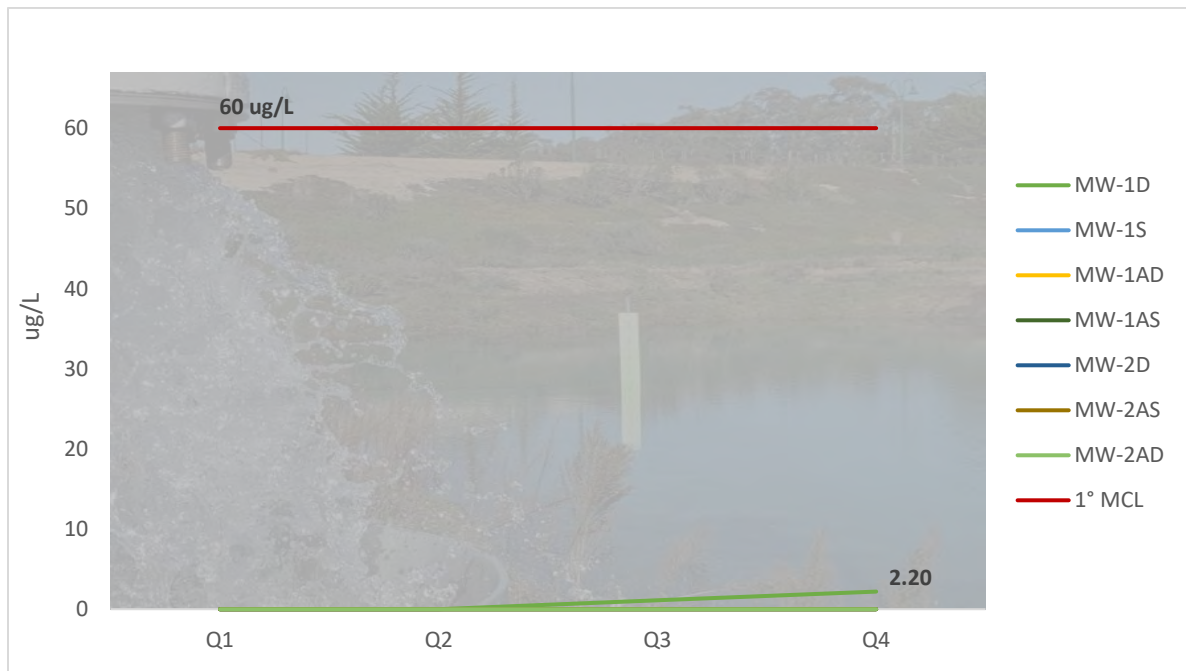


**Figure 108l. Groundwater Monitoring
 Constituents/Parameters with Secondary MCLs
 Quarterly Dichloroacetic Acid (ug/L)**

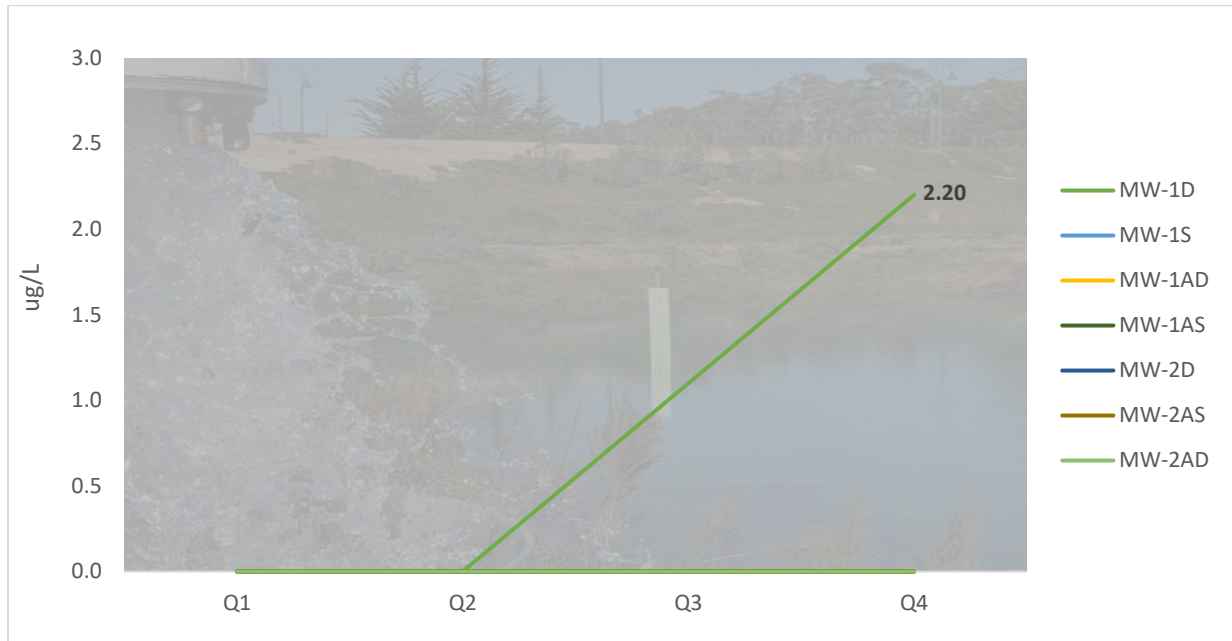


**Figure 108m. Groundwater Monitoring
 Disinfection Byproducts
 Quarterly Total Trihalomethanes (ug/L)**

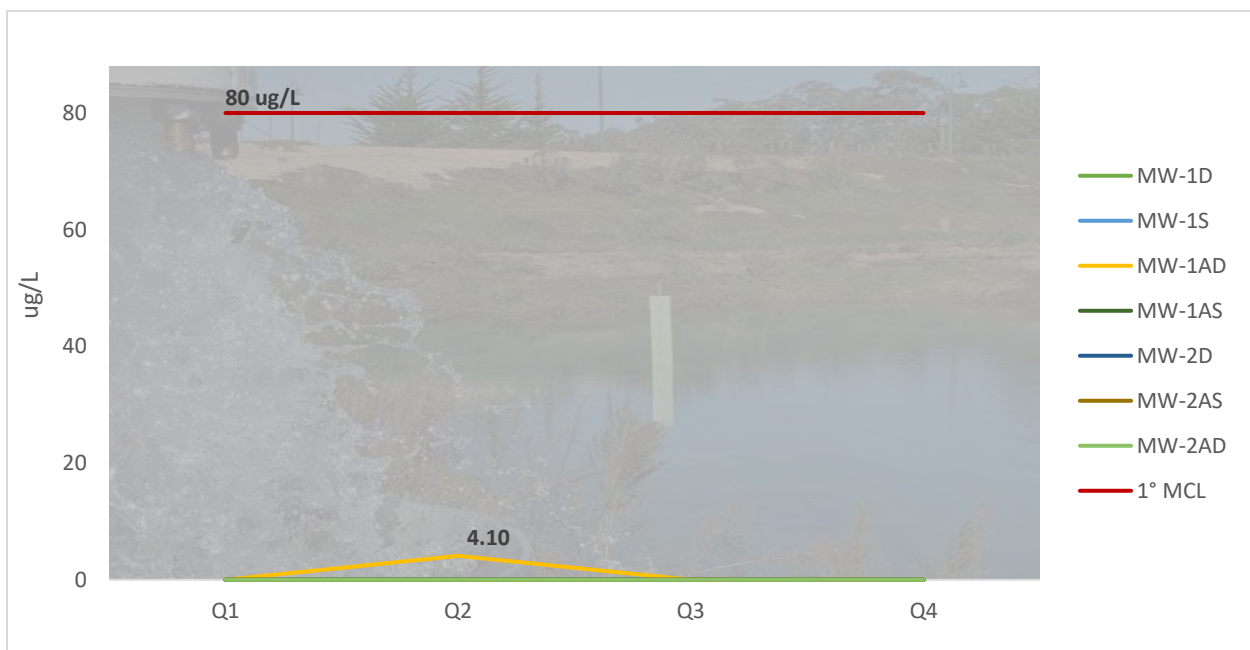


**Figure 108n. Groundwater Monitoring
Disinfection Byproducts
Quarterly Bromodichloromethane (ug/L)**

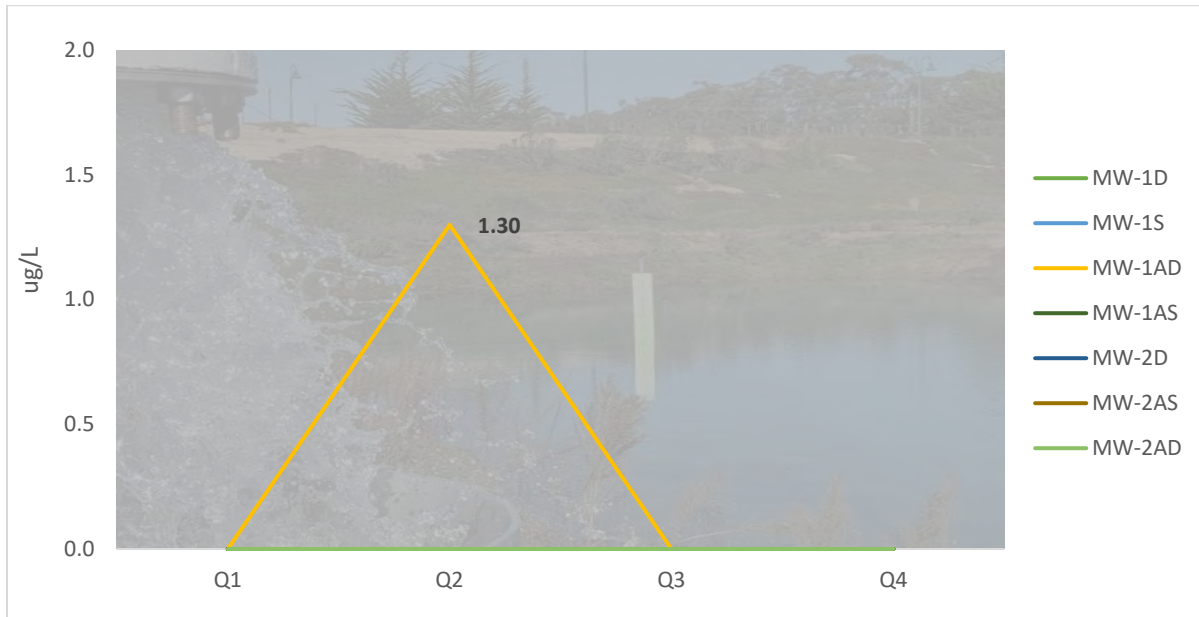


**Figure 108o. Groundwater Monitoring
Disinfection Byproducts
Quarterly Chloroform (ug/L)**

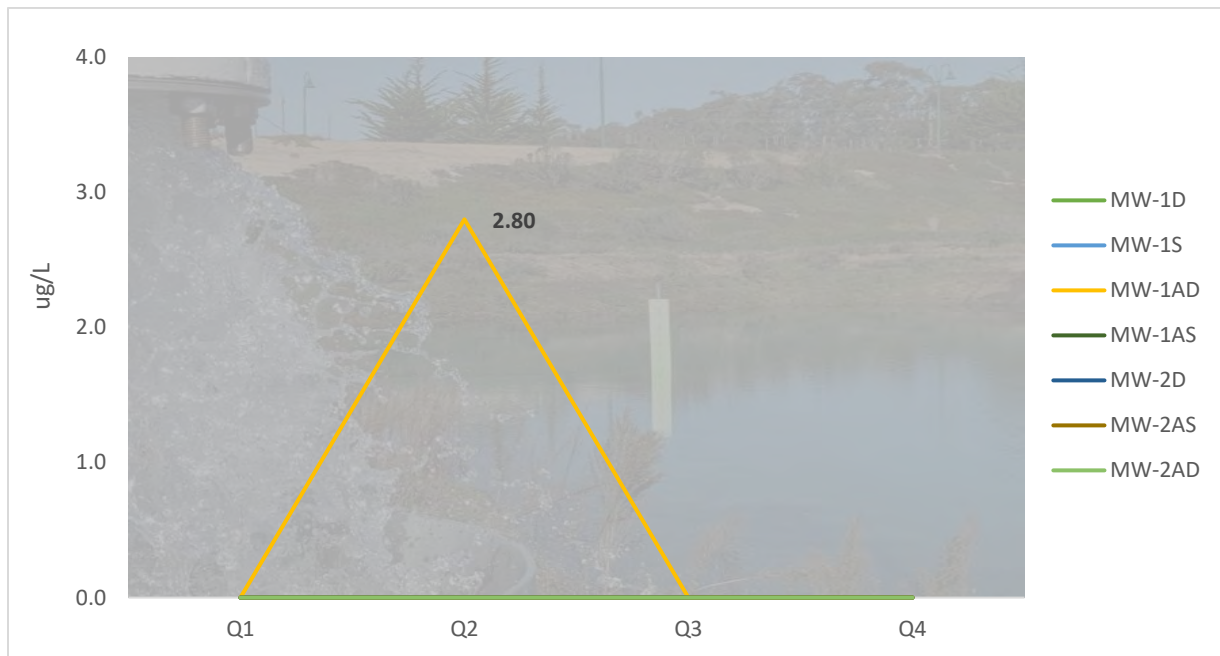


**Figure 108p. Groundwater Monitoring
Quarterly Boron (ug/L)**

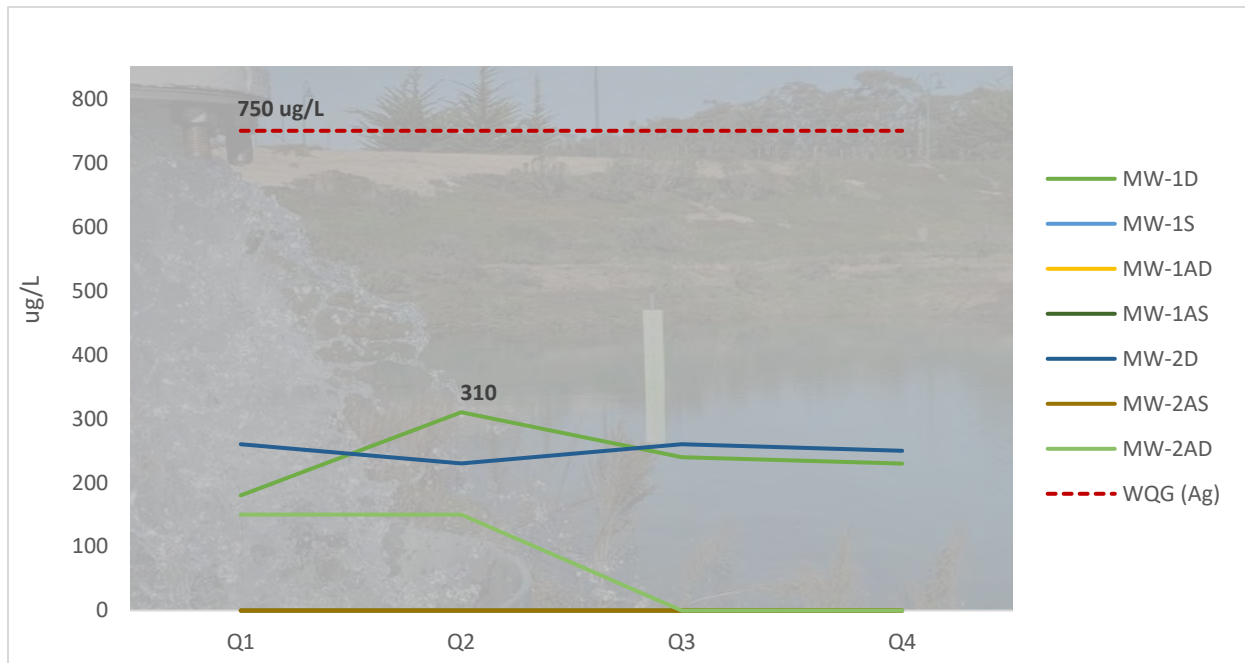


**Figure 108q. Groundwater Monitoring
Quarterly Chlorate (ug/L)**

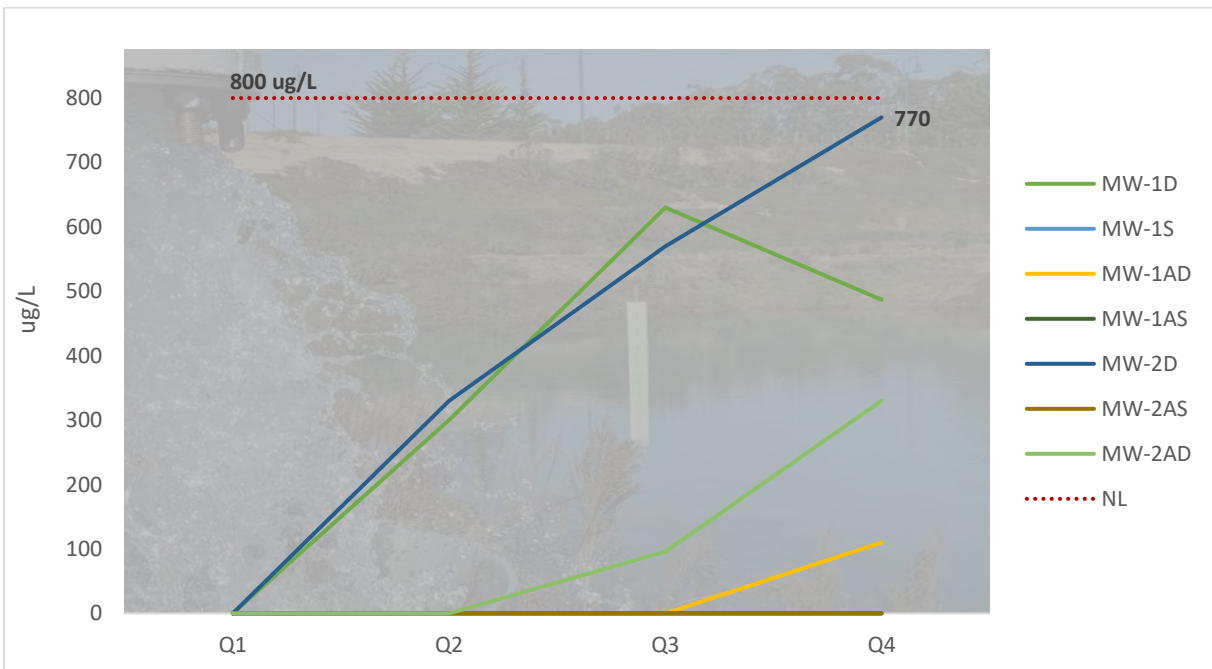


**Figure 108r. Groundwater Monitoring
Quarterly Ethylene Glycol (ug/L)**

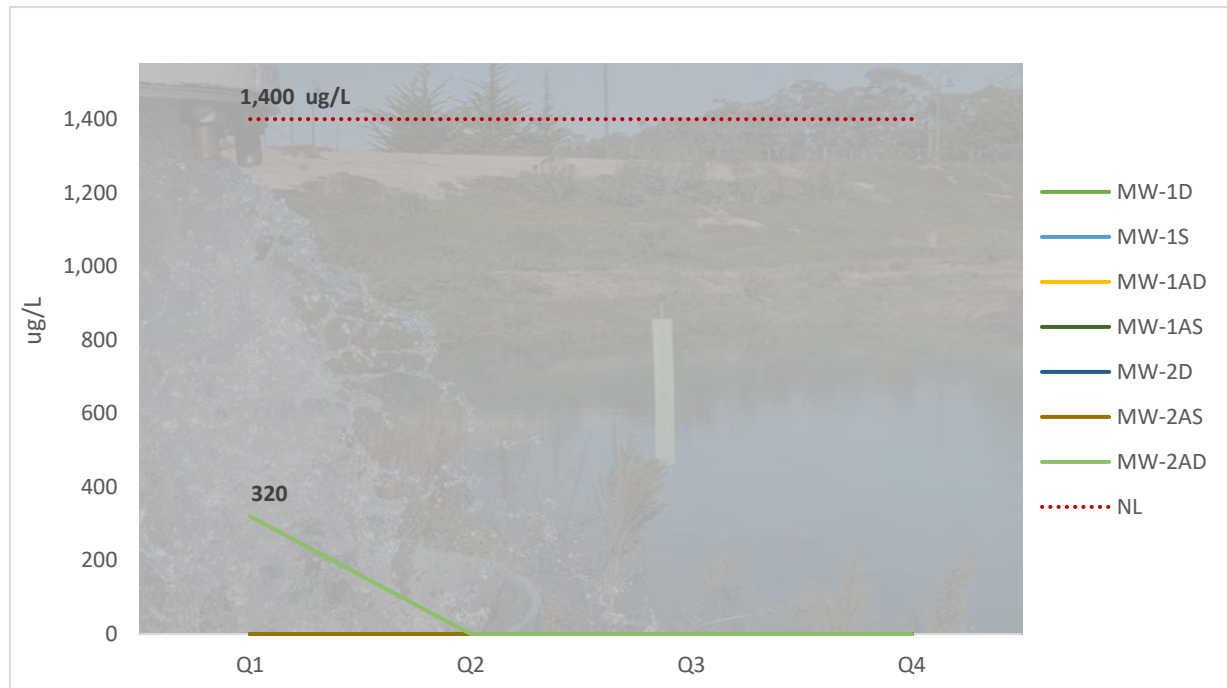


**Table 109. Groundwater Monitoring
Annual Groundwater Monitoring
N-Nitrosopyrrolidine (ug/L)**

Monitoring well	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
Date	11/17/2020	11/17/2020	11/3/2020	11/3/2020	11/17/2020	11/3/2020	11/16/2020
Result	ND 0.94	ND 0.94	ND 0.94	ND 0.94	ND 0.94	ND 0.94	ND 0.94

**Figure 109. Groundwater Monitoring
Annual Groundwater Monitoring- N/A
N-Nitrosopyrrolidine (ug/L)**

All monitoring results were ND.

**Table 110. Groundwater Monitoring
General Physical and General Minerals
Monthly Asbestos (MFL)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
March	ND 0.71	ND 0.73	ND 0.71	ND 0.71	ND 0.71	ND 0.73	ND 0.71
April	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
May	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
June	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
July	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.19	ND 0.20
August	ND 0.20	ND 0.20	ND 0.20	ND 0.19	ND 0.20	ND 0.20	ND 0.20
September	ND 0.20	ND 0.20	ND 0.20		ND 0.20	ND 0.20	ND 0.20
October	ND 0.20	ND 0.20	ND 0.20	0.2	ND 0.19	ND 0.20	ND 0.20
November	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20	ND 0.20
December	ND 0.20	ND 0.20	ND 0.20	ND 0.19	ND 0.20	ND 0.19	ND 0.20

**Figure 110. Groundwater Monitoring
General Physical and General Minerals
Monthly Asbestos (MFL)**

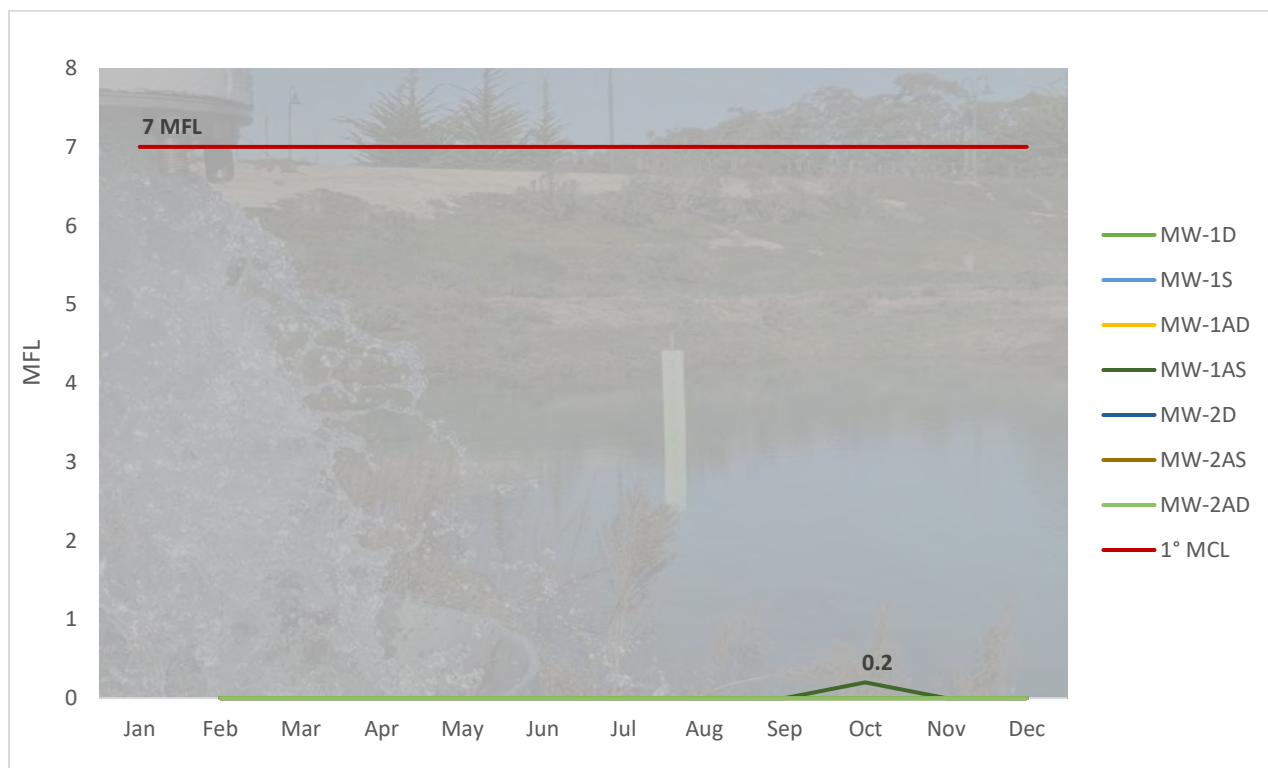


**Table 111. Groundwater Monitoring
General Physical and General Minerals
Monthly Calcium (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	110	14	67	12	90	23	96
March	100	13	67	11	85	21	93
April	44	14	60	12	21	37	98
May	27	14	54	12	20	26	98
June	18	14	58	11	17	24	90
July	18	15	12	68	15	24	83
August	13	13	68	11	12	27	45
September	12	13	61	11	15	27	27
October	13	17	55	12	14	34	15
November	9.5	13	54	11	15	35	14
December	12	13	45	12	13	27	23

**Figure 111. Groundwater Monitoring
General Physical and General Minerals
Monthly Calcium (mg/L)**

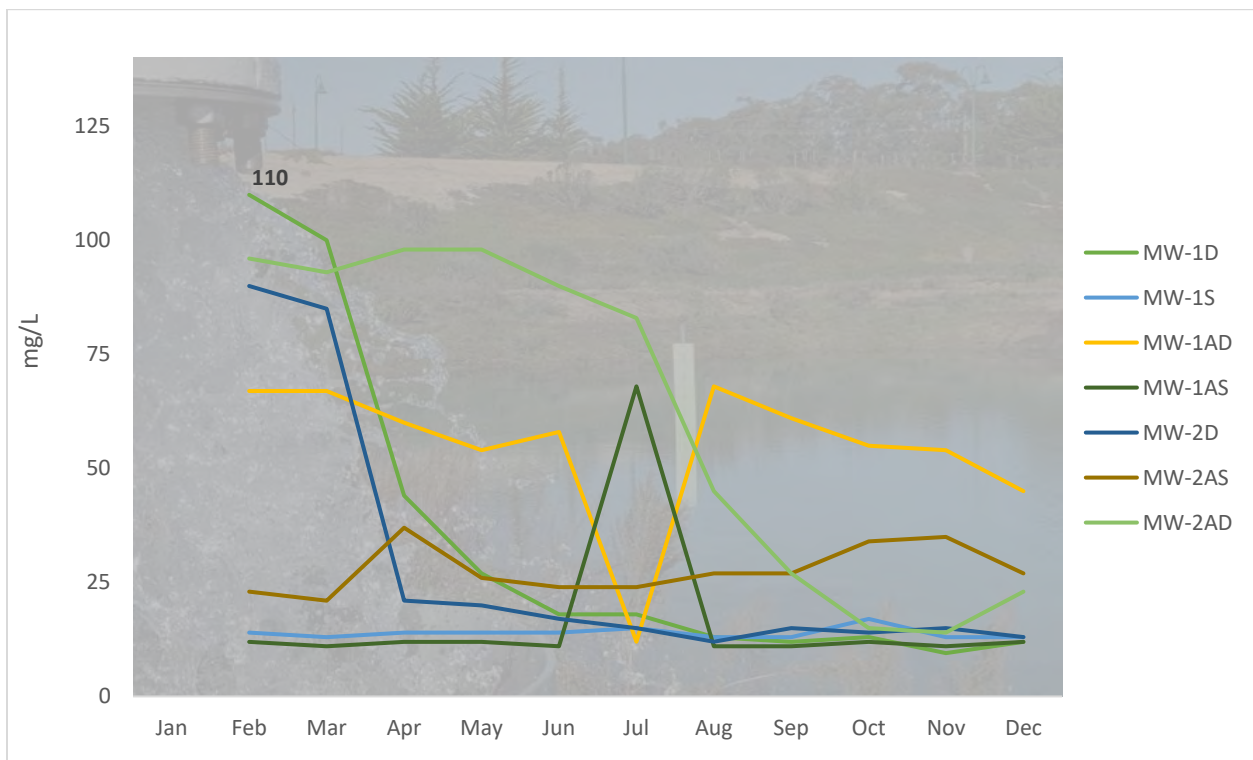


**Table 112. Groundwater Monitoring
General Physical and General Minerals
Monthly Chloride (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	165	58	88	50	138	64	137
March	163	58	87	50	139	64	136
April	119	58	72	50	39	74	138
May	60	57	65	50	31	65	137
June	32	57	77	50	26	64	123
July	29	58	89	50	22	61	108
August	18	56	94	50	18	65	59
September	13	54	86	49	17	65	37
October	53	57	90	53	42	75	27
November	37	56	88	53	39	77	25
December	34	58	67	54	38	71	38

**Figure 112. Groundwater Monitoring
General Physical and General Minerals
Monthly Chloride (mg/L)**

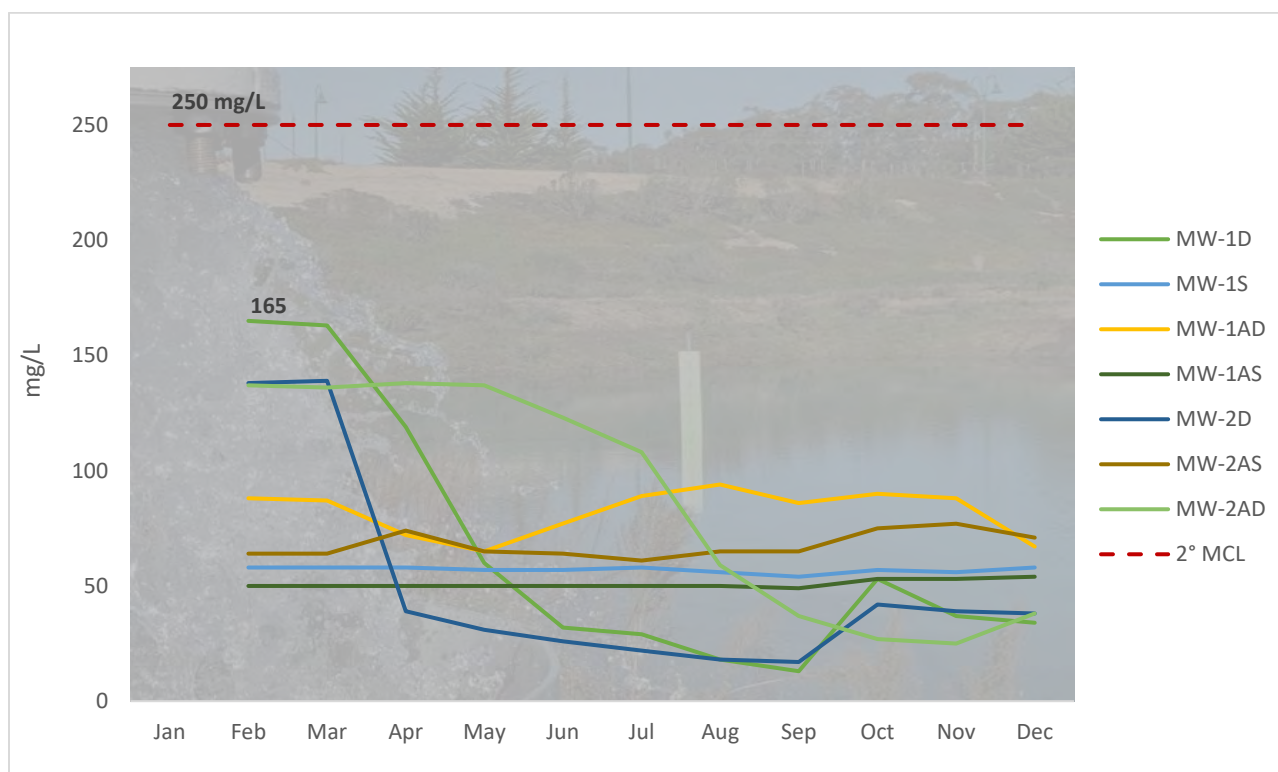


**Table 113. Groundwater Monitoring
General Physical and General Minerals
Monthly Copper (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
March	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 10.00	ND 5.00
April	ND 2.30	ND 2.30	ND 2.30	ND 2.30	ND 2.30	ND 2.30	ND 2.30
May	ND 2.30	ND 2.30	ND 2.30	ND 2.30	ND 2.30	ND 2.30	ND 2.30
June	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
July	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
August	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
September	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
October	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
November	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
December	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00

**Figure 113 Groundwater Monitoring
General Physical and General Minerals
Monthly Copper (ug/L)- N/A**

All monitoring results were ND.

**Table 114. Groundwater Monitoring
General Physical and General Minerals
Monthly Iron (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	0.04	ND 0.01	ND 0.01	0.07	0.09	ND 0.01	0.03
March	0.08	ND 0.01	ND 0.01	0.13	0.08	0.76	0.09
April	0.05	ND 0.01	ND 0.01	0.06	0.04	0.53	0.05
May	DNQ 0.02	ND 0.01	ND 0.01	0.11	0.03	0.18	0.08
June	DNQ 0.02	ND 0.01	DNQ 0.02	0.07	DNQ 0.02	0.07	0.13
July	ND 0.01	ND 0.01	0.07	ND 0.01	DNQ 0.02	0.04	0.05
August	ND 0.01	0.03	ND 0.01	0.34	DNQ 0.03	DNQ 0.03	0.03
September	DNQ 0.03	ND 0.01	ND 0.01	0.05	DNQ 0.02	0.03	DNQ 0.01
October	ND 0.01	0.03	ND 0.01	0.16	ND 0.01	DNQ 0.02	ND 0.01
November	ND 0.01	ND 0.01	ND 0.01	0.07	DNQ 0.02	ND 0.01	ND 0.01
December	ND 0.01	ND 0.01	ND 0.01	0.08	ND 0.01	0.14	ND 0.01

**Figure 114. Groundwater Monitoring
General Physical and General Minerals
Monthly Iron (mg/L)**

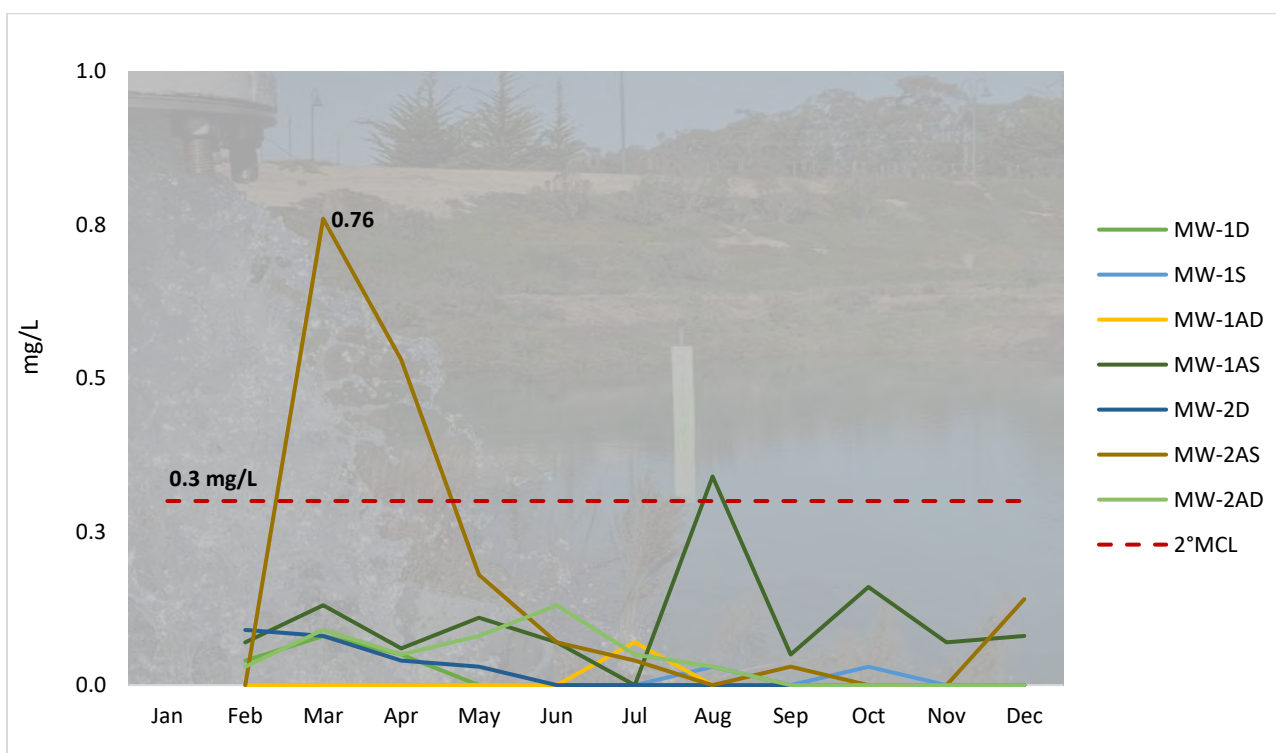


**Table 115. Groundwater Monitoring
General Physical and General Minerals
Monthly Manganese (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	41	ND 1.00	55	19	66	ND 1.00	46
March	49	ND 1.00	74	54	76	20	75
April	28	ND 4.50	57	16	21	DNQ 7.20	44
May	13	ND 4.50	37	30	15	ND 4.50	52
June	8	ND 1.00	23	19	14	1	58
July	6	ND 1.00	60	24	10	1	52
August	5	2	41	50	9	ND 1.00	28
September	4	ND 1.00	57	20	6	ND 1.00	18
October	2	ND 1.00	34	67	7	ND 1.00	10
November	2	ND 1.00	30	23	ND 1.00	ND 1.00	8
December	2	ND 1.00	32	23	8	2	14

**Figure 115. Groundwater Monitoring
General Physical and General Minerals
Monthly Manganese (ug/L)**

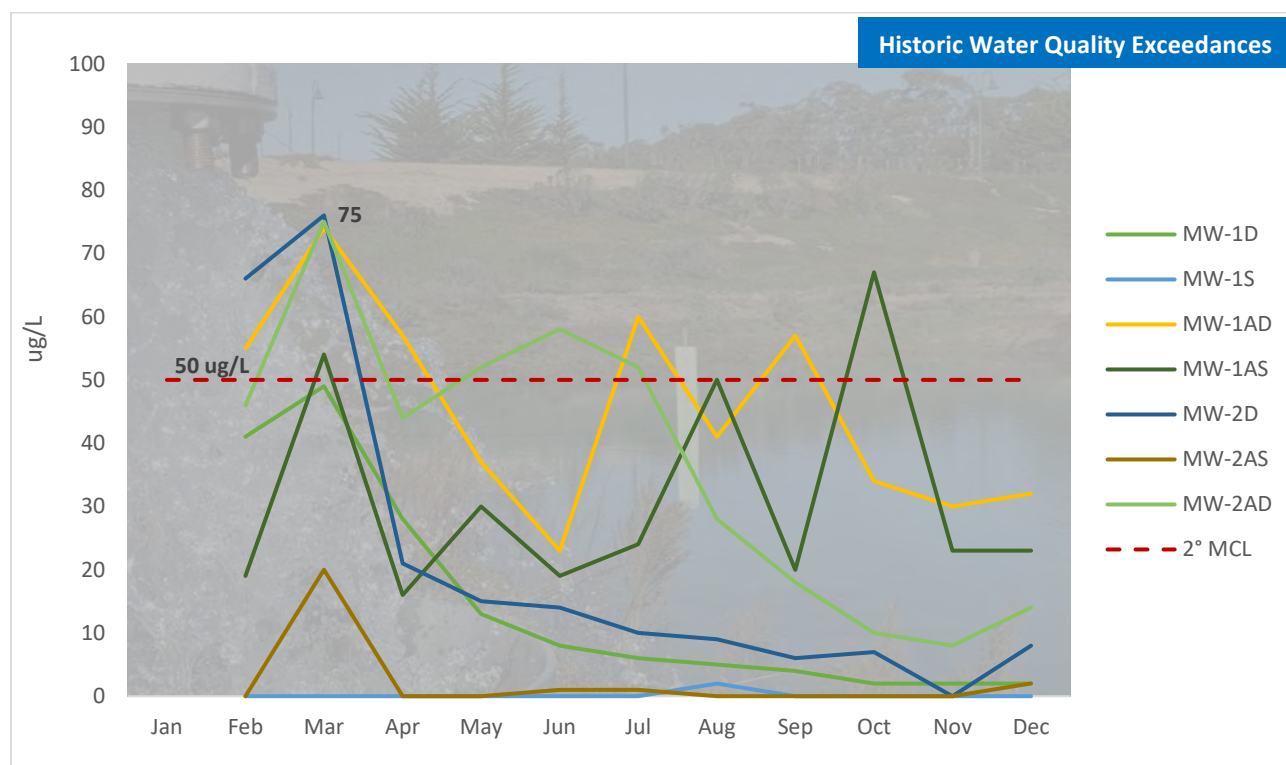


**Table 116. Groundwater Monitoring
General Physical and General Minerals
Monthly Potassium (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	6.2	ND 0.91	4	2.3	5.7	2	5.4
March	6.4	ND 0.91	4.3	2.3	5.7	2.3	5.4
April	6	DNQ 1.80	4.1	2.4	3.2	3	6
May	3.8	2.1	4.3	2.6	2.7	2.4	5.9
June	2.5	DNQ 2.00	4.3	2.6	2.6	2.3	5.2
July	2.4	DNQ 1.90	2.5	4.4	2.4	2.2	4.9
August	DNQ 1.60	DNQ 1.70	4.1	2.4	2.1	2.2	3.2
September	DNQ 1.50	DNQ 1.90	3.9	2.4	2.5	2.4	2.5
October	DNQ 2.00	2.5	3.9	2.6	DNQ 1.90	2.9	2.2
November	DNQ 1.70	DNQ 1.90	3.2	2.3	2.4	2.7	DNQ 1.80
December	DNQ 1.60	DNQ 1.80	3	2.4	2	2.5	2.6

**Figure 116. Groundwater Monitoring
General Physical and General Minerals
Monthly Potassium (mg/L)**

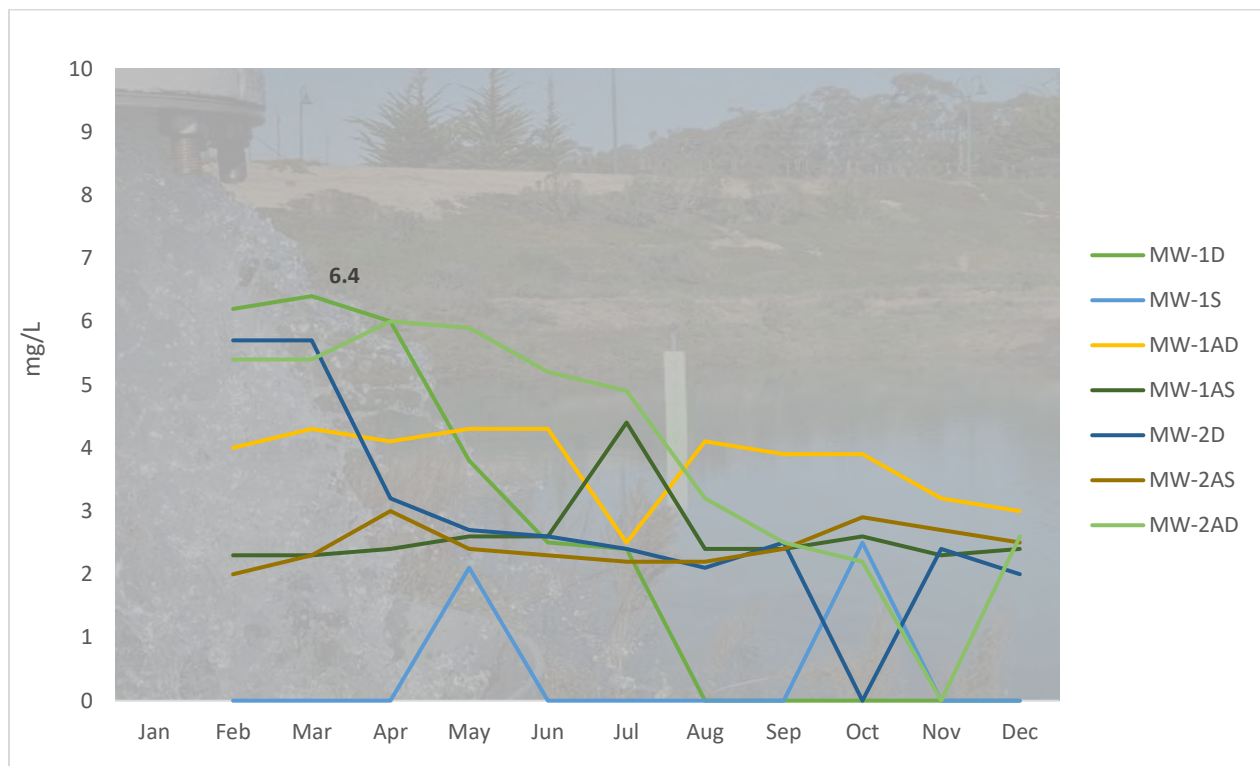


**Table 117. Groundwater Monitoring
General Physical and General Minerals
Monthly Sodium (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	120	38	78	38	110	42	100
March	120	36	78	35	110	42	100
April	110	36	68	35	38	49	100
May	59	39	69	38	34	48	110
June	32	36	75	37	33	48	93
July	30	36	35	74	27	40	82
August	20	36	76	39	24	50	61
September	19	38	70	38	26	49	42
October	37	33	62	37	38	51	38
November	27	39	58	37	31	51	34
December	22	37	51	39	30	48	46

**Figure 117. Groundwater Monitoring
General Physical and General Minerals
Monthly Sodium (mg/L)**

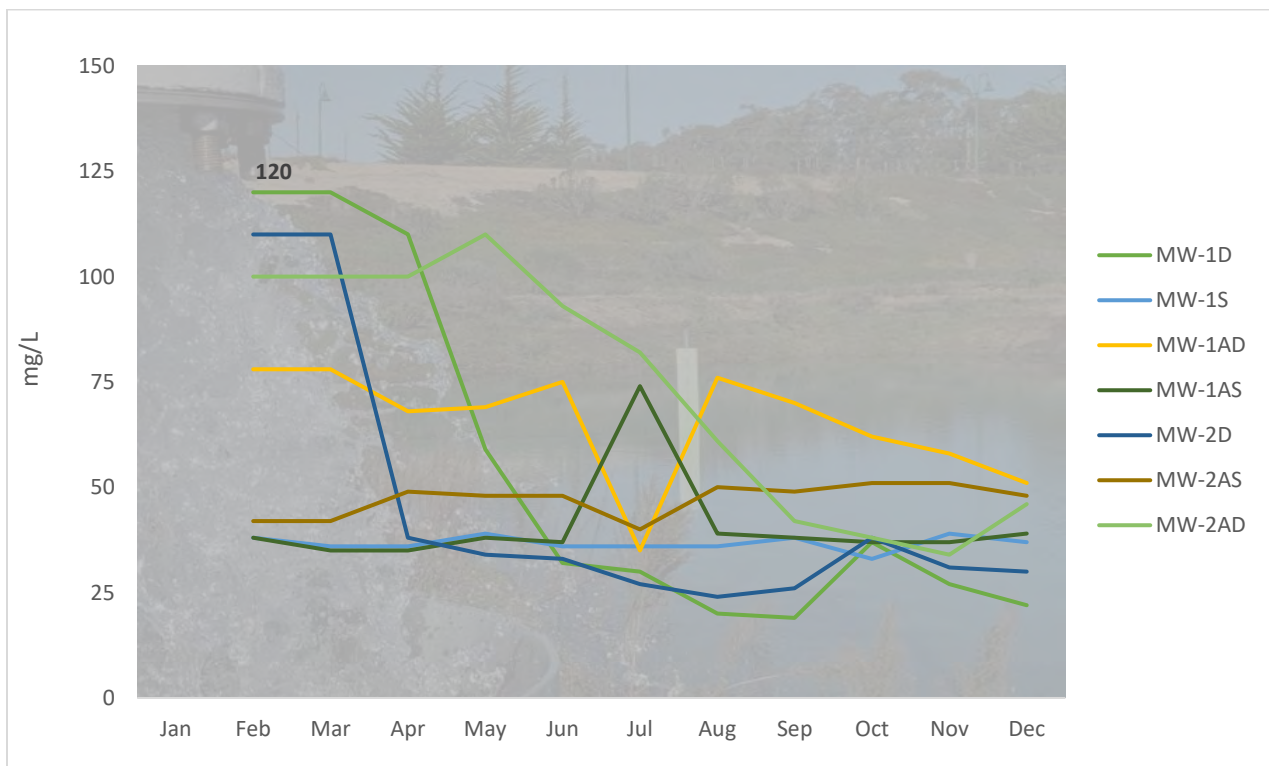


**Table 118. Groundwater Monitoring
General Physical and General Minerals
Monthly Sulfate (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	131	5.6	51	16	97	6.4	117
March	130	5.8	50	16	96	6.5	116
April	33	6	45	16	14	10	119
May	20	5.6	45	16	14	9.1	120
June	11	5.5	44	16	12	7.4	100
July	9.5	5.8	42	16	9.5	6.7	92
August	6	5.3	42	16	6.8	8.1	56
September	3.6	5.2	40	16	5	7.8	33
October	0.5	5.9	38	16	3.1	10	18
November	1	5.6	39	16	3.6	10	17
December	1.1	6.2	35	18	6.9	8.7	31

**Figure 118. Groundwater Monitoring
General Physical and General Minerals
Monthly Sulfate (mg/L)**

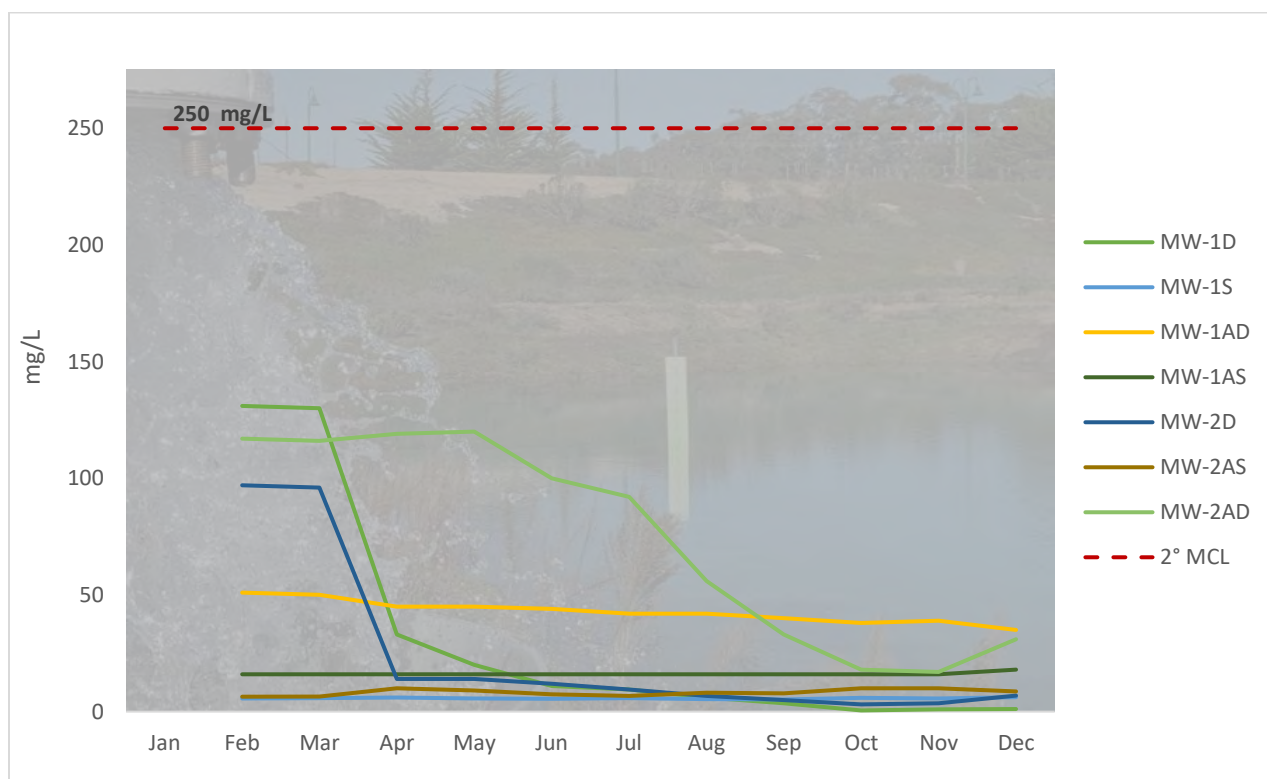


**Table 119. Groundwater Monitoring
General Physical and General Minerals
Monthly Zinc (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
March	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	25	ND 5.00
April	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00
May	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00	ND 23.00
June	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
July	ND 5.00	ND 5.00	ND 5.00	ND 5.00	5	ND 5.00	ND 5.00
August	ND 5.00	ND 5.00	ND 5.00	ND 5.00	9	ND 5.00	ND 5.00
September	ND 5.00	ND 5.00	ND 5.00	ND 5.00	7	ND 5.00	ND 5.00
October	ND 5.00	ND 5.00	ND 5.00	ND 5.00	8	ND 5.00	ND 5.00
November	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00
December	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00	ND 5.00

**Figure 119. Groundwater Monitoring
General Physical and General Minerals
Monthly Zinc (ug/L)**

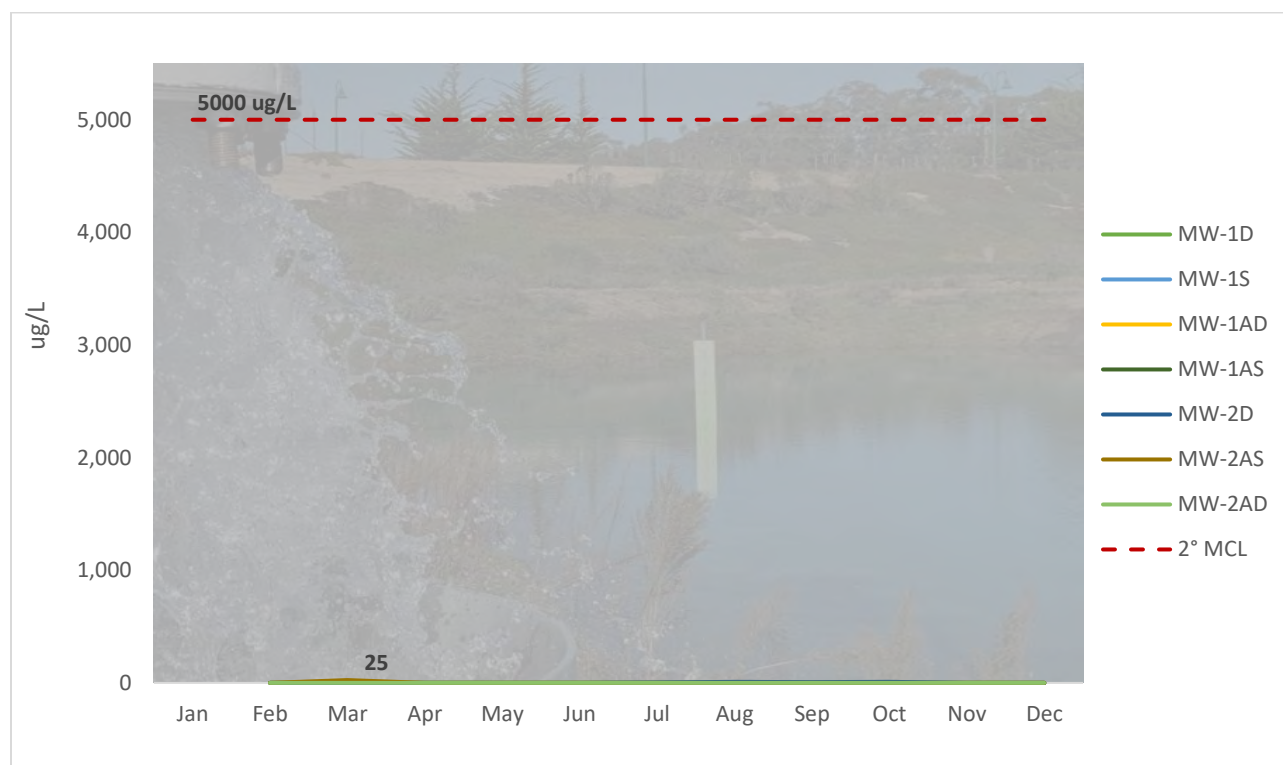


**Table 120. Groundwater Monitoring
General Physical and General Minerals
Monthly Color**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00
March	ND 2.00	ND 2.00	ND 2.00	2	ND 2.00	10	ND 2.00
April	7	ND 2.00	ND 2.00	ND 2.00	4	30	ND 2.00
May	3	ND 2.00	ND 2.00	6	ND 2.00	8	ND 2.00
June	2	ND 2.00	ND 2.00	ND 2.00	2	2	ND 2.00
July	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00
August	ND 2.00	ND 2.00	ND 2.00	10	ND 2.00	ND 2.00	ND 2.00
September	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00
October	ND 2.00	ND 2.00	ND 2.00	3	3	ND 2.00	2
November	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00	ND 2.00
December	ND 2.00	ND 2.00	ND 2.00	2	ND 2.00	7	ND 2.00

**Figure 120. Groundwater Monitoring
General Physical and General Minerals
Monthly Color**

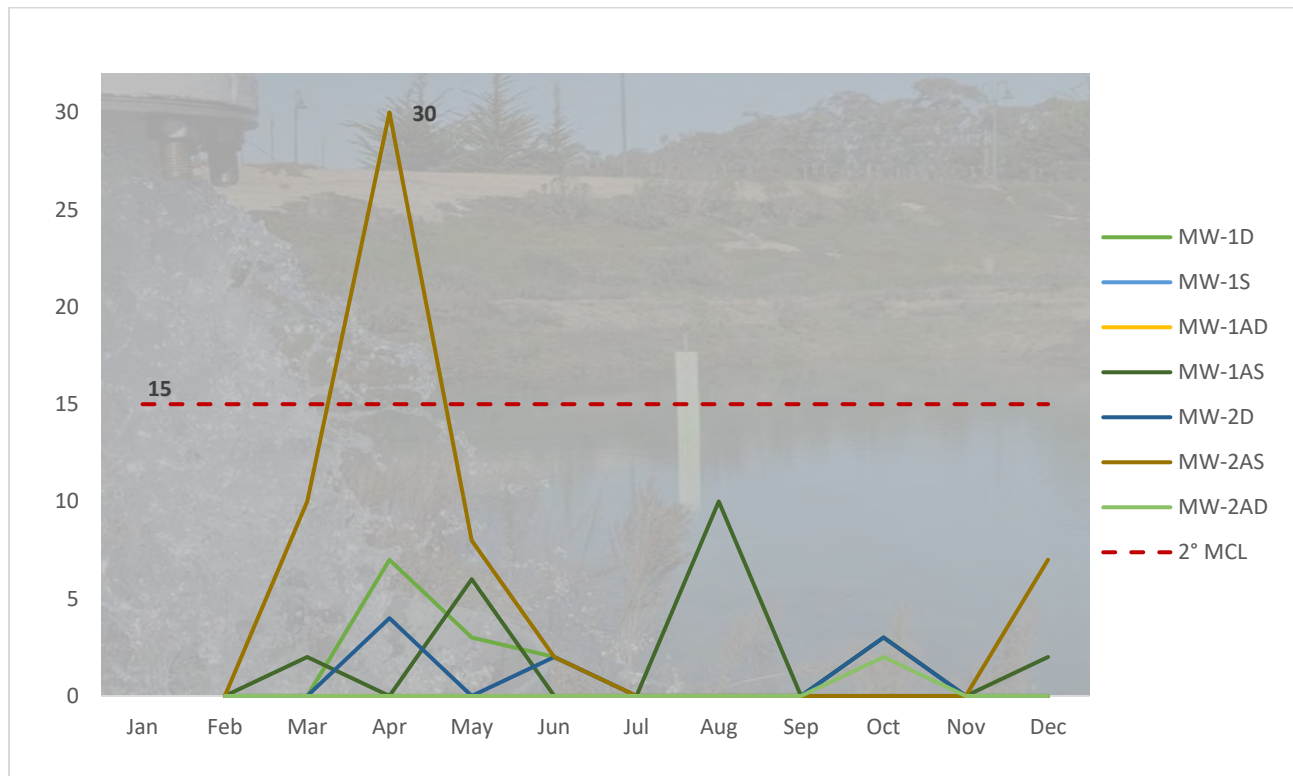


**Table 121. Groundwater Monitoring
General Physical and General Minerals
Monthly Corrosivity**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	0.37	-1.46	0.06	-1.32	0.41	-0.43	0.29
March	0.35	-1.48	0.25	-1.36	0.27	-0.39	0.27
April	0.13	-1.54	0.17	-1.43	-0.66	-0.06	0.29
May	-0.24	-1.44	0.32	-1.22	-1.42	-0.64	0.1
June	-1.29	-1.74	0.07	-1.56	-1.74	-0.7	0.06
July	-0.39	-0.67	0.00	0.15	-0.7	0.43	0.52
August	-0.86	-0.77	0.54	-0.65	-0.77	0.55	0.09
September	-0.97	-0.87	0.46	-0.76	-0.59	0.42	-0.14
October	-1.21	-0.83	0.26	-0.92	-1.01	0.39	-0.41
November	-1.48	-1.1	0.14	-0.86	-1.01	0.42	-0.45
December	-1.48	-1.08	0.09	-0.72	-0.96	0.4	-0.14

**Figure 121. Groundwater Monitoring
General Physical and General Minerals
Monthly Corrosivity**

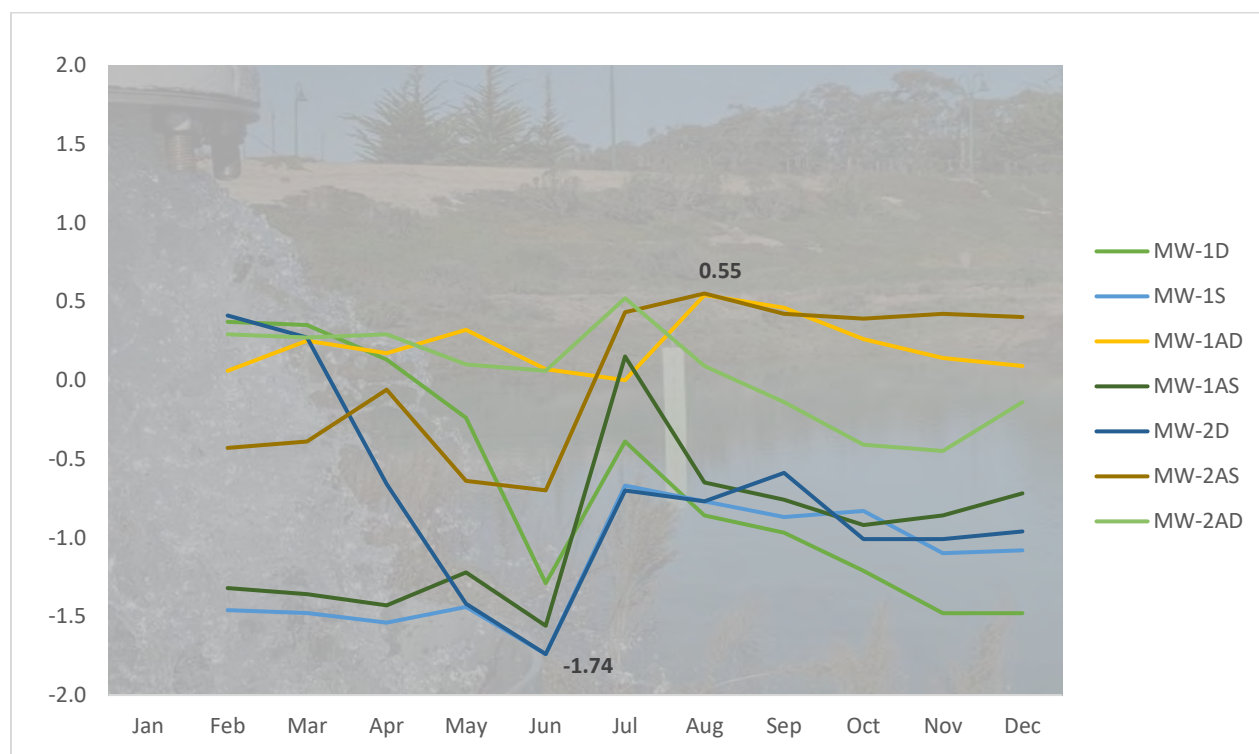


**Table 122. Groundwater Monitoring
General Physical and General Minerals
Monthly Foaming Agents (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03
March	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03	ND 0.03
April	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
May	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
June	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
July	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
August	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
September	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
October	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
November	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05
December	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05	ND 0.05

**Figure 122. Groundwater Monitoring
General Physical and General Minerals
Monthly Foaming Agents (mg/L) – N/A**

All monitoring results were ND.

**Table 123. Groundwater Monitoring
General Physical and General Minerals
Monthly Odor (TON)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	4	1	1	1	4	1	3
March	3	1	2	1	4	1	2
April	4	1	2	1	5	1	3
May	4	1	3	1	1	1	2
June	2	1	3	1	4	1	4
July	2	1	2	1	1	1	2
August	2	1	2	1	1	1	3
September	1	1	2	1	1	1	1
October	1	2	4	1	3	1	4
November	1	1	2	1	2	1	4
December	3	1	2	1	1	1	4

**Figure 123. Groundwater Monitoring
General Physical and General Minerals
Monthly Odor (TON)**

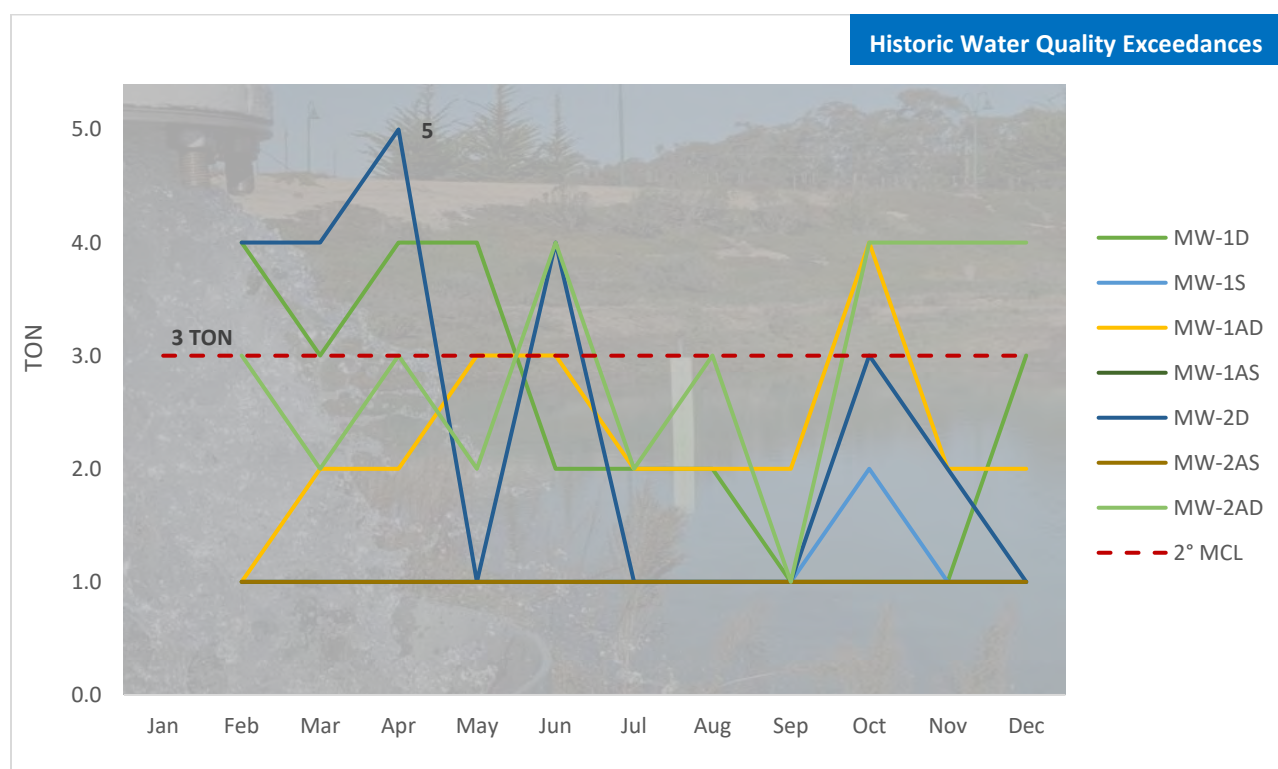


**Table 124. Groundwater Monitoring
General Physical and General Minerals
Monthly Specific Conductance (uS/cm)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	1,270	305	824	298		383	1,120
March	1,260	306	813	298	1,120	384	1,110
April	871	310	728	298	363	504	1,130
May	499	306	685	299	313	414	1,130
June	298	305	745	298	277	394	1,030
July	271	305	780	293	236	378	926
August	196	296	795	295	204	424	572
September	179	293	735	295	223	426	389
October	286	294	675	294	284	472	274
November	214	289	673	299	262	495	265
December	203	293	548	299	254	420	365

**Figure 124. Groundwater Monitoring
General Physical and General Minerals
Monthly Specific Conductance (uS/cm)**

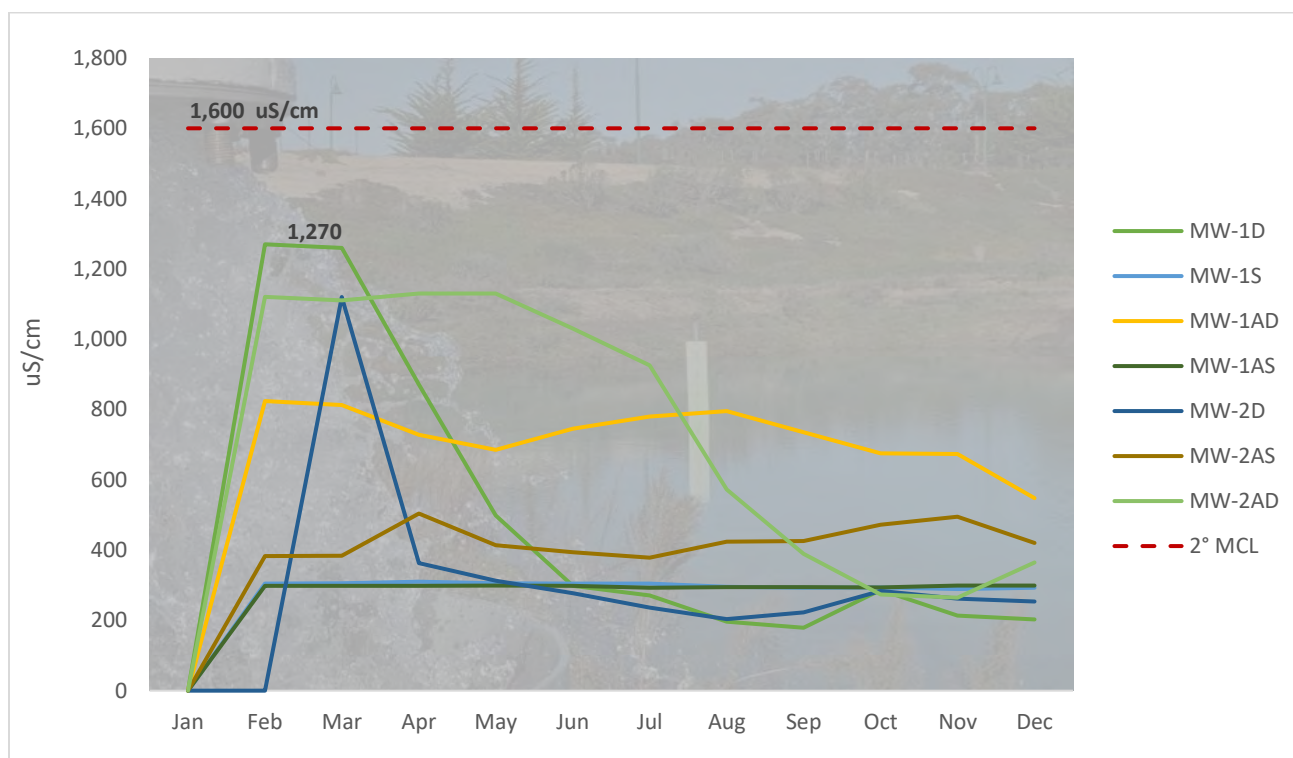


**Table 125. Groundwater Monitoring
General Physical and General Minerals
Monthly TDS (mg/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	792	204	500	210	695	228	692
March	785	205	500	220	705	255	690
April	500	195	445	215	215	320	735
May	280	190	415	205	175	265	705
June	170	180	455	210	155	245	635
July	160	215	490	205	130	240	585
August	115	200	485	200	130	260	370
September	105	200	455	210	135	265	245
October	150	200	415	210	170	295	180
November	115	195	410	220	145	310	180
December	105	195	335	210	145	265	230

**Figure 125. Groundwater Monitoring
General Physical and General Minerals
Monthly TDS (mg/L)**

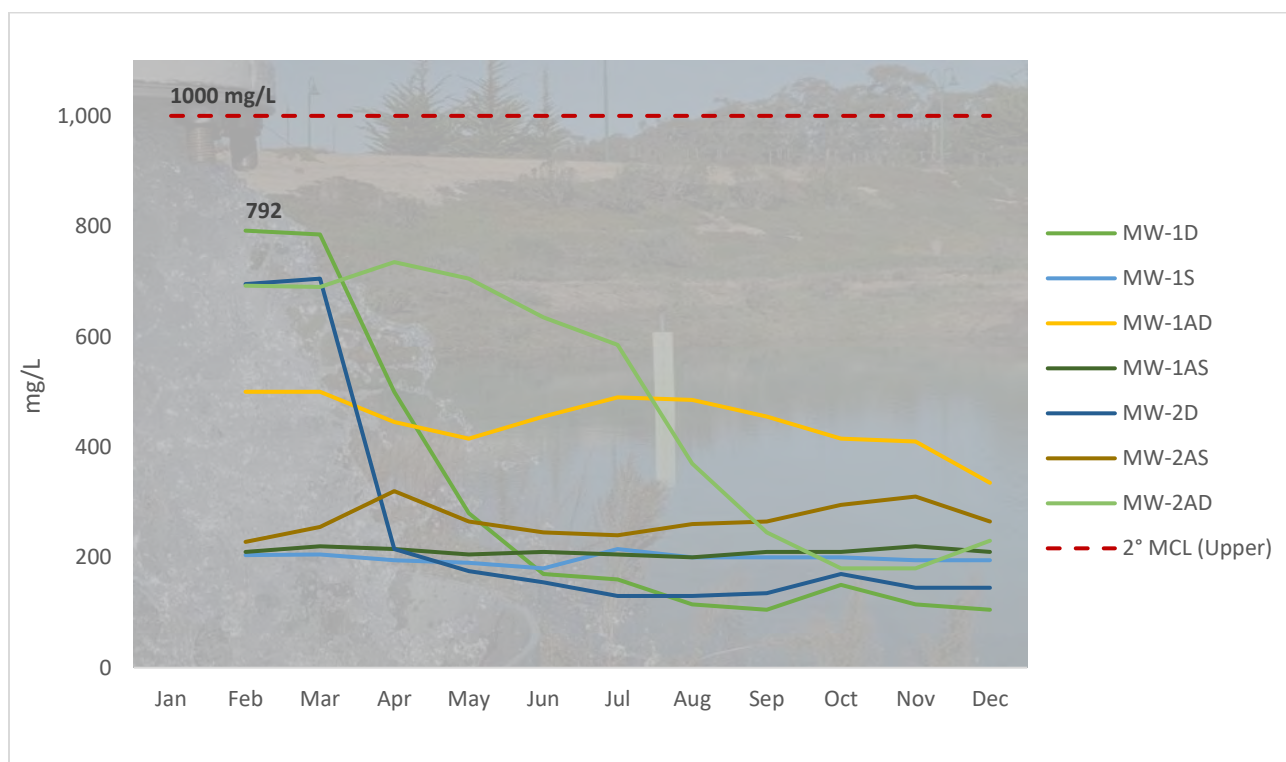
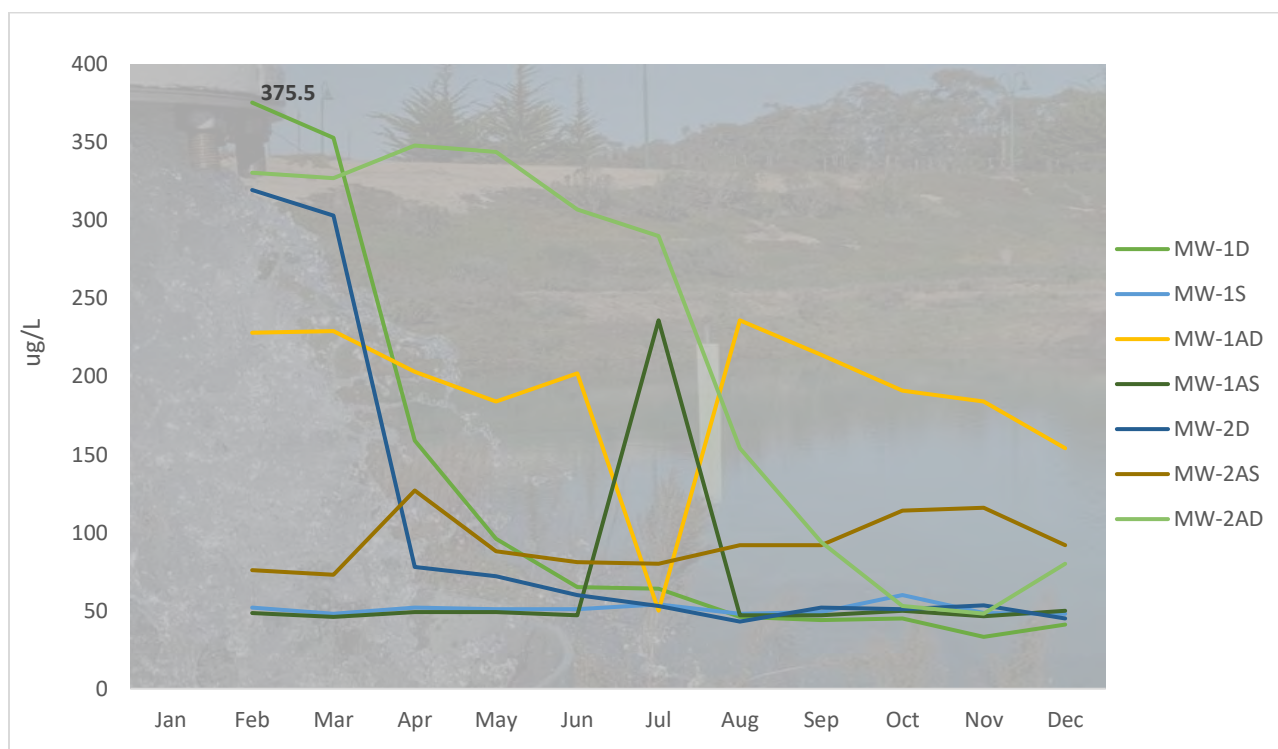


**Table 126. Groundwater Monitoring
General Physical and General Minerals
Monthly Hardness (ug/L)**

Month	MW-1D	MW-1S	MW-1AD	MW-1AS	MW-2D	MW-2AS	MW-2AD
January							
February	375.5	52	228	48.5	319.5	76	330.5
March	353	48	229	46	303	73	327
April	159	52	203	49	78	127	348
May	96	51	184	49	72	88	344
June	65	51	202	47	60	81	307
July	64	54	50	236	53	80	290
August	46	48	236	47	43	92	154
September	44	49	214	47	52	92	94
October	45	60	191	50	51	114	53
November	33.2	48.5	184	46.4	53.5	116	48.1
December	41	48	154	50	45	92	80

**Figure 126. Groundwater Monitoring
General Physical and General Minerals
Monthly Hardness (ug/L)**



4.0 SUMMARY OF COMPLIANCE

A summary of compliance status with all monitoring requirements during the previous calendar year...

4.1 General Performance

Following a rigorous commissioning and acceptance period, AWPf began sending purified water off-site to the injection wells for groundwater replenishment on February 6, 2020. AWPf was on-line 327 days December 31, 2020 using an average of 2.8 MGD influent with a low of 0.72 MGD and a high of 5.8 MGD in March.

AWPF experienced several unexpected power outages because of PG&E power bumps or PG&E planned maintenance activities, both causing plant shutdowns. The shutdowns were short lived ranging from 5 minutes to 4 hours. In addition, from September 5th to October 6th AWPf shut down operations from 3:00 p.m. to 8:00 p.m. during peak usage to conserve energy on the power grid at the request of the governor.

Throughout the year, the AWPf was off-line for short periods of time pertaining to planned maintenance, and/or vendors requests for on-site inspection(s). Overall, the AWF operated well during its maiden year and produced 611 MGD of purified recycled water averaging 1.86 MGD. On average, .085 MGD of RO concentrate was sent to the Ocean Outfall.

4.2 Monitoring Program

The monitoring program is required to determine compliance with water quality conditions and standards to assess the performance of AWPf operations. There are four monitoring location requirements:

1. AWPf Influent
2. AWPf Recycled Water
3. RO Feed Water (Prior to RO)
4. Groundwater

4.2.1 AWPf Influent

The AWPf Influent Monitoring requirements are not associated with any compliance requirements. A summary is as follows:

Table 127a. 2020 AWPf Influent Compliance Summary

Constituents	Units	Requirement	High	Low	Compliant
Ammonia-N	mg/L	N/A	45.9	27.8	N/A
CBOD	mg/L	N/A	29	ND 1	N/A
Boron	mg/L	N/A	0.5	DNQ 0.38	N/A
Chloride	mg/L	N/A	280	181.5	N/A
Nitrate-N	mg/L	N/A	5.6	ND 0.4	N/A
Nitrite-N	mg/L	N/A	1.8	ND 0.4	N/A
pH	pH Units	N/A	8.5	7.2	N/A
Sodium	mg/L	N/A	229	118	N/A
Sulfate	mg/L	N/A	171	19	N/A
TSS	mg/L	N/A	9.5	ND 1	N/A
Total Coliform	MPN/100	N/A	2,755,000	134,000	N/A
TDS	mg/L	N/A	1,016	760	N/A
Flow	MGD	N/A	5.82	0.72	N/A
Total Kjeldahl Nitrogen-N	mg/L	N/A	50.6	33.5	N/A
Total Nitrogen	mg/L	N/A	51.6	34.1	N/A
TOC	mg/L	N/A	39.7	8.5	N/A
Turbidity	NTU	N/A	7.6	1.5	N/A
UV Transmittance	%	N/A	64	59	N/A

4.2.2 AWPf Recycled Water

All constituent parameters were in compliance with the exception of TOC and Chlorate which are discussed in detail in **Section 5.0**.

Table 127b. 2020 AWPf Recycled Water Compliance Summary

Constituent Parameters	Units	Type	Requirement	High	Low	Compliant
Conductivity	umhos/cmmho/cm	2° MCL	1,600 uS/cm or <	435.91	87.81	Yes
Total Chlorine Residual	mg/L	Process Control	N/A	8.92	0.15	N/A
Total Recycled Water Flow	MGD	N/A	N/A	12.18	0	N/A
UV Dose Reactor 1	mJ/cm3	Permit Requirement	14,300 daily minimum for all on-line UV Reactors	6,540	156	Yes
UV Dose Reactor 2	mJ/cm3			6,500	73	
UV Dose Reactor 3	mJ/cm3			6,540	1,146	
UV Dose Reactor 4	mJ/cm3			6,541	48	
UV Dose Reactor 5	mJ/cm3			6,546	1,204	
UV Dose Reactor 6	mJ/cm3			6,545	230	
UV Transmittance	%	Permit Requirement	95	99.3	95.7	N/A
pH	pH Units	Process Control	7.5 - 8.5	8.8	6.3	N/A
Arsenic	ug/L	1° MCL	10	ND 1	ND 1	Yes
Boron	ug/L	WQG	0.75 or <	0.32	0.09	Yes
Chloride	mg/L	2° MCL	250 or <	35.79	7.59	Yes
Chromium-Total	ug/L	1° MCL	50 or <	2	ND 1	Yes
Total Nitrogen	mg/L	1° MCL	10 or <	6.6	1	Yes
Nitrate-N	mg/L	1° MCL	10 or <	0.85	0.27	Yes
Total Kjeldahl Nitrogen-N	mg/L	N/A	N/A	3.95	0.55	N/A
Sodium	mg/L	WQG	69 mg/L	27	8.4	Yes
Sulfate	mg/L	WQG	250 or <	3.21	0.24	Yes
TDS	mg/L	2° MCL	500 or <	100	45	Yes
Total Chloroform	MPN/100 mL	Reinjection Discharge Limit	2.2	ND 1	ND 1	Yes
TOC	mg/L	Reinjection Discharge Limit	0.5 or <	0.9	0.1	No*
Turbidity	NTU	2° MCL	5 NTU or < (15 min rolling average)	4.49	0.1	Yes
Lead	ug/L	1° MCL	15 or <	ND 1	ND 0.45	Yes
Copper	ug/L	1° MCL	1300 or <	ND 5	ND 2.3	Yes

Constituent Parameters	Units	Type	Requirement	High	Low	Compliant
Inorganics with Primary MCL: Aluminum	ug/L	1° MCL	1,000 or <	59	ND 5	Yes
Inorganics with Primary MCL: Antimony	ug/L	1° MCL	6 or <	ND 1	ND 0.91	Yes
Inorganics with Primary MCL: Arsenic	ug/L	1° MCL	10 or <	ND 1	ND 1	Yes
Inorganics with Primary MCL: Asbestos	MFL	1° MCL	7 or <	ND 0.22	ND 0.19	Yes
Inorganics with Primary MCL: Barium	ug/L	1° MCL	1,000 or <	1	ND 1	Yes
Inorganics with Primary MCL: Beryllium	ug/L	1° MCL	4 or <	ND 1	ND 0.45	Yes
Inorganics with Primary MCL: Cadmium	ug/L	1° MCL	5 or <	ND 4.5	ND 1	Yes
Inorganics with Primary MCL: Chromium	ug/L	1° MCL	50 or <	2	ND 4.5	Yes
Inorganics with Primary MCL: Cyanide	ug/L	1° MCL	150 or <	DNQ 2.5	ND 2.2	Yes
Inorganics with Primary MCL: Fluoride	mg/L	1° MCL	2 or <	ND 0.1	ND 0.05	Yes
Inorganics with Primary MCL: Mercury	ug/L	1° MCL	2 or <	ND 1	ND 0.09	Yes
Inorganics with Primary MCL: Nickel	ug/L	1° MCL	100 or <	ND 4.5	ND 1	Yes
Inorganics with Primary MCL: Nitrate as Nitrogen	mg/L	1° MCL	10 or <	0.70	0.37	Yes
Inorganics with Primary MCL: Nitrite as Nitrogen	mg/L	1° MCL	1 or <	0.22	ND 0.02	Yes
Inorganics with Primary MCL: Nitrate + Nitrite	mg/L	1° MCL	10 or <	0.86	0.40	Yes
Inorganics with Primary MCL: Perchlorate	ug/L	1° MCL	6 or <	DNQ 1.50	ND 0.61	Yes
Inorganics with Primary MCL: Selenium	ug/L	1° MCL	50 or <	ND 2.5	ND 0.91	Yes
Inorganics with Primary MCL: Thallium	ug/L	1° MCL	2 or <	ND 1	ND 0.45	Yes
Constituents with Secondary MCLs: Aluminum	ug/L	2° MCL	200 or <	59	ND 5	Yes
Constituents with Secondary MCLs: Chloride	mg/L	2° MCL	250 or <	36	8	Yes
Constituents with Secondary MCLs: Color	Units	2° MCL	15 or <	ND 2	ND 2	Yes
Constituents with Secondary MCLs: Copper	ug/L	2° MCL	1,000 or <	ND 5	ND 2.3	Yes
Constituents with Secondary MCLs: Foaming Agents	mg/L	2° MCL	0.5 or <	ND 0.05	ND 0.03	Yes
Constituents with Secondary MCLs: Iron	mg/L	2° MCL	0.3 or <	0.04	ND 0.01	Yes
Constituents with Secondary MCLs: Manganese	ug/L	2° MCL	50 or <	2	ND 1	Yes
Constituents with Secondary MCLs: MTBE	ug/L	2° MCL	5 or <	ND 0.50	ND 0.07	Yes
Constituents with Secondary MCLs: Odor	Ton	2° MCL	3 or <	2	1	Yes
Constituents with Secondary MCLs: Silver	ug/L	2° MCL	100 or <	ND 10	ND 4.5	Yes
Constituents with Secondary MCLs: Specific Conductance	uS/cm	2° MCL	1,600 uS/cm or <	204	85	Yes
Constituents with Secondary MCLs: Thiobencarb	ug/L	2° MCL	1 or <	ND 8.30E-03	ND 8.30E-03	Yes
Constituents with Secondary MCLs: Sulfate	mg/L	2° MCL	250 or <	3.21	0.24	Yes

Constituent Parameters	Units	Type	Requirement	High	Low	Compliant
Constituents with Secondary MCLs: TDS	mg/L	2° MCL	500 or <	100	45	Yes
Constituents with Secondary MCLs: Turbidity	NTU	2° MCL	5 or <	0.5	0.05	Yes
Constituents with Secondary MCLs: Zinc	ug/L	2° MCL	5,000 or <	ND 23	ND 5	Yes
Radioactivity: Gross Alpha	pCi/L	1° MCL	15 or <	4.77	0.8	Yes
Radioactivity: Gross Beta	pCi/L	1° MCL	50 or <	5.92	0.08	Yes
Radioactivity: Radium 226 & 228	pCi/L	1° MCL	5 or <	0.68	0.13	Yes
Radioactivity: Strontium 90	pCi/L	1° MCL	8 or <	0.42	0	Yes
Radioactivity: Tritium	pCi/L	1° MCL	20,000 or <	341	ND 434	Yes
Radioactivity: Uranium	pCi/L	1° MCL	20 or <	ND 0.67	ND 0.30	Yes
Regulated Organics	ug/L	See Table 79				Yes
Disinfection Byproducts	ug/L	See Table 80				Yes
General Physical & General Minerals	Various	See Table 81				Yes
Constituents with Notification Levels	ug/L	See Table 82				No*
Remaining Priority Pollutants	ug/L	All ND				Yes

* See **Section 5.0** for additional information pertaining to TOC and Chlorate

4.2.3 RO Feed Water (Prior to RO)

A summary of RO Feed Water Compliance is as follows:

Table 127c. 2020 RO Feed Water Compliance Summary

Constituent Parameters	Units	Type	Requirement	Highest Prior to RO	Associated AWPf	% Removal	Compliant
CECs-Removal Efficiency: NDMA	ug/L	Monitoring Trigger Level / NL	0.010	0.04	ND 9.62E-04	97.6	Yes
CECs-Removal Efficiency: Sucralose	ug/L	N/A	N/A	58	ND 4.86E-02	99.9	N/A
CECs-Removal Efficiency: Sulfamethoxazole	ng/L	N/A	N/A	0.99	ND 3.21E-03	99.4	N/A
DDW Specified Chemicals	ug/L	N/A	DDW	See Tables 85 a, b & c		N/A	N/A
Constituent Parameters	Units	Type	Requirement	Highest Prior to RO	Associated AWPf	% Removal	Compliant
Surrogates for CECs: Electrical Conductivity	uS/cm	2° MCL	1,600 or <	1,782.60	121.2	90.5	Yes*
Surrogates for CECs: UV Absorbance	cm-1	Permit Requirement	N/A	0.156	0.014	86.5	N/A
Surrogates for CECs: TOC	mg/L	Permit Requirement	0.5	17.77	0.21	99.0	Yes*
Bioanalytical Screening Tools	No Data for 2020: Bioanalytical QAPP remained under review during this time frame						

* Compliance point is Product Water "Associated AWPf"

4.2.4 Groundwater

A summary of Groundwater Monitoring compliance is as follows:

Table 127d. 2020 Groundwater Monitoring Compliance Summary

Constituent Parameters	Units	Type	Requirements	High	Low	Compliant
Water Level Elevation	Feet bgs	N/A	N/A			N/A
Chlorine Residual	mg/L	Process Control	N/A	0.3	ND 0.10	N/A
Chloride	mg/L	2° MCL	250 or <	164	20	Yes
Nitrate as N	mg/L	1° MCL	10	1.77	ND .1	Yes
Nitrite as N	mg/L	1° MCL	1	0.52	ND 0.05	Yes
Nitrate plus Nitrite as N	mg/L	1° MCL	10	1.81	ND 0.10	Yes
pH	pH Units	WQG	Between 6.5 and 8.4	8.0	6.2	N/A
Sodium	mg/L	WQG	69	120	23	N/A
Sulfate	mg/L	2° MCL	250 or <	130.5	0.87	Yes
TOC	mg/L	N/A	N/A	2.74	ND 0.30	Yes
Total Coliform	MPN/100 mL	Objective	2.2	29.5	ND 1	N/A
BOD5 20C	mg/L	N/A	N/A	20	ND 2	N/A
Oil and Grease	mg/L	N/A	N/A	30	ND 1.4	N/A
Total Nitrogen	mg/L	1° MCL	10	2.1	ND 0.2	Yes
TSS	mg/L	N/A	N/A	12	ND 0.3	N/A
Turbidity	NTU	2° MCL	5 (annual average)	8.2	0.1	Yes
Inorganics with Primary MCL: Aluminum	ug/L	1° MCL	1,000 or <	770	ND 5.00	Yes
Inorganics with Primary MCL: Antimony	ug/L	1° MCL	6 or <	2	ND 0.91	Yes
Inorganics with Primary MCL: Arsenic	ug/L	1° MCL	10 or < (12 month rolling average)	16	ND 1.00	Yes
Inorganics with Primary MCL: Asbestos	MFL	1° MCL	7 or <	0.2	ND 0.71	Yes
Inorganics with Primary MCL: Barium	ug/L	1° MCL	1,000 or <	110	ND 1.00	Yes
Inorganics with Primary MCL: Beryllium	ug/L	1° MCL	4 or <	ND 1.00	ND 0.45	Yes
Inorganics with Primary MCL: Cadmium	ug/L	1° MCL	5 or <	ND 1.00	ND 0.45	Yes
Inorganics with Primary MCL: Chromium	ug/L	1° MCL	50 or <	14	ND 1.00	Yes
Inorganics with Primary MCL: Cyanide	ug/L	1° MCL	150	40	ND 2.2	Yes
Inorganics with Primary MCL: Fluoride	mg/L	1° MCL	2 or <	1.02	ND 0.10	Yes
Inorganics with Primary MCL: Mercury	ug/L	1° MCL	2 or <	ND 1.00	ND 0.09	Yes
Inorganics with Primary MCL: Nickel	ug/L	1° MCL	100 or <	2	ND 1.00	Yes
Inorganics with Primary MCL: Nitrate as Nitrogen	mg/L	1° MCL	10 or <	2.2	ND 0.10	Yes
Inorganics with Primary MCL: Nitrite as Nitrogen	mg/L	1° MCL	1 or <	0.86	ND 0.05	Yes
Inorganics with Primary MCL: Nitrate + Nitrite	mg/L	1° MCL	10 or <	2.52	ND 0.10	Yes
Inorganics with Primary MCL: Perchlorate	ug/L	1° MCL	6 or <	ND 1.20	ND 0.61	Yes
Inorganics with Primary MCL: Selenium	ug/L	1° MCL	50 or <	4.8	ND 2.50	Yes
Inorganics with Primary MCL: Thallium	ug/L	1° MCL	2 or <	ND 2.00	ND 0.45	Yes
Radioactivity: Gross Alpha	pCi/L	1° MCL	15 or <	4.82	0.13	Yes
Radioactivity: Gross Beta	pCi/L	1° MCL	50 or <	5.67	2.07	Yes
Radioactivity: Radium 226 & 228	pCi/L	1° MCL	5 or <	1.06	0.02	Yes

Constituent Parameters	Units	Type	Requirements	High	Low	Compliant
Radioactivity: Radium 226	pCi/L	1° MCL	5 or <	0.24	0.02	Yes
Radioactivity: Radium 228	pCi/L	1° MCL	5 or <	0.92	0.00	Yes
Radioactivity: Strontium 90	pCi/L	1° MCL	8 or <	1.69	0.00	Yes
Radioactivity: Tritium	pCi/L	1° MCL	20,000 or <	332	7.02	Yes
Radioactivity: Uranium	pCi/L	1° MCL	20 or <	DNQ 0.94	ND 0.80	Yes
Regulated Organic Chemicals	ug/L	Various	Various	See Table 108 h-i		Yes
Disinfection byproducts	ug/L	Various	Various	See Table 108 j -n		Yes
Constituents with Secondary MCLs: Boron	ug/L	2° MCL	750 or <	310	ND 60.00	Yes
Constituents with Secondary MCLs: Chlorate	ug/L	NL	800 of <	770	ND 6.0	Yes
Constituents with Secondary MCLs: Ethylene glycol	ug/L	NL	1,400 or <	320	ND 40	Yes
<i>N-Nitrosopyrrolidine</i>	ug/L	N/A	N/A	ND 0.94	ND 0.94	Yes
General Physical & General Minerals: Asbestos	MFL	1° MCL	7 or <	0.2	ND 0.20	Yes
General Physical & General Minerals: Calcium	mg/L	N/A	N/A	110	9.5	N/A
General Physical & General Minerals: Chloride	mg/L	2° MCL	250 or <	165	13	Yes
General Physical & General Minerals: Copper	ug/L	1° MCL/2° MCL	1,300 or </1,000 or <	ND 5.00	ND 2.30	Yes
General Physical & General Minerals: Iron	mg/L	2° MCL	0.3 or <	0.76	ND 0.01	Yes*
General Physical & General Minerals: Manganese	ug/L	2° MCL	50 or <	75	ND 1	Yes
General Physical & General Minerals: Potassium	mg/L	N/A	N/A	6.4	ND 0.91	N/A
General Physical & General Minerals: Sodium	mg/L	WQG	69 or <	120	19	N/A
General Physical & General Minerals: Sulfate	mg/L	2° MCL	250 or <	131	1	Yes
General Physical & General Minerals: Zinc	ug/L	2° MCL	5,000 or <	25	ND 5	Yes
General Physical & General Minerals: Color	mg/L	2° MCL	15 or <	30	ND	Yes**
General Physical & General Minerals: Corrosivity	mg/L	N/A	N/A	0.55	-1.74	N/A
General Physical & General Minerals: Foaming Agents	mg/L	2° MCL	0.5 or <	ND 0.05	ND 0.03	Yes
General Physical & General Minerals: Odor	TON	2° MCL	3 or <	5	1	Yes**
General Physical & General Minerals: Specific Conductance	uS/cm	2° MCL	1,600 or <	1,270	179	Yes
General Physical & General Minerals: TDS	mg/L	2° MCL (Upper)	1,000 or <	792	105	Yes
General Physical & General Minerals: Hardness	mg/L	N/A	N/A	375.5	33.2	N/A
Chemicals with NLs	ug/L	N/A	N/A	Table 108		N/A
Remaining Priority Pollutants	ug/L	N/A	Various			Yes
Silver	ug/L	2° MCL	100 or <			Yes

* Elevated results are not attributed to the Project as water has not reached this well (MW-1AS, MW-2AS)

** Elevated results are within historical levels, therefore, not attributed to the Project

Figure 127. Summary of Compliance- N/A

5.0 SUMMARY OF NON-COMPLIANCE

For any non-compliance during the previous calendar year, a description of:

- i. The date, duration, and nature of the violation;*
- ii. A summary of any corrective actions and/or suspensions of subsurface application of recycled water resulting from a violation; and*
- iii. If uncorrected, a schedule for and summary of all pending and completed remedial actions.*

The narrative section below provides an overview of instances of non-compliance during calendar year 2020 AWPf and subsurface application operations including date, duration, and nature of the violations; summary of the corrective actions completed; and pending and completed remedial actions.

5.1 Date, Duration, and Nature of Non-Compliance

A summary of the date, duration, and nature of the violations that occurred during calendar year 2020 operations of the AWPf is provided in **Table 128** below. For convenience, the footnotes to **Table 128** also provide references to associated Quarterly Report narrative discussion of non-compliance. See **Appendix D** for GeoTracker Report Access Instructions.

Table 128. Date, Duration, and Nature of Non-Compliance

Date(s)	Duration	Nature
March 12 – 13, 2020	Two days	Diversion of off-specification recycled water to SVRP due to H2O2 feed issue
June 10, 2020 June 15, 2020 June 22, 2020	3 RWDL exceedances	RWDL Exceedances: 4-Sample 0.5 mg/L RWDL TOC in AWPf Product Water 24-hour composite samples
November 5, 2020 October 5, 2020	2 elevated level readings	Elevated chlorate level, not exceeding the Notification Level (NL), at the Product Water Pump Station

**See Q1 2020 Quarterly Report, Appendix E*

***See Q2 2020 Quarterly Report, Section 6.0 and Q3 2020 Quarterly Report, Appendix G*

****See Q4 2020 Quarterly Report, Section 6.0*

5.2 Summary of Corrective Actions

5.2.1 Non-Spec Water

M1W experienced a stopping/failure of the hydrogen peroxide feed system associated with the hydrogen peroxide dosing which is required and discussed on Page 18-11 of the Operation Optimization Plan (OOP), as required by MRP No.2019-0116 on March 12, 2020:

18.2.2 UV/AOP Monitoring for 1,4-Dioxane and NDMA

To ensure appropriate treatment for 1,4-Dioxane and NDMA, the WDR/WRR requires continuous on-line monitoring of UV dose, UV intensity, UVT, hydrogen peroxide dose, and flow for each UV reactor. The UV system must be continuously operated at a DDW-approved UV intensity and hydrogen peroxide (H₂O₂) dose, and UVT of the UV Reactor influent of 95% or greater.

Corrective Actions: Non-specification flows were fully captured and returned to the RTP before the primary treatment process so that they were not sent for subsurface application. Flows were pumped to the Salinas Valley Reclamation Project pond and ultimately recirculated to the RTP headworks for treatment through the full secondary and AWPf treatment processes. M1W subsequently added control logic programming for redundancy that dictates that if the AWPf is not in Recirculation Mode, the pump values must be greater than 5% speed. If the speed is less than 5% for 12 minutes, an alarm will trigger and place the AWPf in Recirculation Mode. Corrections were also made to the alarm setpoints associated with the hydrogen peroxide flow. This redundancy was tested after mitigation actions were taken to ensure that any off-specification water that did not receive the proper hydrogen peroxide dose would not be pumped to the conveyance system for subsurface application.

1. The speed of the hydrogen peroxide pumps must be above a setpoint when the plant is operating to deliver to the injection wells (i.e., not in recirculation mode). Also, a minimum low speed (5%) clamp has been added to the peroxide pumps so that the pumps will not go to zero unless they fail or are turned off. This should prevent the “if-then program statement” from holding the calculated dose static.
2. If the peroxide pump speed drops below the setpoint when the plant is operating and not in recirculation, the system will alarm and place the plant into recirculation, independent of calculated dose.
3. The calculated hydrogen peroxide dose is now time averaged over 5 minutes to enable SCADA to display the correct dose and to increase the ability for Operators to promptly see any changes.

5.2.2 TOC

M1W observed exceedances of the RWDL of 0.5 mg/L for the 4-sample average of TOC in the AWPf Product Water 24-hour composite samples dated June 10, 15 and 22, with results ranging from 0.51-0.54 mg/L. M1W observed a steady upward trend in the Product Water composite samples, while no upward trend was observed in the Product Water grab samples, which were tested for comparison. In addition, TOC levels at RO Permeate showed steady levels below 0.25 mg/L.

Upon further investigation, M1W staff concluded that the elevated TOC levels in the composite samples were likely due to contamination of and/or biological growth in the sample container during the compositing process.

Corrective Actions: M1W Lab staff subsequently improved their sampling procedures by adding phosphoric acid preservative to the composite container prior to sampling. This allows the sample to be

maintained at a pH of less than 2 during the 24-hour sampling duration, which inhibits biological growth, which is what M1W staff determined caused the elevated TOC levels.

With these improved sampling practices in place, results for the TOC in the AWPf Product Water 24-hour composite samples in July show significant improvement and M1W is in compliance with the RWDL of 0.5 mg/L for the 4-sample average.

M1W submitted a detailed summary report to DDW and the Regional Board on September 7, 2020, within the required 60-day timeframe of notification of the first exceedance. M1W provided extensive evidence demonstrating that the elevated TOC levels observed in the AWPf Product Water composite samples are not representative of the water quality observed in grab samples or in continuous online measurements.

DDW provided notification to the Central Coast Water Board on September 25, 2020 stating “DDW concurs that M1W has explored all possible causes of the exceedance and attempted necessary corrective actions. DDW conditionally accepts M1W’s proposal to use an online TOC analyzer at the AWPf PWPS to fulfill the requirement of section 60320.218(a) for TOC monitoring of the Product Water...” Additionally, DDW requested that the Central Coast Water Board update MRP R3-2019-0116 Section IV.2 to reflect the following changes:

Figure 128a. Modified MRP R3-2019-0116 TOC Monitoring Requirements

Table M-3: Recycled Water Discharge Limits Monitoring				
Constituent/Parameters	Units	Type of Sample	Minimum Frequency of Analysis	Reference Table Number
Total Organic Carbon	mg/L	Metered ³	Continuous ³	M-3

³ Refer to DDW letter dated September 25, 2020. If the PWPS TOC analyzer is offline, hourly grab samples for 24 consecutive hours (collected once per week) will be accepted in lieu of continuous online TOC measurements. If the PWPS TOC analyzer is offline for more than one (1) week, provide a discussion for the cause and steps taken to bring TOC analyzer back online in the required monthly and quarterly water quality monitoring reports.

In a response letter dated October 23, 2020 M1W provided documentation that all conditional requirements given by DDW had been met within 30 days of granting conditional approval. Beginning in the fourth quarter of 2020 and continuing through the present, M1W has complied with the modified TOC monitoring requirements approved by DDW and did not have any instances of non-compliance through the end of 2020.

5.2.3 Chlorate

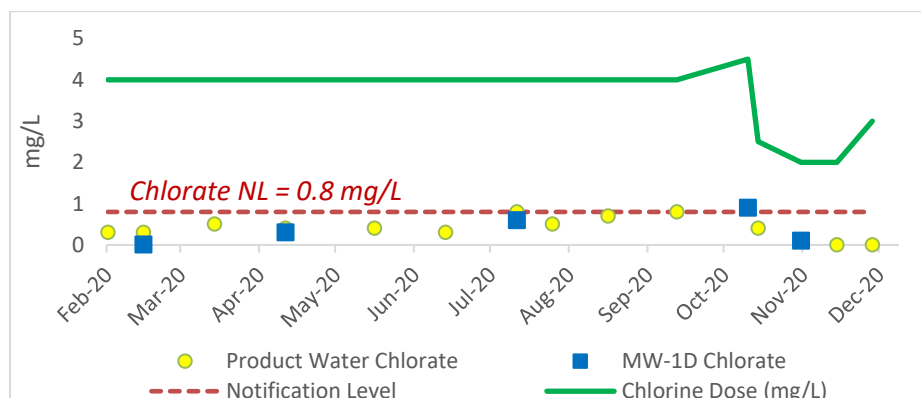
Corrective Actions: The following chain of events occurred thereafter:

- M1W immediately collaborated with on-call technical specialists to identify the cause and strategize operational modifications to reduce chlorate levels. The following changes were made to reduce chlorate concentrations:
 - Reduced sodium hypochlorite dose from 4 mg/L to 3 mg/L
 - Modified the chemical delivery order criteria when the chemical level drops to 2 ft instead of 4 ft (prevents product decomposition)
- M1W had conducted routine monthly sampling at the PWPS and Monitoring Wells on November 2 and November 4, 2020, respectively.
- Confirmation samples were collected at PWPS on November 6, 2021 and at MW-1D on November 23, 2021. The averages of the initial and confirmation samples did not exceed the NL.
- The contract lab subsequently provided preliminary results indicating a possible NL exceedance at the PWPS and MW-1D on November 16 and December 2, 2020, respectively.
- M1W received the final sampling results on January 11, 2021 confirming NL exceedances at the PWPS and MW-1D, at 0.9 mg/L.
- Per Page MRP-29 M1W provided notification via email on November 5, 2020 to DDW and the Regional Board of the NL:

“c. If a result of the monitoring performed pursuant to title 22 section 60320.201 (i) or section 60320.220(b) exceeds a contaminant's notification level (NLs), M1W must collect another sample within 72 hours of notification of the result and then have it analyzed for the contaminant as confirmation of exceedance. If the average of the initial and confirmation sample exceeds the NLs, or the confirmation sample is not collected and analyzed pursuant to section 60320.220(b), M1W must notify DDW and the Central Coast Water Board and perform subsequent monitoring in accordance with section 60320.220(b).”

- On November 6 and November 23, 2020 confirmation samples were collected from the PWPS and Monitoring Wells, respectively.
- Results were received on November 11 and December 5, 2020, respectively, and affirmed that the operational strategies successfully reduced chlorate levels at both the PWPS and MW-1D. See **Figure 127b**.

Figure 128b. Chlorate Trends, Product Water Pump Station and MW-1D



6.0 DETECTIONS OF MONITORING CHEMICALS AND CONSTITUENTS IN GROUNDWATER MONITORING WELLS

Any detections of monitored chemicals or contaminants, and any observed trends in the monitoring wells...

6.1 Existing Groundwater Quality in the Seaside Basin

Table 129 and **Figure 129** (WDR/WRR Order No. 2017-0003, Table 2. Existing Groundwater Quality in the Seaside Basin) demonstrate that the Seaside Basin water quality has historically exceeded MCLs that predate Pure Water Monterey injection operations. Injection to the Deep Injection Wells began March 13, 2020 and therefore exceedances in these parameters are not associated with purified recycled water in the monitoring wells, but rather, they reflect background conditions. Additionally, per WDR/WRR Order No. 2017-0003, Table 2. Existing Groundwater Quality in the Seaside Basin (**Figure 129**), the highlighted values further demonstrate that the background water quality in the Seaside Basin has documented historical exceedances.

Figure 129. MRP R3-2019-0116 Table 2. Existing Groundwater Quality in the Seaside Basin

Table 2 - Existing Groundwater Quality in the Seaside Basin

Constituent	City of Seaside No.4	ASR-1	Ord Grove No. 2	Paralta	Basin-Wide Averages
Aluminum	50	50	26	50	42
Arsenic	1.2	1.8	2.0	2.5	2.1
Barium	28	100	100	100	94
Boron	46	95	132	96	108
Chloride	72	63	129	94	103
Chromium-total	3.6	9.3	10	10	9.1
Chromium VI	-	1.0	0.8	2.3	1.4
Lead	5	3.7	5.0	5.0	4.5
Nitrate as N	1.9	0.1	1.7	0.5	1.1
Sodium	50	60	94	79	79.7
Sulfate	13	77	63	58	54.9
TDS	237	406	524	435	449
TOC	0.5	1.0	0.6	0.6	0.7

*Source: averages of well water quality data submitted by MRPCA on November 9, 2016

*Concentrations are in µg/L except chloride, nitrate, sodium, sulfate, TDS, and TOC, which are mg/L

6.2 Detections and Trends

Table 129. Historic Seaside Basin Water Quality Exceedances

Site	Group/Constituent Identification	Sampling Date	Result	MCL	Unit
MW-1AD	Odor Threshold @ 60 C	2018-12-13	40	3	Ton
MW-1AD	Manganese	2020-02-26	55	50	ug/L
MW-1AD	Heptachlor	2019-02-26	0.015	0.01	ug/L
MW-1D	Odor Threshold @ 60 C	2018-12-06	32	3	Ton
MW-1D	Odor Threshold @ 60 C	2019-02-25	67	3	Ton
MW-1D	Odor Threshold @ 60 C	2020-02-27	4	3	Ton
MW-1D	Nitrate (As N)	2018-12-06	17	10	mg/L
MW-1D	Nitrate + Nitrite (As N)	2018-12-06	17	10	mg/L
MW-2AD	Odor Threshold @ 60 C	2018-12-12	40	3	Ton
MW-2AD	Odor Threshold @ 60 C	2019-02-26	100	3	Ton
MW-2D	Odor Threshold @ 60 C	2018-07-09	8	3	Ton
MW-2D	Odor Threshold @ 60 C	2019-02-28	40	3	Ton
MW-2D	Odor Threshold @ 60 C	2020-02-26	4	3	Ton
MW-2D	Manganese	2020-02-26	66	50	ug/L
MW-2D	Toluene	2018-07-09	290	150	ug/L
MW-2D	Turbidity, Laboratory	2018-07-09	46	5	NTU
MW-2D	Turbidity, Laboratory	2020-02-26	11	5	NTU

6.2.1 MW-1AD

- The sodium water quality goal (WQG) is 69 mg/L, but **Figure 129** illustrates that the Seaside Basin average historical concentration was 79.7 mg/L before injection of purified recycled water began; therefore, injected purified recycled water has contributed to a downward trend in the sodium concentrations such that it was reduced to below WQG by the end of 2020.
- Historical sampling indicated odor detections above the Secondary MCL of 3 TON, and there was only 1 detection over the Secondary MCL in October with a result of 4 TON. The remainder of the year, odor measurements were at or below the Secondary MCL. The historical exceedances, the improvements following the single exceedance, and the following consideration support the conclusion that the data does not indicate Project non-compliance with the Secondary MCL.
 - “A threshold number is not a precise value. In the case of the single observer, it represents a judgement at the time of testing.” SM 2150 B
- Initial (pre-Project) manganese concentrations above the Secondary MCL of 50 ug/L were detected in the Seaside Basin, and detections fluctuated throughout the year with a max of 74 ug/L in March. Manganese was measured to be historically high in the Seaside Basin, and Tracer Study results indicate that no injected purified recycled water had reached this monitoring well in March 2020.
- Heptachlor concentrations had exceeded the Primary MCL of 0.01 ug/L, however no detections occurred in 2020.

6.2.2 MW-1D

- Initial chloride concentrations in this monitoring well were greater than the Seaside Basin average measured concentration of 103 mg/L, but the concentrations did not exceed the WQG of 250 mg/L and data indicates downward trend due to Project injection.

- Initial sodium concentrations in this monitoring well were greater than the WQG of 69 mg/L and the Seaside Basin average of 79.7 mg/L, with a maximum of 120 mg/L in March. Data indicates a downward trend in sodium concentrations to below WQG by the 3rd quarter.
- Initial sulfate concentrations measured were greater than the Seaside Basin baseline average concentration of 54.9 mg/L, with a maximum of 131 mg/L in February. Since then, sulfate concentrations through the end of the year did not exceed the Secondary MCL of 250 mg/L and data indicates a downward trend in concentrations.
- Initial measurements of TDS exceeded the Secondary MCL of 500 mg/L with a maximum of 792 mg/L in February but came below Seaside Basin average of 449 mg/L by May, demonstrating its downward trend.
- Manganese did not exceed the Secondary MCL of 50 ug/L but had a maximum of 49 mg/L in March and data indicates a continued downward trend through the year.
- Sampling resulted in odor detections above the Secondary MCL of 3 TON, there were a few detections over the Secondary MCL with a max of 4 TON early in the year. There has been a decreasing trend through most of the year. Similar to the discussion above pertaining to odor for MW-1AD, data does not indicate that injected purified recycled water is causing a violation of the Secondary MCL.
- Nitrate and nitrate + nitrite had historical detections above the Primary MCL of 10 mg/L. The initial measurements were ND (< 0.1 mg/L), but then showed some increase during the year with a maximum of 1.5 mg/L nitrate and 2.2 mg/L nitrate + nitrite, both of which are well below the Primary MCL. AWPf Product Water total nitrogen remained well below NO3 Primary MCL of 10 mg/L.

6.2.3 MW-2AD

- Fluoride concentrations reached a maximum of 1.02 mg/L in November but remained below the Primary MCL of 2 mg/L throughout the year.
- Initial chloride concentrations were above the Seaside Basin average of 103 mg/L but did not exceed the WQG of 250 mg/L and data demonstrates a downward trend as Project injected water reached this well.
- Initial sodium concentrations were above the WQG of 69 mg/L and the Seaside Basin average of 79.7 mg/L, with a maximum of 110 mg/L in May, but data indicates a downward trend to below the WQG as the year progressed.
- Initial sulfate concentrations were above the Seaside Basin average of 54.9, with a maximum of 120 mg/L in May 2020, but did not exceed the Secondary MCL of 250 mg/L and data indicates a downward trend as Project injected water reached this well.
- Initial TDS concentrations exceeded the Secondary MCL of 500 mg/L with a maximum of 735 mg/L in April but came below Seaside Basin average of 449 mg/L by August, and data indicates a downward trend as Project injected purified recycled water reached this well.
- Sampling resulted in odor detections above the Secondary MCL of 3 TON, and there were a few detections over the Secondary MCL with a maximum of 4 TON, with the results fluctuating throughout the year. Similar to the discussion above pertaining to odor for MW-1AD, data does not indicate that injected purified recycled water is causing a violation of the Secondary MCL.

6.2.4 MW-2D

- Arsenic concentrations at this well increased to maximum of 16 ug/L in June and then decreased to below Primary MCL of 10 ug/L by August and below the Seaside Basin average of 2.1 ug/L by end of the year. See discussion in **Section 6.5 Arsenic Trends in MW-2D**, below.
- Chloride concentrations were measured above the Seaside Basin average of 103 mg/L early in the year with a maximum of 139 mg/L in March, but concentrations did not exceed the Secondary MCL of 250 mg/L and data indicates a downward trend.
- Sodium concentrations early in the year were above the WQG of 69 mg/L and Seaside Basin average of 79.7 mg/L, with a maximum of 110 mg/L in February and March, and data indicates a downward trend with concentrations below the WQG later in the year as the purified recycled water reached this well.
- Historic odor measurements exceeded the Secondary MCL of 3 TON, and there were a few detections over the Secondary MCL in 2020 with a max of 5 TON in April, with a decreasing trend later in the year. Similar to the discussion above pertaining to odor for MW-1AD, data does not indicate that injected purified recycled water is causing any violations of the Secondary MCL.
- Early samples indicated manganese concentrations was detected above the Secondary MCL of 50 ug/L, with a maximum of 76 ug/L in March which was consistent with background water quality and concentrations decreased through the end of the year.
- Toluene concentrations above the Primary MCL of 150 ug/L were detected in pre-Project sampling, but ongoing post-Project start up sampling indicated no detections of toluene.
- Pre-Project turbidity concentrations exceeded the Secondary MCL of 5 NTU and the initial measurements of turbidity had detections above the Secondary MCL with 11 NTU in February and 5.4 NTU in March but over the remainder year, the data illustrates a trend of decreasing turbidity associated with injected purified recycled water.

6.2.5 MW-1AS

- Manganese concentrations exceeded the Secondary MCL of 50 mg/L in March and November, with a maximum of 67 mg/L, but does not indicate a trend increasing or decreasing and the concentrations measured are within the range of background concentrations.
- Sodium concentrations had a single result above the WQG of 69 mg/L in July with a result of 74 mg/L. This data point is considered to be an anomalous result, because all other monthly results ranged from 35 to 39 mg/L.
- Arsenic concentrations were detected above the Seaside Basin average of 2.1 mg/L but below the Primary MCL of 10 mg/L and these concentrations were consistent throughout the year and are within the range of background concentrations.
- According to Gus Yates, PG, CHg, Senior Hydrologist Todd Groundwater (email dated April 29, 2021) and Jonathan Lear, PG, CHg – Water Resources Division Manager, Monterey Peninsula Water Management District and consistent with groundwater modeling in the Title 22 Engineering Report (2019), injected water has not reached this offsite monitoring well; therefore water quality in MW-1AS is not influenced by injected purified recycled water.

6.2.6 MW-1S

- Hexavalent Chromium (or Chromium VI) concentrations were detected above the PHG of 0.02 µg/L with a maximum of 4.8 µg/L but does not indicate a trend increasing or decreasing.

6.2.7 MW-2AS

- Chromium VI concentrations were detected above the PHG of 0.02 µg/L were detected with a maximum of 6.4 µg/L, but the concentrations decreased throughout the year.
- According to Gus Yates, PG, CHg, Senior Hydrologist Todd Groundwater (email dated April 29, 2021) and by Jonathan Lear, PG, CHg – Water Resources Division Manager, Monterey Peninsula Water Management District and consistent with groundwater modeling in the Title 22 Engineering Report (2019), injected water has not reached this offsite monitoring well; therefore, high hexavalent chromium levels are not due to injected purified recycled water.

6.3 Explanation of Sampling Schedule Variance

Per MRP R3-2019-0116, p. MRP-7:

“Quarterly monitoring for recycled water and groundwater must be performed during the months of February, May, August, and November... Should there be instances when monitoring cannot be done during these specified months, M1W must conduct the monitoring as soon as it can and state in the monitoring report the reason monitoring could not be conducted during the specified month.”

Accordingly, please note the following quarterly sampling schedule variances:

6.3.1 Formaldehyde

A QC failure for formaldehyde occurred on the monitoring well samples collected in August 2020 requiring resampling of all seven wells. The resampling event was conducted on September 1-2, 2020.

6.3.2 Quinoline

All monitoring wells with the exception of MW-1AD exceeded the hold time for quinoline per the test method and required resampling which took place on September 29, 2020.

6.4 Coliform Detections in Monitoring Wells

On October 16, 2020 M1W staff became aware of Total Coliform detections during an internal review of the quarterly water quality panels of the AWPf Monitoring Wells. M1W notified both DDW and Central Coast Water Board of the Total Coliform detections on October 20, 2020. The following samples had observed Total Coliform Detections:

Table 130. Monitoring Well Total Coliform Detections (MPN/100 mL)

Site	Result	Units	Sample Date
MW-2AD	1*	MPN/100 mL	3/11/2020
MW-2AS	29.5	MPN/100 mL	3/11/2020
MW1AD**	2*	MPN/100 mL	5/12/2020
MW-2AS	13.5	MPN/100 mL	5/13/2020

*Detection does not exceed the Basin Plan numeric water quality objective of 2.2 MPN/100mL.

**As of May 12, 2020 the Tracer Study has not indicated arrival of AWPf Product Water at this monitoring well.

Figure 130. Monitoring Well Total Coliform Detections (MPN/100 mL) – N/A

Unfortunately, M1W's contract lab did not notify M1W staff of these observed detections. M1W staff has since made it clear to all contract labs that subsequent MCL exceedances require immediate notification to the appropriate point of contact they have on file.

6.5 Arsenic Trends in MW-2D

M1W became aware of single sample arsenic MCL exceedances in Monitoring Well MW-2D on August 12, 2020. M1W provided notification to DDW and the Regional Water Board on August 14, 2020, stating that the exceedances occurred in May, June and July samples. The contract lab did not notify M1W by phone, nor flag this in their reports because the exceedance did not meet the criteria for Tier 1 notification and because the site is not a drinking water well. M1W has since taken corrective action and contacted each of our contract labs requiring notification as soon as they are aware of an MCL exceedance on any AWPf Monitoring Wells and/or AWPf Product Water.

While the individual arsenic measurements that exceeded the MCL of 10 ug/L ranged from 10-16 ug/L, the running annual average compliance interval did not exceed the MCL. Based on discussions with our consultants, coupled with early modeling, we were aware of the possibility of arsenic mobilization which is a common occurrence following the injection of a new source of oxygenated recycled water into an aquifer.

As demonstrated by the observed abrupt upward trend and equally abrupt subsequent downward trend, M1W suspects that this was a discrete short-term event. This is related to the dissolution and subsequent reabsorption of arsenic in the geological formation due to the introduction of oxygenated recycled water. It is important to note that MW-2D is located directly adjacent to Deep Injection Well #2, with an estimated recycled water travel time of 4 days. Due to natural diffusion and mixing with existing groundwater, it is highly unlikely for similar arsenic levels to be observed in any well located outside the zone of direct influence of the recycled water signal.⁷

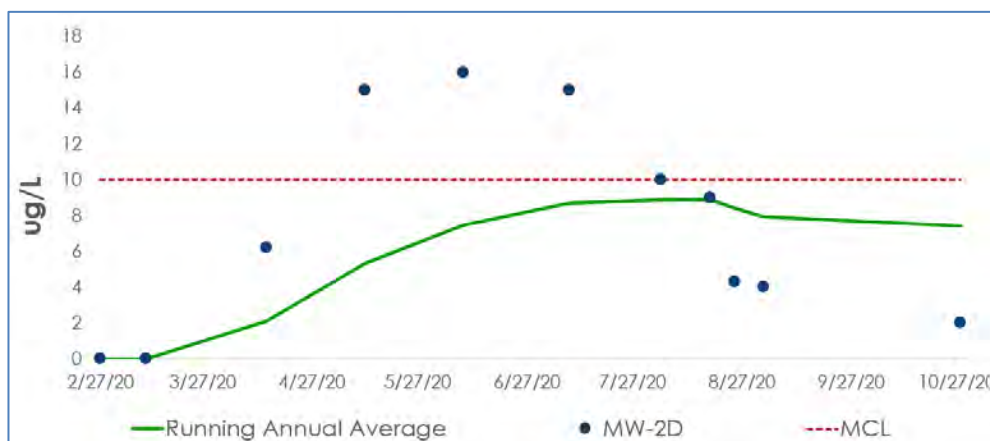
M1W will continue to work closely with our regulators and consultants on this issue to ensure the protection of public health and safety. Additionally, M1W anticipates initiating a third-party review of all data acquired to date by an experienced geochemist with specific expertise in arsenic mobilization to provide additional guidance and recommendations for post-treatment operations.

⁷ Fakhreddine, S.; Prommer H.; Gorelick, S.M., Dadakis, J.; and Fendorf, S.; Controlling Arsenic Mobilization during Managed Aquifer Recharge: The Role of Sediment Heterogeneity, *Environ. Sci. Technol.* 2020, 54, 8728-8738.

**Table 131. Arsenic Levels in MW-2D (ug/L)
and Compliance with Running Annual Average MCL of 10 ug/L**

Sample Date	MW-2D	Running Annual Average
2/27/20	ND	0
3/11/20	ND	0
4/14/20	6.2	2.1
5/12/20	15	5.3
6/9/20	16	7.4
7/9/20	15	8.7
8/4/20	10	8.9
8/18/20	9	8.9
8/25/20	4.3	8.4
9/2/20	4	8.0
10/28/20	2	7.4

**Figure 131. Arsenic Levels in MW-2D (ug/L)
and Compliance with Running Annual Average MCL of 10 ug/L**



6.6 2020 Non-Detect Parameters

Table 132 below denotes all parameters for which all CY 2020 monitoring results were non-detect (ND).

Table 132. MRP No. R3-2019-0116 Non-Detect Parameters and Frequencies

Non-Detect Parameters				
MRP Table	Sampling Location	Description	Sampling Frequency	Parameter
M-4	AWPF Product Water	Organics with Primary MCLs	Monthly	Antimony
				Arsenic
				Asbestos
				Beryllium
				Cadmium
				Cyanide
				Fluoride
				Mercury
				Nickel

Non-Detect Parameters				
MRP Table	Sampling Location	Description	Sampling Frequency	Parameter
				Perchlorate
				Selenium
				Thallium
M-5	AWPF Product Water	Constituents/Parameters with Secondary MCLS	Monthly	Color
				Copper
				Foaming Agents
				MTBE
				Silver
				Thiobencarb
				Zinc
M-6	AWPF Product Water	Radioactivity	Monthly	Uranium
M-7	AWPF Product Water	Regulated Organics	Monthly	All parameters ND, except Xylenes
M-8	AWPF Product Water	Disinfection Byproducts	Monthly	Bromate
				Total Trihalomethanes
				Bromodichloromethane
				Bromoform
				Chloroform
				Dibromochloromethane
				Haloacetic acids (HAA5)
				Dibromoacetic Acid
				Monobromoacetic Acid
				Monochloroacetic Acid
				Trichloroacetic Acid
M-9	AWPF Product Water	General Physical and General Minerals	Quarterly	Asbestos
				Copper
				Zinc
				Color
				Foaming Agents
M-10	AWPF Product Water	Constituents with Notification Levels	Monthly	1,4-Dioxane
				2,4,6-Trinitrotoluene (TNT)
				HMX
				RDX
				Diazinon
				Propachlor
				N-Nitrosodiethylamine (NDEA)
				n-Nitrosodimethylamine (NDMA)
				N-Nitrosodi-n-propylamine (NDPA)
				Perfluorooctane sulfonate (PFOS)
				Perfluorooctanoic acid (PFOA)
				n-Butylbenzene
				sec-Butylbenzene
				tert-Butylbenzene
				Carbon disulfide
				2-Chlorotoluene
				4-Chlorotoluene
				Dichlorodifluoromethane (Freon 12)
				Ethylene glycol
				Isopropylbenzene
				Methyl isobutyl ketone (MIBK)

Non-Detect Parameters				
MRP Table	Sampling Location	Description	Sampling Frequency	Parameter
				Naphthalene
				n-Propylbenzene
				1,2,4-Trimethylbenzene
				1,3,5-Trimethylbenzene
				Vanadium
M-11	AWPF Product Water	Remaining Priority Pollutants	Quarterly	All parameters ND
M-14	Groundwater	Inorganics with Primary MCLS	Monthly	Beryllium
				Cadmium
				Mercury
				Perchlorate
				Thallium
M-15	Groundwater	Remaining Priority Pollutants, (c) Base/Neutral Extractables	Quarterly	All sub-group parameters ND
		Remaining Priority Pollutants, (b) Acid Extractables	Quarterly	All parameters ND, except 2-Chlorophenol and 2,4,6-Trichlorophenol
		Remaining Priority Pollutants, (a) Pesticides	Quarterly	All parameters ND, except Chromium (III) and Hexavalent Chromium
		Organic Chemicals, Chemicals with Notification Levels	Quarterly	1,2,4-Trimethylbenzene
				1,3,5-Trimethylbenzene
				1,4-Dioxane
				2-Chlorotoluene
				2,4,6-Trinitrotoluene (TNT)
				4-Chlorotoluene
				Diazinon
				Dichlorodifluoromethane (Freon 12)
				HMX
				Isopropylbenzene
				Methyl isobutyl ketone (MIBK)
				Naphthalene
				n-Butylbenzene
				N-Nitrosodiethylamine (NDEA)
				N-Nitrosodi-n-propylamine (NDPA)
				Perfluorooctanoic acid (PFOA)
				n-Propylbenzene
				Propachlor
				RDX
				sec-Butylbenzene
				tert-Butylbenzene
				Tertiary butyl alcohol (TBA)
		Organic chemicals, Disinfection Products	Quarterly	Chlorite
				Bromoform
				Dibromochloromethane
				Dibromoacetic Acid
				Monobromoacetic Acid
				Monochloroacetic Acid
				Trichloroacetic Acid

Non-Detect Parameters				
MRP Table	Sampling Location	Description	Sampling Frequency	Parameter
		Organic Chemicals, (b) Synthetic Organic Chemicals	Quarterly	All parameters ND, except Quinoline, Erythromycin, Chloropicrin, and Caffeine
		Organic Chemicals, (a) Volatile Organic Chemicals	Quarterly	All parameters ND, except Toluene
M-16	Groundwater	General Physical and General Minerals	Monthly	Copper
				Foaming Agents

Figure 132. MRP No. R3-2019-0116 Non-Detect Parameters and Frequencies- N/A

7.0 DISCUSSION OF RECHARGE WATER MIGRATION PATTERNS

Information pertaining to the vertical and horizontal migration of the recharge in the monitoring wells...

Based on the evaluation of tracer study data collected through December 31, 2020 in compliance with the Pure Water Monterey Tracer Work Plan, the following conclusions were presented in the Technical Memorandum: Intrinsic Tracer Test Status Report No. 3 Pure Water Monterey, Groundwater Replenishment Project (Todd Groundwater, January 27, 2021):

- Specific conductance (SC) data from continuous transducer data and discrete water quality samples indicate the arrival of either Carmel River water or purified recycled water in offsite deep monitoring well MW-1AD. Geochemical plotting techniques, including trilinear diagrams, radial plots, and stiff plots do not definitively indicate which water is causing the decreased SC levels. Given that ASR wells have not been injecting since April, only extraction has occurred from ASR-1 July through end of the year, and that DIW-1 has resumed injection following rehabilitation, further decreases in SC—if any—will be due to PWM injection.
- SC and major ion data in MW-1D, MW-2D, and MW-2AD were affected by well rehabilitation. Notably, following the extraction season for ASR wells and during the cessation of injection at DIW-2, SC at MW-2AD rebounded during December toward the background range.
- Due to a strong westward water-level gradient toward the Ord Grove #2 well, purified recycled water might not break through at well MW-1AD, which is slightly east of the PWM and ASR wells. Arrival and breakthrough are affected by the timing and rates of injection and extraction, aquifer transmissivity, and the slope of the regional gradient.

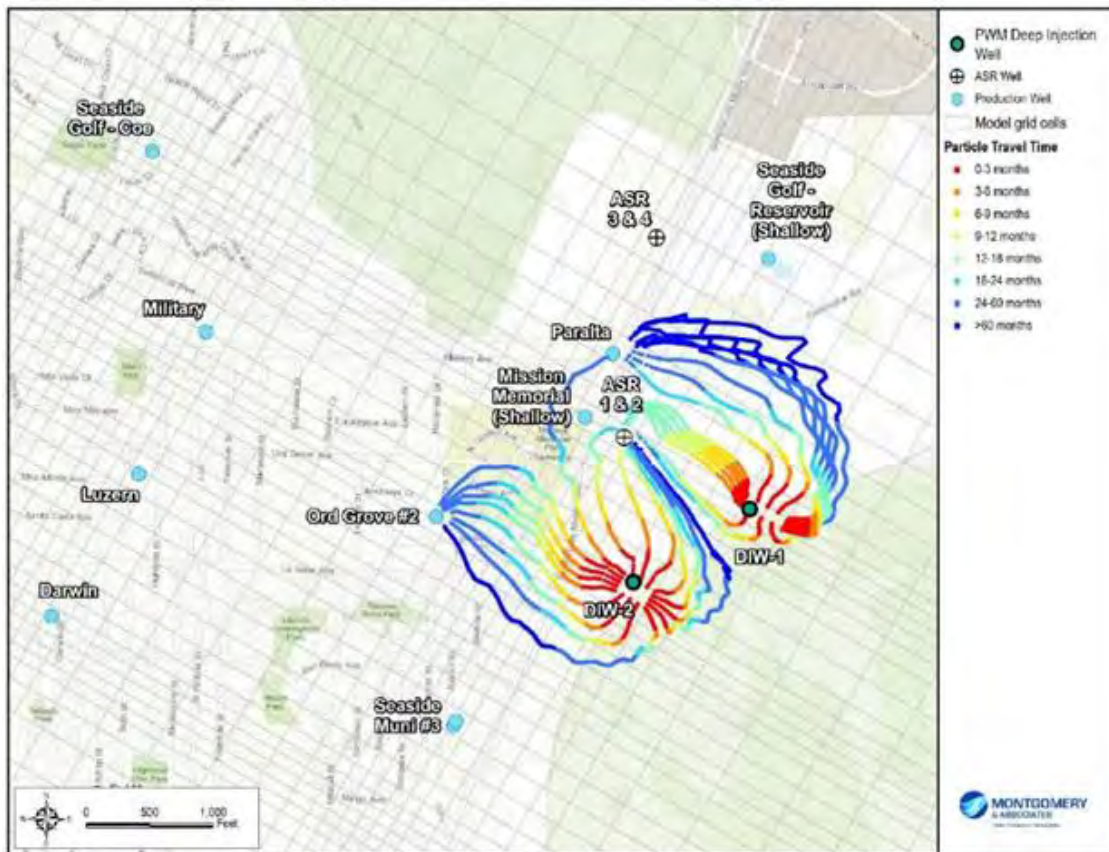
Sampling frequency of MW-1AD continues at biweekly intervals in the first quarter of 2021. Arrival and breakthrough at that location are not likely to be rapid, given the nine months of elapsed time since the beginning of injection and the lack of definitive arrival to-date. After the observation of peak purified recycled water concentration, the underground retention time from the tracer test will be calculated based on the time from when the purified recycled water was injected to when two percent (2%) of the initial tracer concentration has reached the downgradient monitoring point, or when ten percent (10%) of the peak tracer concentration observed in the downgradient monitoring point reaches the monitoring point. Due to changing injection rates at both ASR and PWM injection wells and varying water quality, the arrival times will need to be determined from the groundwater model (recalibrated to match observed injection and water quality).

M1W hereby certifies that no groundwater for drinking purposes has been pumped from wells within the boundary representing the greatest of the horizontal and vertical distances reflecting two months. See also **Section 8.0** for information regarding the MPWMD well prohibition ordinance (Ordinance 183).

The results of Project groundwater modeling of the fastest travel time over the 30-year modeling period from injection to extraction in the deep and shallow aquifers and the existing wells in the area are presented as **Figure 133a** and **Figure 133b**. There are currently no wells that can be used for pumping groundwater within the boundary representing the greatest horizontal and vertical distance reflecting two months of travel time from the injection wells as modeled by Montgomery & Associates.⁸

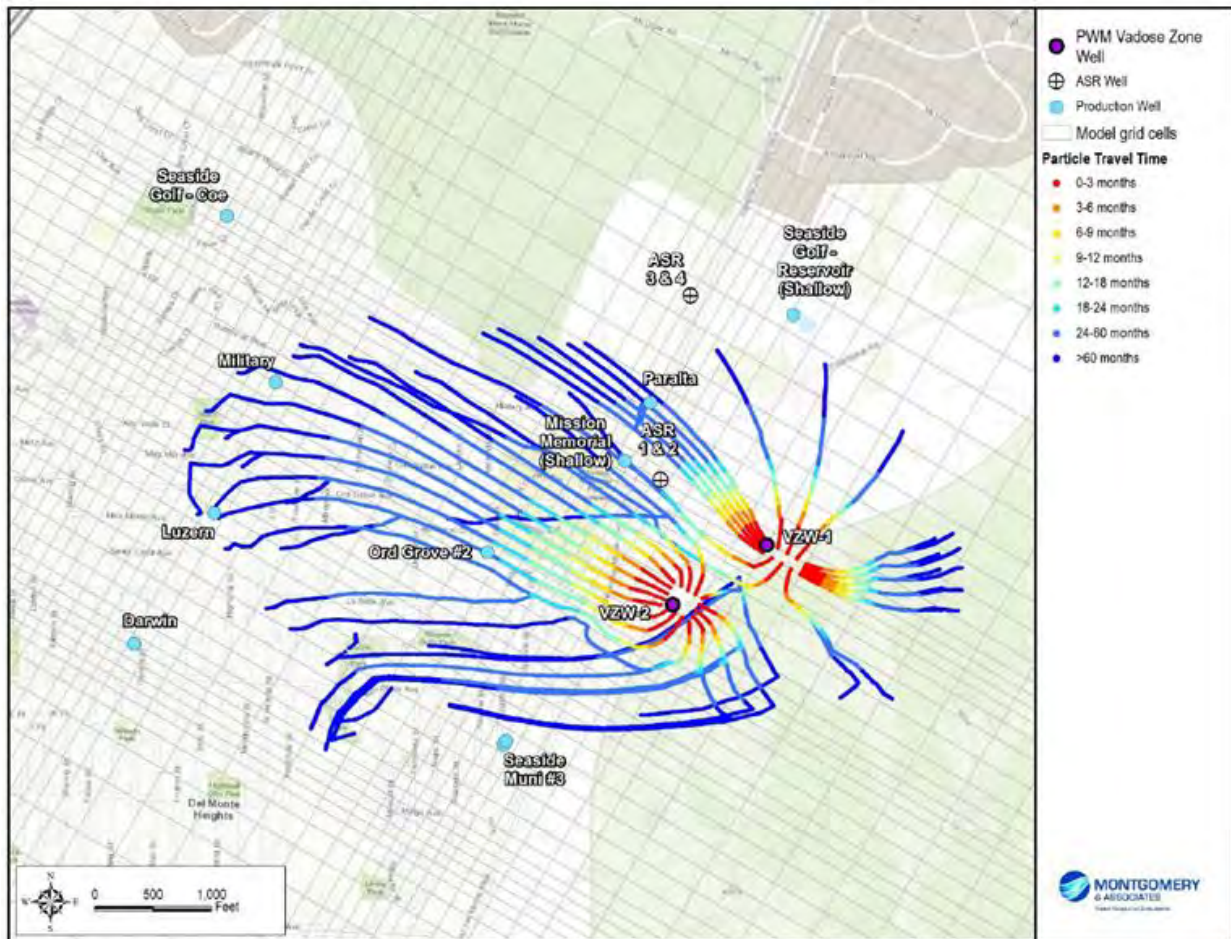
Table 133. Project Groundwater Modeling: Underground Travel Times – N/A

Figure 133a. Project Groundwater Modeling: Underground Travel Times



⁸ Montgomery & Associates, *Technical Memorandum, SUBJECT: Pure Water Monterey Project Wellfield Design Modeling Results With Updated Local Santa Margarita Aquifer Properties and 70/30 Deep/Shallow Recharge Split* March 25, 2019, which was included in the Final PWM Project Engineering Report (April 2019) as Appendix D.

Figure 133b. Project Groundwater Modeling: Underground Travel Times



8.0 NEAREST DRINKING WATER SUPPLY WELL TITLE 22 DRINKING WATER QUALITY DATA

Title 22 drinking water quality data for the nearest drinking water supply well...

On June 15, 2019, the Monterey Peninsula Water Management District (MPWMD) enacted Ordinance No. 183 which added Rule 20-E, establishing a zone of controlled drinking water well construction and a zone of potential controlled drinking water well construction related to the Project's injection of highly-purified water. The ordinance is available via MPWMD's website at the following link:

www.mpwmd.net/ordinances/final/ord183/Ordinance183.pdf.

The nearest drinking water supply well to the AWPf Injection Wells Facilities is operated by California American (CalAm) Water to supply Public Water System (PWS) 2710004. See **Appendix C** for a copy of the 2019 CalAm Water System Annual Consumer Confidence Report (CCR), an annual water quality report containing data that CalAm Water and all associated water suppliers collected during 2019. CCRs disclose what contaminants, if any, are detected in their drinking water as well as related health effects. CCRs also provide information on water sources and treatments applied. CCRs are due annually by July 1st of the year following the reporting year, thus the 2020 CalAm Water System CCR had yet to be published as of the date of this report. See also **Section 7.0** for a discussion of the vertical and horizontal migration of the recharge water plume.

9.0 OPERATIONAL CHANGES OF UNIT PROCESSES AND FACILITIES

A description of any changes in the operation of any unit processes or facilities...

9.1 On-Line TOC Monitoring

In a presentation to DDW and the Board in July, M1W proposed to use an online TOC analyzer at the AWPFPWPS in lieu of the 24-hour composite samples to increase efficiencies and continue to fulfill the requirements of section 60320.218(a) for TOC monitoring of Product Water. DDW approved (letter dated September 25, 2020) and requested the Board update the Monitoring and Reporting Program (MRP) R3-2019-0116 or adopt subsequent MRP to reflect the following:

1. MRP R3-2019-0116 section III.2 Monthly Reports, new item I (revisions shown in bold text):

1. MRP R3-2019-0116 section III.2. Monthly Reports, new item i (revisions shown in **bold text**):

Product Water TOC results shall be reported as follows:

- i. **Weekly average**
 - a. **For continuous TOC analyzer results, the weekly average shall be the arithmetic mean of all readings collected within the calendar week;**
 - b. **For hourly grab samples, the weekly average shall be the arithmetic mean of all samples collected during the week.**
- ii. **The average of the last four (4) TOC results shall be the average of the last four weekly average results;**
- iii. **The 20-week running average of all TOC results shall be the arithmetic mean of all continuous analyzer results and hourly grab sample results collected within the past 20 calendar weeks.**

2. MRP R3-2019-0116 section IV.2. Table M-3: Recycled Water Discharge Limits Monitoring as follows (revisions shown in **bold text**):

Table M-3: Recycled Water Discharge Limits Monitoring				
Constituent/Parameters	Units	Type of Sample	Minimum Frequency of Analysis	Reference Table Number
Total Organic Carbon	mg/L	Metered³	Continuous³	M-3

³ Refer to DDW letter dated September 25, 2020. If the PWPS TOC analyzer is offline, hourly grab samples for 24 consecutive hours (collected once per week) will be accepted in lieu of continuous online TOC measurements. If the PWPS TOC analyzer is offline for more than one (1) week, provide a discussion for the cause and steps taken to bring TOC analyzer back online in the required monthly and quarterly water quality monitoring reports.

9.2 UV AOP to Dose Product

M1W received acceptance pertaining to the Final AOP Test Report dated August 2020 summarizing Carollo Engineers UV AOP System Performance and Optimization Testing in June.

Proposed modifications for the UV AOP system were as follows:

1. Operate:
 - Minimum UV dose setpoint of 2,200 mJ/cm²
 - Minimum H₂O₂ dose setpoint of 6.5 mg/L
 - Setpoints provide UV Dose Peroxide Product of 14,300 mJ/cm²-mg/L
2. UV Reactors operated at a minimum flow rate of 1.0 MGD per reactor and minimum UVT of 90%
3. Conduct calibrations of UVT and UV intensity meters per the requirements of the Draft OOP

Accepted Recommendations per DDW:

1. Operate at critical surrogate operational parameter of H₂O₂ dose (mg/L) and UV dose (mJ/cm²) minimum product of 14,300 mJ/cm²-mg/L and an absolute minimum H₂O₂ dose setpoint of 5.0 mg/L;
2. UV reactors must be operated at a maximum flow rate of 1.0 MGD per reactor and a minimum UVT of 95%; and
3. UVT and UV intensity meters must be calibrated per the requirements of the current OOP

9.3 Product Water Stabilization

M1W had challenges in October related to the existing product water stabilization operations using the liquid lime chemical slurry suspension of Calcium Hydroxide (CaOH₂). After an investigation completed by M1W, Trussell and Kennedy Jenks, it was determined to modify product stabilization to extend injection capacity between rehabilitation of the deep injection wells. M1W are now using calcium chloride and sodium hydroxide to stabilize product water prior to conveyance.

10.0 QUANTITY AND QUALITY OF RECYCLED WATER TO BE UTILIZED IN 2021

The estimated quantity and quality of the recycled water to be utilized for the next calendar year...

The AWP is anticipated to produce at least 4,300 acre-feet/year of recycled water meeting or exceeding Title 22 drinking water standards and requirements of WDR/WRR Order No. R3-2017-0003 and MRP No. R3-2019-0116 for injection to the Seaside Basin to meet contract obligations. As established in discussion with MCWD on March 10, 2021, there will not be any urban landscape irrigation customers served by the Regional Urban Water Augmentation Project (RUWAP) system as supplied by the shared product water pipeline.

11.0 LABORATORY INFORMATION

A list of analytical methods used for each test and associated laboratory quality assurance/quality control procedures. Identification of the laboratories used by M1W to monitor compliance with Order No. R3-2017-0003, their status of certification, and a summary of proficiency test...

11.1 Analytical Methods and Laboratory QA/QC Procedures

Table 134 below provides a list of analytical methods used for each test, as well as associated laboratory QA/QC procedures.

Table 134. Analytical Methods and Laboratory QA/QC Procedures

Laboratory	Method	QA/QC Parameter				
		Blank	Dup	LCS	MS/MSD	Sur/IS
Alpha	EPA 1664A	X	X	X	X	
Alpha	EPA 200.7	X	X	X	X	
Alpha	EPA 200.8	X	X	X	X	
Alpha	EPA 218.6	X	X	X	X	
Alpha	EPA 300.0	X	X	X	X	
Alpha	EPA 300.1	X		X	X	X
Alpha	EPA 504.1	X	X	X	X	
Alpha	EPA 508	X	X	X		X
Alpha	EPA 515.3	X			X	X
Alpha	EPA 524.2	X	X	X	X	X
Alpha	EPA 531.1	X	X	X	X	
Alpha	EPA 547	X	X	X	X	
Alpha	EPA 548.1	X	X	X		
Alpha	EPA 549.2	X	X	X		
Alpha	EPA 552.2	X	X	X	X	X
Alpha	EPA 624.1	X	X	X	X	X
Alpha	EPA 625.1	X		X	X	X
Alpha	SM2540D	X	X			
Alpha	SM4500-CI F	X	X			
Alpha	SM4500-Norg B		X	X	X	
Alpha	SM5210B	X	X	X		
Alpha	SM5310C	X	X	X	X	
BC Labs	EPA 314.0					
BSK	EPA 200.7	X	X	X	X	
BSK	EPA 200.8	X	X	X	X	
BSK	EPA 300.1	X	X	X	X	
BSK	EPA 314.0	X		X	X	
BSK	EPA 317.0	X			X	
BSK	EPA 504.1	X	X	X	X	X
BSK	EPA 505	X	X	X	X	X
BSK	EPA 515.4	X	X	X	X	X
BSK	EPA 525.3	X	X	X	X	X
BSK	EPA 531.1	X	X	X	X	
BSK	EPA 547	X	X	X	X	X
BSK	EPA 548.1	X	X	X	X	
BSK	EPA 549.2	X	X	X	X	
BSK	EPA 552.3	X	X		X	X
BSK	SM 4500-CN E	X	X	X	X	

Laboratory	Method	QA/QC Parameter				
		Blank	Dup	LCS	MS/MSD	Sur/IS
Ceres	EPA 1613B	X		X		X
Eurofins	EPA 200.8	X	X	X	X	
Eurofins	EPA 218.7	X	X	X	X	
Eurofins	EPA 300.0	X	X	X	X	
Eurofins	EPA 515.4	X		X	X	X
Eurofins	EPA 521	X	X	X	X	X
Eurofins	EPA 522	X		X	X	
Eurofins	EPA 524.2	X	X	X		X
Eurofins	EPA 525.2	X	X	X	X	X
Eurofins	EPA 537.1	X	X	X	X	X
Eurofins	EPA 551.1	X	X	X	X	X
Eurofins	EPA 556	X	X	X	X	X
Eurofins	EPA 624.1	X	X	X	X	X
Eurofins	EPA 625.1	X	X	X		X
Eurofins	EPA 8015B	X	X	X	X	
Eurofins	LC-MS-MS	X	X	X	X	
Eurofins	EPA 905	X	X	X		
FGL	EPA 524	X		X	X	
FGL	EPA 900	X		X	X	
FGL	EPA 903	X	X	X		
FGL	Ra - 05	X	X	X		
FGL	EPA 906	X	X	X		
LA Testing/EMSL	EPA 100.2	X				
MBAS	EPA 200.7	X	X	X	X	
MBAS	SM 5910 B	X	X	X		
M1W	SM 4500-NH3 C	X	X	X	X	
M1W	SM 5310 B	X	X	X	X	
McC Campbell	MAI-Alcohols	X	X	X		
McC Campbell	SW8315A	X	X	X		
MCHD	EPA200.8 REV 5.4	X		X	X	
MCHD	EPA300.0 REV 2.1	X	X	X	X	
MCHD	SM 2120B	X	X	X		
MCHD	SM 2130B	X	X	X		
MCHD	SM 2510B	X	X	X		
MCHD	SM 2540C	X	X	X		
MCHD	SM 5540C	X		X	X	
MCHD	SM4500 NO2 B	X	X	X	X	
MCHD	SM4500H+ B-2000		X	X		

Dup = Sample Dup, LCS Dup or Rep

LCS = LFB, SB, ICV or CCV

MS/MSD = MS or MS/MSD

Sur/IS= Surrogate and/or Internal Standard

Figure 134. Analytical Methods and Laboratory QA/QC Procedures – N/A

11.3 Laboratories Utilized

Table 135, below provides a list of the laboratories used by M1W to monitor compliance with Order No. RE-2017-0003. See **Appendix B** for laboratory ELAP certifications.

Table 135. Laboratories Utilized

Alpha Analytical Laboratories, Inc. – Ukiah ELAP #1551 208 Mason Street Ukiah, CA 95482 (707) 468-0401	Eurofins Calscience ELAP #2706 17461 Derian Avenue Irvine, CA 92614-5817 (949) 261-1022
Alpha Analytical Laboratories Inc. - North Bay ELAP #233 110 Liberty Street Petaluma, CA 94952 (707) 769-3128	Eurofins Eaton Analytical, LLC – Monrovia ELAP #2813 750 Royal Oaks Drive, Suite 100 Monrovia, CA 91016 (626) 386-1100
BC Laboratories Inc. ELAP #1186 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911	Eurofins TestAmerica Savannah ELAP #2939 5102 LaRoche Avenue Savannah, CA 31404 (912) 354-7858
BSK Associates ELAP #1180 1414 Stanislaus Street Fresno, CA 93706-1623 (559) 497-2888	FGL ELAP # 1573 853 Corporation Street Santa Paula, CA 93060 (805) 392-2000
Ceres Analytical Laboratory, Inc. ELAP #3046 4919 Windplay Drive, Suite 1 El Dorado Hills, CA 95762 (916) 932-5011	Monterey Bay Analytical Services ELAP #2385 4 Justin Court, Suite D Monterey, CA 93940 (831) 375-6227
EMSL Analytical, Inc. ELAP #2283 520 Mission Street South Pasadena, CA 91030 (800) 303-0047	McC Campbell Analytical, Inc. ELAP # 1644 1534 Willow Pass Road Pittsburg, CA 94565 (925) 252-9262
Eurofins Calscience, LLC ELAP#2944 7440 Lincoln Way Garden Grove, CA 92841-1427 (714) 895-5494	Monterey County Consolidated Environmental Laboratory ELAP # 1395 1270 Natividad Road, Room A15 Salinas, CA 93906 (831) 755-4516
Monterey One Water ELAP #1195 14811 Del Monte Boulevard Marina, CA 93933 (831) 883-6120	

11.4 Proficiency Tests

Once per year laboratories are required to obtain an “Acceptable” PT score for each Field of Testing (FOT) the laboratory is applying for or currently accredited for. See **Appendix A** for laboratory proficiency testing documentation for laboratories utilized for compliance with WDR/WRR Order No. R3-2017-003 and MRP R3-2019-0116.

12.0 STAFFING

A list of current operating personnel, their responsibilities, and their corresponding grade certification.

The AWPf is located on the RTP property, where M1W's existing operations staff are based. The RTP serves as the operations and maintenance hub for the AWPf. The existing control room at the RTP has human-machine interface (HMI) screens used to monitor and operate the AWPf. There is also a local HMI in the AWPf Membrane Process Building and Operators at the AWPf have mobile tablets and laptop computers to remotely access the supervisory control and data acquisition (SCADA) system screens to monitor and control the facility.

The AWPf is operated and monitored 24 hours per day, 7 days per week. Marina Coast Water District (MCWD) staff operate and maintain the conveyance pipeline and reservoir. **Table 136** lists the staff responsible for operating the RTP and the AWPf including their names, titles, and certifications.

Table 136. Operational Personnel, Responsibilities, and Certifications

Title	Name	Certificate #	Certification Type
Chief Plant Operator	Jose Guzman	V-28470	WWTP Operator
Operations Supervisor	Nathan Clark ²	V-28858	WWTP Operator
Operations Supervisor	David Bradley	V-29017 AWT--123	WWTP Operator Advanced Water Treatment Operator
Sr. Operator	Neil Steiner	V-42403 II-42403 II-T2-40374	WWTP Operator Water Distribution Operator Water Treatment Operator
Sr. Operator	Garon Goularte ¹	V-28342	WWTP Operator
WWTP Operator III	Robert Locke	V-8477	WWTP Operator
WWTP Operator III	Carol Simon	V-8435 II-19453	WWTP Operator Distribution
WWTP Operator III	Mike Swearingen	III-10926	WWTP Operator
WWTP Operator III	Guadalupe Avila	V-9495 I-23404	WWTP Operator Water
WWTP Operator III	Thomas Tolerson	III-9993	WWTP Operator
WWTP Operator III	Jaime Hernandez	V-10382	WWTP Operator
Operator III	Lucas Martin	III-43531	WWTP Operator
Operator III	Juan Carlos Rocha ¹	III-42675 II-D2-45020	WWTP Operator Water Distribution Operator
Operator III	Nicholas Norman	III-43479	WWTP Operator
Operator III	Javier Robledo	III-43631	WWTP Operator
WWTP Operator II	Freddy Mendez	III-39834	WWTP Operator
WWTP Operator II	Stefan Wilson	III-42213	WWTP Operator
Operator II	Cody Whiteside	II-41922	WWTP Operator
Operator I	Colton Trott	I-43640	WWTP Operator
Operator III	Ilya Levitin	V-40970	WWTP Operator
Operator II	Sean Huang	III-44009 II-50606 II-T2-41828	WWTP, Water Distribution & Water Treatment Operator
Operator II	Milton Alcon	II- 41352 I-T1-40177	WWTP & Water Treatment Operator
Operator II	Derrik Treur	II-44249	WWTP Operator
Operator in Training	Joshua Meiningner	---	Operator in Training
Operator in Training	Jacob Regester	---	Operator in Training (Intern)

13.0 REPORT PREPARERS

The Annual Report must be prepared by a properly qualified engineer registered and licensed in California and experienced in the field of wastewater treatment.

Table 137. below lists the staff who contributed to the preparation of this Annual Report, including properly-qualified engineers registered and licensed in California and field experts consulted.

Table 137. Report Preparers

Name	Title
Tamsen McNarie	Assistant General Manager
Jose Guzman	Chief Plant Operator
Jennifer Gonzalez, P.E.	Engineering Manager
Jonathan Mungcal	Utilities & Maintenance Services Manager
Tom Kouretas, P.E.	Associate Engineer
Alison Imamura, P.E.	Associate Engineer
Jerry Valladao, P.E.	Associate Engineer
Sarah McGinnis	Interim Laboratory Supervisor QA/QC Analyst
Sarah Stevens	Administrative Analyst/Regulatory
Experts Consulted	
Name	Title, Entity
Jon Lear, PG, CHG	Water Resources Division Manager, MPWMD
John Kenney, P.E.	Trussell Technology
Gus Yates, PG, CHG	Todd Groundwater, Senior Hydrogeologist

14.0 SUMMARY OF MONITORING REPORTS, REPORTING, AND TREND ANALYSES

A summary of monitoring reports, reporting, and trend analysis, to describe the changes in water quality and contrast them to background measurements for all constituents exceeding MCLs or where concentration trends increase after the addition of recycled water. Specifically describe studies or investigations made to identify the source, fate and transport path of constituents which exceed the MCL at monitoring wells.

See **Section 6.0** for a summary of trend analysis describing the changes in water quality and contrasting them to background measurements for all constituents exceeding MCLs or where concentration trends increased after the addition of recycled water.

Monitoring reports have been successfully submitted by M1W and associated contractors on a Monthly and Quarterly basis throughout the first year of operation of the Advanced Water Purification Facility and Groundwater Replenishment Project. Quarterly reports of the intrinsic tracer study on the Monitoring wells have been submitted to the Regional Board by Todd Groundwater as are discussed in **Section 7.0**.

Any MCL exceedances were reported to DDW and the Regional Board via email when M1W became aware of them, were discussed in the Quarterly reports and in **Section 6.0** of this report. MW-2D had an MCL exceedance of arsenic that was short-lived and returned to levels consistent with the Seaside Basin average. MW-1D has shown an increase in nitrate, nitrate plus nitrite and total nitrogen, but has remained below the MCL. AWPf Product Water has also remained below the MCL for these parameters. MW-2AD and MW-1AD have shown an increase in fluoride, but has remained below the MCL. MW-2AS showed a spike in TOC in the fourth quarter. Historical MCL exceedances have been present in the Monitoring wells for odor, manganese, turbidity, nitrate, heptachlor, and toluene. The changes in water quality, in regards to these parameters, are discussed in **Section 6.0**.

15.0 INTER-AGENCY COORDINATION

M1W must submit to DDW and the Central Coast Water board a summary of coordination activities with Marina Coast Water District on the operation and maintenance of the Product Water Pipeline and the Purified Water Reservoir necessary for the protection of the product water for injection. At a minimum, M1W must be kept informed of the status of testing and maintenance of backflow preventers on the Product Water Pipeline, occurrence of backflow incidents (if any), and maintenance activities of the Purified Water Reservoir.

15.1 Coordination with MCWD

In August, M1W established a Seaside Water Quality and Operations Committee that meets monthly to coordinate with various stakeholders regarding the Pure Water Monterey Project injection operations and groundwater quality issues. Agendas and presentation materials were provided to the Regional Water Control Board and DDW. In addition, M1W met with MCWD to discuss the conveyance pipeline and Blackhorse Reservoir operations on October 22nd. The team acknowledged that the facilities have been operating reliably for Seaside Basin injection as expected and that MCWD had not started to use purified recycled water for urban irrigation. At that time, MCWD indicated that they will not be using purified recycled water until summer of 2021 at the earliest. On March 10, 2021 M1W and MCWD met virtually to confirm 2021/22 irrigation demands.

15.1.1 Testing and Maintenance of Backflow Preventers

No backflow testing was performed in 2020.

15.1.2 Occurrences of Backflow Incidents

No backflow incidents occurred in 2020.

15.1.3 Maintenance Activities of the Purified Recycled Water Reservoir

MCWD performs quarterly inspections of the recycled water reservoir. These inspection schedules are incorporated into MCWD's Computerized Maintenance Management System (CMMS).

16.0 RECYCLED WATER POLICY VOLUMETRIC ANNUAL REPORT

Volumetric Monitoring: M1W must report in accordance with each of the items in section 3 of the Recycled Water Policy...

M1W has submitted the Volumetric Annual Report, per Section 3 of the Recycled Water Policy, under separate cover to the Regional Water Board and DDW on April 30, 2021.

17.0 CERTIFICATION STATEMENT

I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the 30th day of April 2021 at 6:45pm

Jose O. Guzman

Digitally signed by Jose O. Guzman
DN: cn=Jose O. Guzman, gn=Jose O. Guzman, c=US, United States, I=US, United States
o=Monterey One Water, ou=Operations, e=joguz@mywater.org
Reason: I am the author of this document
Location:
Date: 2021-05-04 12:31:07-08

(Signature)

*Jose O. Guzman
Chief Plant Operator*

Appendix A. Laboratory Proficiency Test Documentation



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Monterey One Water (M1W)

Laboratory Division

14811 Del Monte Boulevard

Marina, CA 93933

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1195**

Expiration Date: **5/31/2021**

Effective Date: **6/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Monterey County Consolidated Environmental Laboratory

1270 Natividad Road

Salinas, CA 93906

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1395**

Expiration Date: **12/31/2020**

Effective Date: **1/1/2019**

Sacramento, California
subject to forfeiture or revocation

A handwritten signature in black ink, reading "Christine Sotelo".

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

Alpha Analytical Laboratories, Inc. – Ukiah

208 Mason Street

Ukiah, CA 95482

Phone: (707) 468-0401

Certificate No. 1551

Expiration Date 6/30/2021

***As of 6/15/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.010	002	Heterotrophic Bacteria	SimPlate
101.020	001	Total Coliform P/A	SM 9221 B
101.020	002	Fecal Coliform P/A	SM 9221 B, E
101.020	003	E. coli P/A	SM 9221 B, F
101.020	004	Total Coliform (Enumeration)	SM 9221 B, C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B, E
101.020	006	E. coli (Enumeration)	SM 9221 B, F
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0

Subgroup Code	Analyte Code	Analyte	Method
102.030	007	Nitrite (as N)	EPA 300.0
102.030	008	Phosphate, Ortho (as P)	EPA 300.0
102.030	009	Sulfate (as SO ₄)	EPA 300.0
102.040	001	Bromide	EPA 300.1
102.040	002	Chlorite	EPA 300.1
102.040	003	Chlorate	EPA 300.1
102.040	004	Bromate	EPA 300.1
102.045	001	Perchlorate	EPA 314.0
102.095	001	Turbidity	SM 2130 B-2001
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.121	001	Hardness	SM 2340 C-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.174	001	Chlorine, Free	SM 4500-Cl F-2000
102.174	002	Chlorine, Total Residual	SM 4500-Cl F-2000
102.203	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
102.220	001	Nitrite (as N)	SM 4500-NO ₂ B-2000
102.232	002	Nitrate (as N)	SM 4500-NO ₃ - E-2000
102.240	001	Phosphate, Ortho (as P)	SM 4500-P E-1999
102.242	001	Silica	SM 4500-SiO ₂ C-1997
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000
102.565	001	Cyanide, Total	Quickchem 10-204-00-1-X

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	004	Beryllium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8

Subgroup Code	Analyte Code	Analyte	Method
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium (VI)	EPA 218.6

Field of Testing: 104 – Volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
104.030	001	1,2-Dibromoethane (EDB, Ethylene Dibromide)	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1
104.040	000	Volatile Organic Compounds	EPA 524.2

Field of Testing: 105 – Semi-volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
105.030	000	N-, P- Pesticides	EPA 507
105.035	000	Organochlorine Pesticides and PCBs	EPA 508
105.082	000	Chlorinated Acids	EPA 515.3
105.091	000	Semi-volatile Organic Compounds	EPA 525.3
105.100	000	Carbamates	EPA 531.1
105.120	001	Glyphosate	EPA 547
105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.200	008	Haloacetic Acids (HAA5)	EPA 552.2

Field of Testing: 106 – Radionuclides in Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
106.092	001	Uranium	EPA 200.8

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.020	002	Total Coliform	SM 9221 B-2006
107.030	002	Total Coliform with Chlorine Present	SM 9221 B-2006
107.040	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
107.050	002	Fecal Coliform with Chlorine Present	SM 9221 C, E-2006
107.242	001	Enterococci	Enterolert
107.245	002	E. coli (Enumeration)	SM 9223 B Colilert

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.112	001	Boron	EPA 200.7
108.112	002	Calcium	EPA 200.7
108.112	004	Magnesium	EPA 200.7
108.112	005	Potassium	EPA 200.7
108.112	007	Sodium	EPA 200.7
108.112	008	Phosphorus, Total	EPA 200.7
108.113	001	Boron	EPA 200.8
108.120	002	Chloride	EPA 300.0
108.120	003	Fluoride	EPA 300.0
108.120	008	Sulfate (as SO ₄)	EPA 300.0
108.120	012	Nitrate (as N)	EPA 300.0
108.120	013	Nitrate-Nitrite (as N)	EPA 300.0
108.120	014	Nitrite (as N)	EPA 300.0
108.120	015	Phosphate, Ortho (as P)	EPA 300.0
108.121	001	Bromide	EPA 300.1 (1997 Rev.1.0)
108.360	001	Phenols, Total	EPA 420.1
108.381	001	Oil & Grease Total	EPA 1664 A
108.390	001	Turbidity	SM 2130 B-2001
108.410	001	Alkalinity	SM 2320 B-1997
108.420	001	Hardness (Calculation)	SM 2340 B-1997
108.421	001	Hardness	SM 2340 C-1997
108.430	001	Specific Conductance	SM 2510 B-1997
108.439	001	Residue, Volatile	SM 2540 E-1997
108.440	001	Residue, Total	SM 2540 B-1997
108.441	001	Residue, Filterable TDS	SM 2540 C-1997
108.442	001	Residue, Non-filterable TSS	SM 2540 D-1997
108.443	001	Residue, Settleable	SM 2540 F-1997
108.464	001	Chlorine, Total Residual	SM 4500-CI F-2000
108.464	002	Chlorine, Free	SM 4500-CI F-2000
108.490	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
108.500	002	Ammonia (as N)	SM 4500-NH ₃ B, C-1997

Subgroup Code	Analyte Code	Analyte	Method
108.501	002	Kjeldahl Nitrogen, Total (as N)	SM 4500-NH3 B, C-1997
108.511	001	Kjeldahl Nitrogen, Total (as N)	SM 4500-Norg B-1997
108.514	001	Nitrite (as N)	SM 4500-NO2 B-2000
108.528	001	Nitrate-Nitrite (as N)	SM 4500-NO3- E-2000
108.528	003	Nitrate (as N) (Calculation)	SM 4500-NO3- E-2000
108.536	001	Oxygen, Dissolved	SM 4500-O G-2001
108.540	001	Phosphate, Ortho (as P)	SM 4500-P E-1999
108.541	001	Phosphorus, Total	SM 4500-P E-1999
108.552	001	Silica, Dissolved	SM 4500-SiO2 C-1997
108.584	001	Sulfide (as S)	SM 4500-S D-2000
108.592	001	Biochemical Oxygen Demand	SM 5210 B -2001
108.592	002	Carbonaceous BOD	SM 5210 B -2001
108.595	001	Chemical Oxygen Demand	SM 5220 D-1997
108.597	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
108.605	001	Surfactants	SM 5540 C-2000
108.926	001	Cyanide, Total	Quickchem 10-204-00-1-X

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7
109.010	004	Barium	EPA 200.7
109.010	005	Beryllium	EPA 200.7
109.010	006	Boron	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	024	Tin	EPA 200.7
109.010	025	Titanium	EPA 200.7
109.010	026	Vanadium	EPA 200.7

Subgroup Code	Analyte Code	Analyte	Method
109.010	027	Zinc	EPA 200.7
109.020	001	Aluminum	EPA 200.8
109.020	002	Antimony	EPA 200.8
109.020	003	Arsenic	EPA 200.8
109.020	004	Barium	EPA 200.8
109.020	005	Beryllium	EPA 200.8
109.020	006	Cadmium	EPA 200.8
109.020	007	Chromium	EPA 200.8
109.020	008	Cobalt	EPA 200.8
109.020	009	Copper	EPA 200.8
109.020	010	Lead	EPA 200.8
109.020	011	Manganese	EPA 200.8
109.020	012	Molybdenum	EPA 200.8
109.020	013	Nickel	EPA 200.8
109.020	014	Selenium	EPA 200.8
109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.020	021	Iron	EPA 200.8
109.020	022	Tin	EPA 200.8
109.020	023	Titanium	EPA 200.8
109.104	001	Chromium (VI)	EPA 218.6
109.190	001	Mercury	EPA 245.1
109.445	002	Chromium (VI)	SM 3500-Cr B-2009

Field of Testing: 110 – Volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
110.040	000	Purgeable Organic Compounds	EPA 624
110.070	002	n-Amyl Acetate	EPA 1666
110.070	004	n-Butyl Acetate	EPA 1666
110.070	009	Ethyl Acetate	EPA 1666
110.070	010	n-Heptane	EPA 1666
110.070	011	n-Hexane	EPA 1666
110.070	012	Isobutyraldehyde	EPA 1666
110.070	013	Isopropyl Acetate	EPA 1666
110.070	018	Methyl Formate	EPA 1666

Field of Testing: 111 – Semi-volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
111.091	000	Organophosphorus Pesticides	EPA 614
111.100	000	Base/Neutral & Acid Organics	EPA 625
111.170	000	Organochlorine Pesticides and PCBs	EPA 608

Field of Testing: 113 – Environmental Toxicity Methods

Subgroup Code	Analyte Code	Analyte	Method
113.022	003A	Rainbow trout (O. mykiss)	EPA 2019 (EPA-821-R-02-012), Static
113.022	003B	Rainbow trout (O. mykiss)	EPA 2019 (EPA-821-R-02-012), Static Renewal

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.103	001	Chromium (VI)	EPA 7196 A
114.140	001	Mercury	EPA 7470 A
114.141	001	Mercury	EPA 7471 A
114.222	001	Cyanide, Total	EPA 9014
114.240	001	Corrosivity - pH Determination	EPA 9040 B
114.241	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311 (TCLP)
115.030	001	Waste Extraction Test (WET)	CCR Chapter 11, Article 5, Appendix II

Field of Testing: 116 – Volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B

Subgroup Code	Analyte Code	Analyte	Method
116.100	001	Total Petroleum Hydrocarbons – Gasoline (GRO)	LUFT GC/MS Aqueous Only

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015 B
117.016	001	Diesel-range Total Petroleum Hydrocarbons	LUFT
117.110	000	Extractable Organics	EPA 8270 C
117.150	000	Carbonyl Compounds	EPA 8315 A
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.240	000	Organophosphorus Pesticides	EPA 8141 A Aqueous Only
117.250	000	Chlorinated Herbicides	EPA 8151 A Aqueous Only

Field of Testing: 119 – Toxicity Bioassay of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
119.010	001	Fathead Minnow (P. promelas)	Polisini & Miller (CDFG 1998) Interim

Field of Testing: 120 – Physical Properties of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040 B
120.080	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.010	001	Total Coliform (Enumeration)	SM 9221 B-2006
126.030	001	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
126.050	001	Total Coliform (Enumeration)	SM 9223 B Colilert
126.050	002	E. coli (Enumeration)	SM 9223 B Colilert
126.080	001	Enterococci	Enterolert



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Alpha Analytical Laboratories, Inc. - Ukiah

208 Mason Street

Ukiah, CA 95482

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1551**

Expiration Date: **6/30/2021**

Effective Date: **7/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Fruit Growers Laboratory, Inc.

Santa Paula

853 Corporation Street

Santa Paula, CA 93060

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1573**

Expiration Date: **7/31/2021**

Effective Date: **8/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

McC Campbell Analytical, Inc.

1534 Willow Pass Road

Pittsburg, CA 94565

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1644**

Expiration Date: **10/31/2021**

Effective Date: **11/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



**CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing**



McC Campbell Analytical, Inc.

1534 Willow Pass Road
Pittsburg, CA 94565
Phone: 9252529262

**Certificate No. 1644
Expiration Date 10/31/2021**

Field of Testing: 101 - Microbiology of Drinking Water

101.010	001	Heterotrophic Bacteria	SM 9215 B
101.010	002	Heterotrophic Bacteria	SimPlate
101.020	001	Total Coliform P/A	SM 9221 B
101.020	002	Fecal Coliform P/A	SM 9221 B,E
101.020	003	E. coli P/A	SM 9221 B,F
101.020	004	Total Coliform (Enumeration)	SM 9221 B,C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B,E
101.020	006	E. coli (Enumeration)	SM 9221 B,F
101.040	001	Total Coliform P/A	SM 9222 B
101.040	002	Fecal Coliform P/A	SM 9222 D
101.040	005	Total Coliform (Enumeration)	SM 9222 B
101.040	006	Fecal Coliform (Enumeration)	SM 9222 D
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert
101.140	001	Enterococci	SM 9230 B
101.170	001	Enterococci	Enterolert

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.020	001	Turbidity	EPA 180.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.026	006	Hardness (Calculation)	EPA 200.7
102.040	001	Bromide	EPA 300.1
102.040	002	Chlorite	EPA 300.1
102.040	003	Chlorate	EPA 300.1
102.040	004	Bromate	EPA 300.1
102.040	005	Chloride	EPA 300.1
102.040	006	Fluoride	EPA 300.1

102.040	007	Nitrate (as N)	EPA 300.1
102.040	008	Nitrite (as N)	EPA 300.1
102.040	009	Phosphate,Ortho (as P)	EPA 300.1
102.040	010	Sulfate (as SO ₄)	EPA 300.1
102.045	001	Perchlorate	EPA 314.0
102.050	001	Cyanide, Total	EPA 335.4
102.086	001	Dissolved Organic Carbon (DOC)	EPA 415.3 Revision 1.2
102.086	003	Organic Carbon-Total (TOC)	EPA 415.3 Revision 1.2
102.095	001	Turbidity	SM 2130 B-2001
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.121	001	Hardness	SM 2340 C-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.175	001	Chlorine, Free	SM 4500-Cl G-2000
102.175	002	Chlorine, Total Residual	SM 4500-Cl G-2000
102.190	001	Cyanide, Total	SM 4500-CN E-1999
102.192	001	Cyanide, Amenable	SM 4500-CN G-1999
102.203	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
102.243	001	Silica	SM 4500-SiO ₂ D-1997
102.260	001	Organic Carbon-Total (TOC)	SM 5310 B-2000
102.261	001	Dissolved Organic Carbon (DOC)	SM 5310 B-2000
102.270	001	Surfactants	SM 5540 C-2000
102.280	001	UV254	SM 5910 B-2011
102.564	001	Cyanide, Total	Kelada-01

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.130	001	Aluminum	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8

103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.161	001	Mercury	EPA 245.2
103.310	001	Chromium VI (Hexavalent Chromium)	EPA 218.6
103.311	001	Chromium VI (Hexavalent Chromium)	EPA 218.7

Field of Testing: 104 - Volatile Organic Chemistry of Drinking Water

104.035	001	1,2,3-Trichloropropane (TCP)	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.2
104.040	026	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.2
104.040	027	trans-1,2-Dichloroethylene (trans- 1,2 Dichloroethene)	EPA 524.2
104.040	028	Dichloromethane (Methylene Chloride)	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 524.2
104.040	034	trans-1,3-Dichloropropylene (trans-1,3 Dichloropropene)	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethylene (Tetrachloroethene)	EPA 524.2
104.040	046	Toluene	EPA 524.2

104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethylene (Trichloroethene)	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.040	061	Carbon Disulfide	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	005	Trichlorotrifluoroethane	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2
104.055	000	Volatile Organic Compounds	EPA 524.3
104.055	001	Benzene	EPA 524.3
104.055	002	Carbon Tetrachloride	EPA 524.3
104.055	003	Chlorobenzene	EPA 524.3
104.055	004	1,2-Dichlorobenzene	EPA 524.3
104.055	005	1,4-Dichlorobenzene	EPA 524.3
104.055	006	1,2-Dichloroethane	EPA 524.3
104.055	007	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.3
104.055	008	trans-1,2-Dichloroethylene (trans- 1,2 Dichloroethene)	EPA 524.3
104.055	009	Dichloromethane (Methylene Chloride)	EPA 524.3
104.055	010	1,2-Dichloropropane	EPA 524.3
104.055	011	Ethylbenzene	EPA 524.3
104.055	012	Styrene	EPA 524.3
104.055	013	Tetrachloroethylene (Tetrachloroethene)	EPA 524.3
104.055	014	1,1,1-Trichloroethane	EPA 524.3
104.055	015	Trichloroethylene (Trichloroethene)	EPA 524.3
104.055	016	Toluene	EPA 524.3
104.055	017	1,2,4-Trichlorobenzene	EPA 524.3
104.055	018	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.3
104.055	019	1,1,2-Trichloroethane	EPA 524.3

104.055	020	Vinyl Chloride	EPA 524.3
104.055	021	Xylenes, Total	EPA 524.3
104.055	022	1,2-Dibromo-3-chloropropane (DBCP)	EPA 524.3
104.055	023	1,2-Dibromoethane (EDB)	EPA 524.3
104.056	000	Trihalomethanes, Total	EPA 524.3
104.056	001	Bromodichloromethane	EPA 524.3
104.056	002	Bromoform	EPA 524.3
104.056	003	Chloroform	EPA 524.3
104.056	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.3
104.057	000	Gasoline Additives	EPA 524.3
104.057	001	Di-isopropyl Ether (DIPE)	EPA 524.3
104.057	002	Methyl tert-butyl Ether (MTBE)	EPA 524.3
104.057	003	tert-Amyl Methyl Ether (TAME)	EPA 524.3
104.057	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.3
104.057	005	Trichlorofluoromethane	EPA 524.3
104.057	006	tert-Butyl Alcohol (TBA)	EPA 524.3
104.057	007	Trichlorotrifluoroethane (Freon 113)	EPA 524.3

Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water

105.010	000	Organochlorine Pesticides and PCBs	EPA 505
105.010	004	Chlordane	EPA 505
105.010	006	Endrin	EPA 505
105.010	007	Heptachlor	EPA 505
105.010	008	Heptachlor Epoxide	EPA 505
105.010	009	Hexachlorobenzene	EPA 505
105.010	010	Hexachlorocyclopentadiene	EPA 505
105.010	011	Lindane (HCH-gamma)	EPA 505
105.010	012	Methoxychlor	EPA 505
105.010	014	Toxaphene	EPA 505
105.010	015	PCBs as Aroclors (screen)	EPA 505
105.082	000	Chlorinated Acids	EPA 515.3
105.082	001	2,4-D	EPA 515.3
105.082	002	Dinoseb	EPA 515.3
105.082	003	Pentachlorophenol	EPA 515.3
105.082	004	Picloram	EPA 515.3
105.082	005	2,4,5-TP (Silvex)	EPA 515.3
105.082	006	Bentazon	EPA 515.3
105.082	007	Dalapon	EPA 515.3
105.082	008	Dicamba	EPA 515.3
105.090	000	Semi-volatile Organic Compounds	EPA 525.2
105.090	003	Atrazine	EPA 525.2
105.090	004	Benzo(a)pyrene	EPA 525.2
105.090	008	Di(2-ethylhexyl) Adipate	EPA 525.2

105.090	009	Di(2-ethylhexyl) Phthalate	EPA 525.2
105.090	016	Hexachlorobenzene	EPA 525.2
105.090	017	Hexachlorocyclopentadiene	EPA 525.2
105.090	022	Molinate	EPA 525.2
105.090	023	Pentachlorophenol	EPA 525.2
105.090	025	Simazine	EPA 525.2
105.091	000	Semi-volatile Organic Compounds	EPA 525.3
105.091	001	Alachlor	EPA 525.3
105.091	003	Atrazine	EPA 525.3
105.091	005	Benzo(a)pyrene	EPA 525.3
105.091	009	Di(2-ethylhexyl) Adipate	EPA 525.3
105.091	011	Endrin	EPA 525.3
105.091	012	Heptachlor	EPA 525.3
105.091	013	Heptachlor Epoxide	EPA 525.3
105.091	014	Hexachlorobenzene	EPA 525.3
105.091	015	Hexachlorocyclopentadiene	EPA 525.3
105.091	016	Lindane (HCH-gamma)	EPA 525.3
105.091	017	Methoxychlor	EPA 525.3
105.091	020	Molinate	EPA 525.3
105.091	021	Pentachlorophenol	EPA 525.3
105.091	023	Simazine	EPA 525.3
105.091	024	Thiobencarb	EPA 525.3
105.091	026	PCBs as Aroclors	EPA 525.3
105.100	000	Carbamates	EPA 531.1
105.100	001	Aldicarb (Temik)	EPA 531.1
105.100	002	Aldicarb Sulfone	EPA 531.1
105.100	003	Aldicarb Sulfoxide	EPA 531.1
105.100	004	Carbaryl (Sevin)	EPA 531.1
105.100	005	Carbofuran (Furadan)	EPA 531.1
105.100	006	3-Hydroxycarbofuran	EPA 531.1
105.100	007	Methomyl (Lannate)	EPA 531.1
105.100	008	Oxamyl	EPA 531.1
105.101	000	Carbamates	EPA 531.2
105.101	001	Carbofuran (Furadan)	EPA 531.2
105.101	002	Oxamyl	EPA 531.2
105.101	003	Aldicarb (Temik)	EPA 531.2
105.101	004	Aldicarb Sulfone	EPA 531.2
105.101	005	Aldicarb Sulfoxide	EPA 531.2
105.101	006	Carbaryl (Sevin)	EPA 531.2
105.101	007	3-Hydroxycarbofuran	EPA 531.2
105.101	008	Methomyl (Lannate)	EPA 531.2
105.120	001	Glyphosate	EPA 547

105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.200	001	Bromoacetic Acid	EPA 552.2
105.200	003	Chloroacetic Acid	EPA 552.2
105.200	005	Dibromoacetic Acid	EPA 552.2
105.200	006	Dichloroacetic Acid	EPA 552.2
105.200	007	Trichloroacetic Acid	EPA 552.2
105.200	008	Haloacetic Acids (HAA5)	EPA 552.2
105.230	000	Dioxins	EPA 1613
105.230	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613
105.230	002	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Screening Only	EPA 1613

Field of Testing: 107 - Microbiological Methods for Non-Potable Water and Sewage Sludge

107.001	001	Total Coliform (Enumeration)	SM 9221 B,C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C,E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C,F-2006
107.003	001	Total Coliform (Enumeration)	SM 9222 B-2006
107.003	002	Fecal Coliform (Enumeration)	SM 9222 D-2006
107.005	001	E. coli (Enumeration)	SM 9223 B-2004
107.007	001	Enterococci	SM 9230 B-2007
107.017	001	Enterococci	Enterolert

Field of Testing: 108 - Inorganic Constituents in Non-Potable Water

108.001	001	Specific Conductance	EPA 120.1 (1982 Rev.1.0)
108.007	001	Residue, Volatile	EPA 160.4 (1971)
108.009	001	Turbidity	EPA 180.1 (1993 Rev. 2.0)
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	003	Phosphorus, Total	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.015	001	Calcium	EPA 200.8 (1994 Rev. 5.4)
108.015	002	Magnesium	EPA 200.8 (1994 Rev. 5.4)
108.015	003	Potassium	EPA 200.8 (1994 Rev. 5.4)
108.015	005	Sodium	EPA 200.8 (1994 Rev. 5.4)
108.019	001	Bromide	EPA 300.1 (1997 Rev.1.0)
108.019	002	Chloride	EPA 300.1 (1997 Rev.1.0)
108.019	003	Fluoride	EPA 300.1 (1997 Rev.1.0)
108.019	004	Nitrate (as N)	EPA 300.1 (1997 Rev.1.0)
108.019	005	Nitrate-Nitrite (as N)	EPA 300.1 (1997 Rev.1.0)
108.019	006	Nitrite (as N)	EPA 300.1 (1997 Rev.1.0)
108.019	007	Phosphate, Ortho (as P)	EPA 300.1 (1997 Rev.1.0)
108.019	008	Sulfate (as SO ₄)	EPA 300.1 (1997 Rev.1.0)

108.021	001	Alkalinity	EPA 310.2 (1974 Rev. 1.0)
108.023	001	Cyanide, Total	EPA 335.4 (1993 Rev. 1.0)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen, Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.033	001	Nitrate-Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.035	002	Phosphorus, Total	EPA 365.1 (1993 Rev. 2.0)
108.037	001	Phosphate, Ortho (as P)	EPA 365.3 (1978)
108.045	001	Chemical Oxygen Demand	EPA 410.4 (1993 Rev. 2.0)
108.047	001	Phenols, Total	EPA 420.1 (1978 Rev. 1.0)
108.049	001	Phenols, Total	EPA 420.4 (1993 Rev. 2.0)
108.053	001	Oil & Grease Total	EPA 1664 A
108.055	001	Color	SM 2120 B-2011
108.059	001	Turbidity	SM 2130 B-2011
108.061	001	Acidity	SM 2310 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.065	001	Hardness (Calculation)	SM 2340 B-2011
108.067	001	Hardness	SM 2340 C-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.077	001	Residue, Volatile	SM 2540 E-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.108	001	Chlorine, Total Residual	SM 4500-Cl E-2011
108.114	001	Chlorine, Total Residual	SM 4500-Cl G-2011
108.114	002	Chlorine, Free	SM 4500-Cl G-2011
108.125	001	Cyanide, Total	SM 4500-CN E-2011
108.129	001	Cyanide, Available	SM 4500-CN G-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.147	001	Ammonia (as N)	SM 4500-NH3 G-2011
108.159	001	Nitrate-Nitrite (as N)	SM 4500-NO3 F-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.215	001	Organic Carbon-Total (TOC)	SM 5310 B-2011
108.225	001	Surfactants	SM 5540 C-2011
108.335	001	Cyanide, Total	Kelada-01

Field of Testing: 109 - Metals and Trace Elements in Non-Potable Water

109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)

109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	006	Boron	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	012	Iron	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	020	Tin	EPA 200.8 (1994 Rev. 5.4)
109.625	021	Titanium	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.629	001	Chromium VI (Hexavalent Chromium)	EPA 218.6 (1994 Rev. 3.3)
109.635	001	Mercury	EPA 245.1 (1994 Rev. 3.0)
109.637	001	Mercury	EPA 245.2 (1974)
109.657	001	Mercury	EPA 1631 E (2002)

Field of Testing: 110 - Volatile Organic Constituents in Non-Potable Water

110.040	001	Acetone	EPA 624.1
110.040	003	Acrolein	EPA 624.1
110.040	004	Acrylonitrile	EPA 624.1
110.040	005	Benzene	EPA 624.1
110.040	006	Bromodichloromethane	EPA 624.1
110.040	007	Bromoform	EPA 624.1
110.040	008	Bromomethane (Methyl Bromide)	EPA 624.1
110.040	010	Carbon Tetrachloride	EPA 624.1
110.040	011	Chlorobenzene	EPA 624.1
110.040	012	Chloroethane	EPA 624.1
110.040	013	2-Chloroethyl vinyl Ether	EPA 624.1
110.040	014	Chloroform	EPA 624.1
110.040	015	Chloromethane (Methyl Chloride)	EPA 624.1
110.040	016	Dibromochloromethane (Chlorodibromomethane)	EPA 624.1

110.040	017	1,2-Dichlorobenzene	EPA 624.1
110.040	018	1,3-Dichlorobenzene	EPA 624.1
110.040	019	1,4-Dichlorobenzene	EPA 624.1
110.040	020	1,1-Dichloroethane	EPA 624.1
110.040	021	1,2-Dichloroethane	EPA 624.1
110.040	022	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 624.1
110.040	024	1,2-Dichloropropane	EPA 624.1
110.040	025	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 624.1
110.040	026	trans-1,3-Dichloropropylene (trans-1,3 Dichloropropene)	EPA 624.1
110.040	029	Ethylbenzene	EPA 624.1
110.040	031	Methylene Chloride (Dichloromethane)	EPA 624.1
110.040	032	4-Methyl-2-pentanone (MIBK)	EPA 624.1
110.040	034	1,1,2,2-Tetrachloroethane	EPA 624.1
110.040	035	Tetrachloroethylene (Tetrachloroethene)	EPA 624.1
110.040	037	Toluene	EPA 624.1
110.040	038	1,1,1-Trichloroethane	EPA 624.1
110.040	039	1,1,2-Trichloroethane	EPA 624.1
110.040	040	Trichloroethylene (Trichloroethene)	EPA 624.1
110.040	041	Vinyl Chloride	EPA 624.1
110.040	042	m-Xylene	EPA 624.1
110.040	043	o-Xylene	EPA 624.1
110.040	044	p-Xylene	EPA 624.1
110.040	045	Trichlorofluoromethane	EPA 624.1

Field of Testing: 111 - Semi-volatile Organic Constituents in Non-Potable Water

111.055	001	Aldrin	EPA 608.3
111.055	002	alpha-BHC	EPA 608.3
111.055	003	beta-BHC	EPA 608.3
111.055	004	delta-BHC	EPA 608.3
111.055	005	gamma-BHC (Lindane)	EPA 608.3
111.055	006	Chlordane	EPA 608.3
111.055	007	4,4'-DDD	EPA 608.3
111.055	008	4,4'-DDE	EPA 608.3
111.055	009	4,4'-DDT	EPA 608.3
111.055	010	Dieldrin	EPA 608.3
111.055	011	Endosulfan I	EPA 608.3
111.055	012	Endosulfan II	EPA 608.3
111.055	013	Endosulfan Sulfate	EPA 608.3
111.055	014	Endrin	EPA 608.3
111.055	015	Endrin Aldehyde	EPA 608.3
111.055	016	Heptachlor	EPA 608.3
111.055	017	Heptachlor Epoxide	EPA 608.3
111.055	019	PCB-1016	EPA 608.3

111.055	020	PCB-1221	EPA 608.3
111.055	021	PCB-1232	EPA 608.3
111.055	022	PCB-1242	EPA 608.3
111.055	023	PCB-1248	EPA 608.3
111.055	024	PCB-1254	EPA 608.3
111.055	025	PCB-1260	EPA 608.3
111.055	046	Methoxychlor	EPA 608.3
111.055	060	Toxaphene	EPA 608.3
111.070	001	Acenaphthene	EPA 610
111.070	002	Acenaphthylene	EPA 610
111.070	003	Anthracene	EPA 610
111.070	004	Benzo(a)anthracene	EPA 610
111.070	005	Benzo(a)pyrene	EPA 610
111.070	006	Benzo(b)fluoranthene	EPA 610
111.070	007	Benzo(g,h,i)perylene	EPA 610
111.070	008	Benzo(k)fluoranthene	EPA 610
111.070	009	Chrysene	EPA 610
111.070	010	Dibenz(a,h)anthracene	EPA 610
111.070	011	Fluoranthene	EPA 610
111.070	012	Fluorene	EPA 610
111.070	013	Indeno(1,2,3-c,d)pyrene	EPA 610
111.070	014	Naphthalene	EPA 610
111.070	015	Phenanthrene	EPA 610
111.070	016	Pyrene	EPA 610
111.110	001	Azinphos Methyl	EPA 614
111.110	004	Diazinon	EPA 614
111.110	005	Disulfoton	EPA 614
111.110	006	Ethion	EPA 614
111.110	007	Malathion	EPA 614
111.110	008	Parathion Ethyl	EPA 614
111.110	009	Parathion Methyl	EPA 614
111.160	001	Acenaphthene	EPA 625.1
111.160	002	Acenaphthylene	EPA 625.1
111.160	003	Anthracene	EPA 625.1
111.160	004	Benzidine	EPA 625.1
111.160	005	Benzo(a)anthracene	EPA 625.1
111.160	006	Benzo(a)pyrene	EPA 625.1
111.160	007	Benzo(b)fluoranthene	EPA 625.1
111.160	008	Benzo(g,h,i)perylene	EPA 625.1
111.160	009	Benzo(k)fluoranthene	EPA 625.1
111.160	010	Bis(2-chloroethoxy) Methane	EPA 625.1
111.160	011	Bis(2-chloroethyl) Ether	EPA 625.1

111.160	013	Bis(2-ethylhexyl)phthalate	EPA 625.1
111.160	014	4-Bromophenyl Phenyl Ether	EPA 625.1
111.160	015	Butyl Benzyl Phthalate	EPA 625.1
111.160	016	2-Chloronaphthalene	EPA 625.1
111.160	017	4-Chlorophenyl Phenyl Ether	EPA 625.1
111.160	018	Chrysene	EPA 625.1
111.160	019	Dibenz(a,h)anthracene	EPA 625.1
111.160	020	3,3'-Dichlorobenzidine	EPA 625.1
111.160	021	Diethyl Phthalate	EPA 625.1
111.160	022	Dimethyl Phthalate	EPA 625.1
111.160	023	Di-n-butyl Phthalate	EPA 625.1
111.160	024	2,4-Dinitrotoluene	EPA 625.1
111.160	025	2,6-Dinitrotoluene	EPA 625.1
111.160	026	Di-n-octyl Phthalate	EPA 625.1
111.160	027	Fluoranthene	EPA 625.1
111.160	028	Fluorene	EPA 625.1
111.160	029	Hexachlorobenzene	EPA 625.1
111.160	030	Hexachlorobutadiene	EPA 625.1
111.160	031	Hexachloroethane	EPA 625.1
111.160	032	Indeno(1,2,3-c,d)pyrene	EPA 625.1
111.160	033	Isophorone	EPA 625.1
111.160	034	Naphthalene	EPA 625.1
111.160	035	Nitrobenzene	EPA 625.1
111.160	036	N-nitrosodi-n-propylamine	EPA 625.1
111.160	037	Phenanthrene	EPA 625.1
111.160	038	Pyrene	EPA 625.1
111.160	039	1,2,4-Trichlorobenzene	EPA 625.1
111.160	040	4-Chloro-3-methylphenol	EPA 625.1
111.160	041	2-Chlorophenol	EPA 625.1
111.160	042	2,4-Dichlorophenol	EPA 625.1
111.160	043	2,4-Dimethylphenol	EPA 625.1
111.160	044	2,4-Dinitrophenol	EPA 625.1
111.160	045	2-Methyl-4,6-dinitrophenol	EPA 625.1
111.160	046	2-Nitrophenol	EPA 625.1
111.160	047	4-Nitrophenol	EPA 625.1
111.160	048	Pentachlorophenol	EPA 625.1
111.160	049	Phenol	EPA 625.1
111.160	050	2,4,6-Trichlorophenol	EPA 625.1
111.160	056	Azinphos Methyl	EPA 625.1
111.160	081	Diazinon	EPA 625.1
111.160	085	Disulfoton	EPA 625.1
111.160	091	Ethion	EPA 625.1

111.160	098	Hexachlorocyclopentadiene	EPA 625.1
111.160	100	Malathion	EPA 625.1
111.160	108	N-nitrosodimethylamine	EPA 625.1
111.160	109	N-nitrosodi-n-propylamine	EPA 625.1
111.160	110	N-nitrosodiphenylamine	EPA 625.1
111.160	112	Parathion Methyl	EPA 625.1
111.160	134	Terbufos	EPA 625.1
111.250	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613 B
111.250	002	Total Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613 B
111.250	003	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	EPA 1613 B
111.250	004	Total Tetrachlorodibenzofuran (TCDF)	EPA 1613 B
111.250	005	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	EPA 1613 B
111.250	006	Total Pentachlorodibenzo-p-dioxin (PeCDD)	EPA 1613 B
111.250	007	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	EPA 1613 B
111.250	008	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	EPA 1613 B
111.250	009	Total Pentachlorodibenzofuran (PeCDF)	EPA 1613 B
111.250	010	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	011	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	012	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	013	Total Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	014	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	015	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	016	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	017	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	018	Total Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	019	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	EPA 1613 B
111.250	020	Total Heptachlorodibenzo-p-dioxin (HpCDD)	EPA 1613 B
111.250	021	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	EPA 1613 B
111.250	022	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	EPA 1613 B
111.250	023	Total Heptachlorodibenzofuran (HpCDF)	EPA 1613 B
111.250	024	OCDD	EPA 1613 B
111.250	025	OCDF	EPA 1613 B
111.99	001	Bifenthrin	EPA 1660m
111.99	002	Cyfluthrin	EPA 1660m
111.99	003	Cypermethrin	EPA 1660m
111.99	004	Esfenvalerate	EPA 1660m
111.99	005	Lambda-Cyhalothrin	EPA 1660m
111.99	006	Permethrin (total)	EPA 1660m

Field of Testing: 113 - Environmental Toxicity Methods

113.010	001	Fathead Minnow (<i>P. promelas</i>)	Polisini & Miller (CDFG 1988)
113.010	003	Rainbow trout (<i>O. mykiss</i>)	Polisini & Miller (CDFG 1988)
113.011	001A	Fathead Minnow (<i>P. promelas</i>)	EPA 2000.0, Static

113.011	001B	Fathead Minnow (<i>P. promelas</i>)	EPA 2000.0, Static Renewal
113.011	001C	Fathead Minnow (<i>P. promelas</i>)	EPA 2000.0, Continuous Flow
113.012	011A	Daphnid (<i>C. dubia</i>)	EPA 2002.0, Static
113.012	011B	Daphnid (<i>C. dubia</i>)	EPA 2002.0, Static Renewal
113.013	003A	Rainbow trout (<i>O. mykiss</i>)	EPA 2019.0, Static
113.013	003B	Rainbow trout (<i>O. mykiss</i>)	EPA 2019.0, Static Renewal
113.013	003C	Rainbow trout (<i>O. mykiss</i>)	EPA 2019.0, Continuous Flow
113.014	012A	Daphnids (<i>Daphnia</i> spp.)	EPA 2021.0, Static
113.014	012B	Daphnids (<i>Daphnia</i> spp.)	EPA 2021.0, Static Renewal
113.015	017A	Amphipod (<i>Hyalella</i> spp.)	EPA-821-R-02-012, Static
113.015	017B	Amphipod (<i>Hyalella</i> spp.)	EPA-821-R-02-012, Static Renewal
113.020	002A	Sheepshead minnow (<i>C. variegatus</i>)	EPA 2004.0, Static
113.020	002B	Sheepshead minnow (<i>C. variegatus</i>)	EPA 2004.0, Static Renewal
113.021	006A	Silverside (<i>Menidia</i> spp.)	EPA 2006.0, Static
113.021	006B	Silverside (<i>Menidia</i> spp.)	EPA 2006.0, Static Renewal
113.022	009A	Mysid (<i>M. bahia</i>)	EPA 2007.0, Static
113.022	009B	Mysid (<i>M. bahia</i>)	EPA 2007.0, Static Renewal
113.030	001	Fathead Minnow (<i>P. promelas</i>)	EPA 1000.0
113.032	011	Daphnid (<i>C. dubia</i>)	EPA 1002.0
113.033	025	Green algae (<i>S. capricornutum</i>)	EPA 1003.0
113.034	025	Green algae (<i>S. capricornutum</i>)	ASTM E1218-04
113.040	002	Sheepshead minnow (<i>C. variegatus</i>)	EPA 1004.0
113.042	006	Silverside (<i>Menidia</i> spp.)	EPA 1006.0
113.043	009	Mysid (<i>M. bahia</i>)	EPA 1007.0
113.045	007	Topsmelt (<i>A. affinis</i>)	EPA 600/R-95/136
113.045	019B	Sand dollar (<i>D. excentricus</i>)	EPA 600/R-95/136, Development Test
113.045	021A	Purple sea urchin (<i>S. purpuratus</i>)	EPA 600/R-95/136, Fertilization Test
113.045	021B	Purple sea urchin (<i>S. purpuratus</i>)	EPA 600/R-95/136, Development Test
113.045	022	Red abalone (<i>H. rufescens</i>)	EPA 600/R-95/136
113.045	023	Mussels (<i>Mytilus</i> spp.)	EPA 600/R-95/136
113.045	024	Giant Kelp (<i>M. pyrifera</i>)	EPA 600/R-95/136
113.046	025	Diatom (<i>T. pseudonana</i>)	ASTM E1218-04
113.050	013	Amphipod (<i>H. azteca</i>)	EPA 600/R-99/064, EPA 100.1
113.051	008	Midge (<i>C. tentans</i>)	EPA 600/R-99/064, EPA 100.2
113.060	014	Amphipod (<i>E. estuarii</i>)	EPA 600/R-94/025, EPA 100.4
113.060	015	Amphipod (<i>L. plumulosus</i>)	EPA 600/R-94/025, EPA 100.4
113.060	016	Amphipod (<i>R. abronius</i>)	EPA 600/R-94/025, EPA 100.4
113.060	028	Amphipod (<i>A. abdita</i>)	EPA 600/R-94/025, EPA 100.4

Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste

114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020

114.020	004	Beryllium	EPA 6020
114.020	005	Cadmium	EPA 6020
114.020	006	Chromium	EPA 6020
114.020	007	Cobalt	EPA 6020
114.020	008	Copper	EPA 6020
114.020	009	Lead	EPA 6020
114.020	010	Molybdenum	EPA 6020
114.020	011	Nickel	EPA 6020
114.020	012	Selenium	EPA 6020
114.020	013	Silver	EPA 6020
114.020	014	Thallium	EPA 6020
114.020	015	Vanadium	EPA 6020
114.020	016	Zinc	EPA 6020
114.025	001	Mercury	EPA 6020 A
114.106	001	Chromium VI (Hexavalent Chromium)	EPA 7199
114.240	001	Corrosivity - pH Determination	EPA 9040 B
114.241	001	Corrosivity - pH Determination	EPA 9045 C
114.280	001	Organic Lead	HML 939-M
114.999	000	Chlorine, Total	EPA 9075

Field of Testing: 115 - Extraction Test of Hazardous Waste

115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter 11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

Field of Testing: 116 - Volatile Organic Chemistry of Hazardous Waste

116.030	001	Gasoline Range Organics (GRO)	EPA 8015 B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021 B
116.040	062	BTEX	EPA 8021 B
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B

Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste

117.010	001	Diesel Range Organics (DRO)	EPA 8015 B
117.016	001	Diesel Range Organics (DRO)	LUFT
117.017	001	TRPH Screening	EPA 418.1
117.110	000	Extractable Organics	EPA 8270 C
117.111	071	Pesticides	EPA 8270 C
117.130	000	Dioxins and Dibenzofurans	EPA 8290
117.140	000	Polynuclear Aromatic Hydrocarbons	EPA 8310
117.150	000	Carbonyl Compounds	EPA 8315 A
117.171	000	Nitroaromatics and Nitramines	EPA 8330 A
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.250	000	Chlorinated Herbicides	EPA 8151 A

117.270	000	Carbamates, N-methylcarbamates	EPA 8318

Field of Testing: 120 - Physical Properties of Hazardous Waste

120.010	001	Ignitability	EPA 1010
120.022	001	Ignitability	EPA 1030
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040 B
120.080	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 126 - Microbiological Methods for Ambient Water

126.003	001	Total Coliform (Enumeration)	SM 9221 B,C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C,E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C,F-2006
126.005	001	Total Coliform (Enumeration)	SM 9222 B-2006
126.005	003	Fecal Coliform (Enumeration)	SM 9222 D-2006
126.007	001	E. coli (Enumeration)	SM 9223 B-2004
126.009	001	Fecal Streptococci	SM 9230 B-2007
126.019	001	Enterococci	Enterolert



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

EMSL Analytical, Inc.

South Pasadena, CA

520 Mission Street

South Pasadena, CA 91030

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2283**

Expiration Date: **12/31/2020**

Effective Date: **1/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

EMSL Analytical, Inc.

South Pasadena, CA

520 Mission Street

South Pasadena, CA 91030

Phone: (323) 254-9960

Certificate No. 2283

Expiration Date 12/31/2021

***As of 12/28/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.301	001	Asbestos	EPA 100.2

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.003	002	Fecal Coliform (Enumeration)	SM 9222 D-2006

Field of Testing: 121 – Bulk Asbestos Analysis of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
121.010	001	Bulk Asbestos	EPA 600/M4-82-020

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.005	003	Fecal Coliform (Enumeration)	SM 9222 D-2006
126.019	001	Enterococci	Enterolert



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Alpha Analytical Laboratories Inc. - North Bay

North Bay

110 Liberty Street

Petaluma, CA 94952

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2303**

Expiration Date: **3/31/2022**

Effective Date: **4/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

Alpha Analytical Laboratories Inc. – North Bay

North Bay

110 Liberty Street

Petaluma, CA 94952

Phone: (707) 769-3128

Certificate No. 2303

Expiration Date 3/31/2022

***As of 4/1/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.026	006	Hardness (Calculation)	EPA 200.7
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	007	Nitrite (as N)	EPA 300.0
102.030	009	Sulfate (as SO ₄)	EPA 300.0
102.040	001	Bromide	EPA 300.1
102.040	004	Bromate	EPA 300.1

Subgroup Code	Analyte Code	Analyte	Method
102.045	001	Perchlorate	EPA 314.0
102.095	001	Turbidity	SM 2130 B-2001
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.175	001	Chlorine, Free	SM 4500-Cl G-2000
102.175	002	Chlorine, Total Residual	SM 4500-Cl G-2000
102.203	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
102.240	001	Phosphate, Ortho (as P)	SM 4500-P E-1999
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.125	003	Arsenic	EPA 200.5
103.125	010	Lead	EPA 200.5
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	004	Beryllium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium (VI)	EPA 218.6

Field of Testing: 104 – Volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
104.040	000	Volatile Organic Compounds	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	003	Phosphorus, Total	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.017	001	Bromide	EPA 300.0 (1993 Rev. 2.1)
108.017	002	Chloride	EPA 300.0 (1993 Rev. 2.1)
108.017	003	Fluoride	EPA 300.0 (1993 Rev. 2.1)
108.017	004	Nitrate (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	005	Nitrate-Nitrite (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	006	Nitrite (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	008	Sulfate (as SO ₄)	EPA 300.0 (1993 Rev. 2.1)
108.053	001	Oil & Grease Total	EPA 1664 A
108.059	001	Turbidity	SM 2130 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.065	001	Hardness (Calculation)	SM 2340 B-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.175	001	Phosphate, Ortho (as P)	SM 4500-P E-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.217	001	Organic Carbon-Total (TOC)	SM 5310 C-2011
108.225	001	Surfactants	SM 5540 C-2011

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)

Subgroup Code	Analyte Code	Analyte	Method
109.623	002	Antimony	EPA 200.7 (1994 Rev. 4.4)
109.623	003	Arsenic	EPA 200.7 (1994 Rev. 4.4)
109.623	004	Barium	EPA 200.7 (1994 Rev. 4.4)
109.623	005	Beryllium	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	007	Cadmium	EPA 200.7 (1994 Rev. 4.4)
109.623	008	Chromium	EPA 200.7 (1994 Rev. 4.4)
109.623	009	Cobalt	EPA 200.7 (1994 Rev. 4.4)
109.623	010	Copper	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)
109.623	012	Lead	EPA 200.7 (1994 Rev. 4.4)
109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.623	014	Molybdenum	EPA 200.7 (1994 Rev. 4.4)
109.623	015	Nickel	EPA 200.7 (1994 Rev. 4.4)
109.623	016	Selenium	EPA 200.7 (1994 Rev. 4.4)
109.623	017	Silver	EPA 200.7 (1994 Rev. 4.4)
109.623	018	Thallium	EPA 200.7 (1994 Rev. 4.4)
109.623	019	Tin	EPA 200.7 (1994 Rev. 4.4)
109.623	020	Titanium	EPA 200.7 (1994 Rev. 4.4)
109.623	021	Vanadium	EPA 200.7 (1994 Rev. 4.4)
109.623	022	Zinc	EPA 200.7 (1994 Rev. 4.4)
109.635	001	Mercury	EPA 245.1 (1994 Rev. 3.0)

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	001	Antimony	EPA 6010 B

Subgroup Code	Analyte Code	Analyte	Method
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.106	001	Chromium (VI)	EPA 7199
114.141	001	Mercury	EPA 7471 A

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.021	001	TCLP Inorganics	EPA 1311 (TCLP)
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II

Field of Testing: 116 – Volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
116.030	001	Gasoline-range Organics	EPA 8015 B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021 B
116.040	062	BTEX	EPA 8021 B
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015 B
117.110	000	Extractable Organics	EPA 8270 C



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Monterey Bay Analytical Services, Inc.

4 Justin Court, Suite D

Monterey, CA 93940

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2385**

Expiration Date: **10/31/2021**

Effective Date: **11/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

Monterey Bay Analytical Services, Inc.

4 Justin Court, Suite D

Monterey, CA 93940

Phone: (831) 375-6227

Certificate No. 2385

Expiration Date 10/31/2021

***As of 12/12/2019, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.010	002	Heterotrophic Bacteria	SimPlate
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert
101.050	005	Total Coliform P/A	SM 9223 B Colilert 18
101.050	006	E. coli P/A	SM 9223 B Colilert 18
101.050	007	Total Coliform (Enumeration)	SM 9223 B Colilert 18
101.050	008	E. coli (Enumeration)	SM 9223 B Colilert 18
101.100	001	Total Coliform P/A	Colitag
101.100	002	E. coli P/A	Colitag

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.020	001	Turbidity	EPA 180.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.026	006	Hardness (Calculation)	EPA 200.7

Subgroup Code	Analyte Code	Analyte	Method
102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	007	Nitrite (as N)	EPA 300.0
102.030	008	Phosphate, Ortho (as P)	EPA 300.0
102.030	009	Sulfate (as SO ₄)	EPA 300.0
102.045	001	Perchlorate	EPA 314.0
102.060	001	Nitrate (as N) (Calculation)	EPA 353.2
102.061	001	Nitrite (as N)	EPA 353.2
102.070	001	Phosphate, Ortho (as P)	EPA 365.1
102.100	001	Alkalinity	SM 2320 B-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.175	001	Chlorine, Free	SM 4500-Cl G-2000
102.175	002	Chlorine, Total Residual	SM 4500-Cl G-2000
102.203	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000
102.280	001	UV254	SM 5910 B-2011
102.570	001	Cyanide, Free	OIA-1677, DW

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	018	Vanadium	EPA 200.8

Subgroup Code	Analyte Code	Analyte	Method
103.140	019	Strontium	EPA 200.8

Field of Testing: 106 – Radionuclides in Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
106.092	001	Uranium	EPA 200.8

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.001	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C, F-2006
107.013	001	E. coli (Enumeration)	Colilert
107.015	001	E. coli (Enumeration)	Colilert 18
107.015	002	Fecal Coliform (Enumeration)	Colilert 18
107.017	001	Enterococci	Enterolert

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.009	001	Turbidity	EPA 180.1 (1993 Rev. 2.0)
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.017	001	Bromide	EPA 300.0 (1993 Rev. 2.1)
108.017	002	Chloride	EPA 300.0 (1993 Rev. 2.1)
108.017	003	Fluoride	EPA 300.0 (1993 Rev. 2.1)
108.017	004	Nitrate (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	005	Nitrite (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	006	Nitrate-Nitrite (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	007	Phosphate, Ortho (as P)	EPA 300.0 (1993 Rev. 2.1)

Subgroup Code	Analyte Code	Analyte	Method
108.017	008	Sulfate (as SO ₄)	EPA 300.0 (1993 Rev. 2.1)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen, Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.033	001	Nitrate-Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.035	001	Phosphate, Ortho (as P)	EPA 365.1 (1993 Rev. 2.0)
108.035	002	Phosphorus, Total	EPA 365.1 (1993 Rev. 2.0)
108.053	002	Oil & Grease Total	EPA 1664 B
108.063	001	Alkalinity	SM 2320 B-2011
108.065	001	Hardness (Calculation)	SM 2340 B-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.077	001	Residue, Volatile	SM 2540 E-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.080	001	Temperature	SM 2550 B-2010
108.114	001	Chlorine, Total Residual	SM 4500-Cl G-2011
108.114	002	Chlorine, Free	SM 4500-Cl G-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H ⁺ B-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.217	001	Organic Carbon-Total (TOC)	SM 5310 C-2011
108.321	001	Cyanide, Total	ASTM D7511-12

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	010	Copper	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)
109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.623	022	Zinc	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)

Subgroup Code	Analyte Code	Analyte	Method
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	012	Iron	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.685	002	Chromium (VI)	SM 3500-Cr B-2011

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.003	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C, F-2006
126.015	001	E. coli (Enumeration)	Colilert
126.017	001	E. coli (Enumeration)	Colilert 18
126.019	001	Enterococci	Enterolert



Interim

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins Calscience

Irvine

17461 Derian Avenue

Irvine, CA 92614-5817

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2706**

Expiration Date: **6/30/2021**

Effective Date: **7/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA

Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Interim

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Alpha Analytical Laboratories, Inc.

Livermore Lab

262 Rickenbacker Circle

Livermore, CA 94551

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2728**

Expiration Date: **6/30/2020**

Effective Date: **7/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins Eaton Analytical, LLC - Monrovia

750 Royal Oaks Drive, Suite 100

Monrovia, CA 91016

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2813**

Expiration Date: **2/1/2021**

Effective Date: **2/2/2019**

Sacramento, California
subject to forfeiture or revocation

A handwritten signature in black ink, appearing to read "Christine Sotelo".

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2939**

Expiration Date: **6/30/2021**

Effective Date: **7/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins Calscience, LLC

7440 Lincoln Way

Garden Grove, CA 92841-1427

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2944**

Expiration Date: **9/30/2021**

Effective Date: **10/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Ceres Analytical Laboratory, Inc.

4919 Windplay Drive, Suite 1

El Dorado Hills, CA 95762

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **3046**

Expiration Date: **4/30/2021**

Effective Date: **5/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing



Ceres Analytical Laboratory, Inc.

4919 Windplay Drive, Suite 1
El Dorado Hills, CA 95762
Phone: 9169325011

Certificate No. 3046
Expiration Date 4/30/2021

Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water

105.230	000	Dioxins	EPA 1613 B
105.230	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613 B
105.230	002	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Screen	EPA 1613 B

Field of Testing: 111 - Semi-volatile Organic Chemistry of Wastewater

111.111	000	Dioxins and Dibenzofurans	EPA 1613 B

Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste

117.130	000	Dioxins and Dibenzofurans	EPA 8290

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

LA Testing

Huntington Beach, CA

5431 Industrial Drive

Huntington Beach, CA 92649

Phone: (714) 828-4999

Certificate No. 1406

Expiration Date 1/31/2022

***As of 2/1/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.020	001	Turbidity	EPA 180.1

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B

Subgroup Code	Analyte Code	Analyte	Method
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.130	001	Lead	EPA 7420
114.140	001	Mercury	EPA 7470 A
114.141	001	Mercury	EPA 7471 A
114.240	001	Corrosivity - pH Determination	EPA 9040 B
114.241	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.021	001	TCLP Inorganics	EPA 1311 (TCLP)
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.220	000	PCBs	EPA 8082

Field of Testing: 120 – Physical Properties of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
120.070	001	Corrosivity – pH Determination	EPA 9040 B
120.080	001	Corrosivity – pH Determination	EPA 9045 C

Field of Testing: 121 – Bulk Asbestos Analysis of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
121.010	001	Bulk Asbestos	EPA 600/M4-82-020



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

BSK Associates

Laboratory Services - Fresno Analytical Laboratory

1414 Stanislaus Street

Fresno, CA 93706-1623

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1180**

Expiration Date: **4/30/2021**

Effective Date: **5/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

BSK Associates

Laboratory Services – Fresno Analytical Laboratory

1414 Stanislaus Street

Fresno, CA 93706-1623

Phone: (559) 497-2888

Certificate No. 1180

Expiration Date 04/30/2021 INTERIM

***As of 11/25/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.020	004	Total Coliform (Enumeration)	SM 9221 B,C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B,E
101.020	006	E. coli (Enumeration)	SM 9221 B,F
101.050	005	Total Coliform P/A	SM 9223 B Colilert 18
101.050	006	E. coli P/A	SM 9223 B Colilert 18
101.050	007	Total Coliform (Enumeration)	SM 9223 B Colilert 18
101.050	008	E. coli (Enumeration)	SM 9223 B Colilert 18

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7

Subgroup Code	Analyte Code	Analyte	Method
102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	007	Nitrite (as N)	EPA 300.0
102.030	008	Phosphate,Ortho (as P)	EPA 300.0
102.030	009	Sulfate (as SO4)	EPA 300.0
102.040	001	Bromide	EPA 300.1
102.040	002	Chlorite	EPA 300.1
102.040	003	Chlorate	EPA 300.1
102.044	001	Bromate	EPA 317.0
102.045	001	Perchlorate	EPA 314.0
102.047	001	Perchlorate	EPA 331.0
102.095	001	Turbidity	SM 2130 B-2001
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.174	001	Chlorine, Free	SM 4500-Cl F-2000
102.174	002	Chlorine, Total Residual	SM 4500-Cl F-2000
102.175	001	Chlorine, Free	SM 4500-Cl G-2000
102.175	002	Chlorine, Total Residual	SM 4500-Cl G-2000
102.190	001	Cyanide, Total	SM 4500-CN E-1999
102.192	001	Cyanide, Amenable	SM 4500-CN G-1999
102.203	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
102.240	001	Phosphate,Ortho (as P)	SM 4500-P E-1999
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000
102.280	001	UV254	SM 5910 B-2011

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8

Subgroup Code	Analyte Code	Analyte	Method
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	011	Mercury	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.310	001	Chromium VI (Hexavalent Chromium)	EPA 218.6
103.311	001	Chromium VI (Hexavalent Chromium)	EPA 218.7

Field of Testing: 104 – Volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
104.030	001	1,2-Dibromoethane (EDB)	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1
104.035	001	1,2,3-Trichloropropane (TCP)	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.2
104.040	026	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.2

Subgroup Code	Analyte Code	Analyte	Method
104.040	027	trans-1,2-Dichloroethylene (trans- 1,2 Dichloroethene)	EPA 524.2
104.040	028	Dichloromethane (Methylene Chloride)	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 524.2
104.040	034	trans-1,3-Dichloropropylene (trans-1,3 Dichloroprope)	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethylene (Tetrachloroethene)	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethylene (Trichloroethene)	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.040	061	Carbon Disulfide	EPA 524.2
104.040	062	Methyl Isobutyl Ketone (4- Methyl-2-Pentanone)	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	005	Trichlorotrifluoroethane	EPA 524.2

Subgroup Code	Analyte Code	Analyte	Method
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2

Field of Testing: 105 – Semi-volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
105.010	000	Organochlorine Pesticides and PCBs	EPA 505
105.010	002	Alachlor	EPA 505
105.010	003	Atrazine	EPA 505
105.010	004	Chlordane	EPA 505
105.010	006	Endrin	EPA 505
105.010	007	Heptachlor	EPA 505
105.010	008	Heptachlor Epoxide	EPA 505
105.010	009	Hexachlorobenzene	EPA 505
105.010	010	Hexachlorocyclopentadiene	EPA 505
105.010	011	Lindane (HCH-gamma)	EPA 505
105.010	012	Methoxychlor	EPA 505
105.010	013	Simazine	EPA 505
105.010	014	Toxaphene	EPA 505
105.010	015	PCBs as Aroclors (screen)	EPA 505
105.083	000	Chlorinated Acids	EPA 515.4
105.083	001	2,4-D	EPA 515.4
105.083	002	Dinoseb	EPA 515.4
105.083	003	Pentachlorophenol	EPA 515.4
105.083	004	Picloram	EPA 515.4
105.083	005	2,4,5-TP (Silvex)	EPA 515.4
105.083	006	Dalapon	EPA 515.4
105.083	007	Bentazon	EPA 515.4
105.083	008	Dicamba	EPA 515.4
105.091	000	Semi-volatile Organic Compounds	EPA 525.3
105.091	001	Alachlor	EPA 525.3
105.091	003	Atrazine	EPA 525.3
105.091	004	Bromacil	EPA 525.3
105.091	005	Benzo(a)pyrene	EPA 525.3
105.091	006	Butachlor	EPA 525.3
105.091	008	Diazinon	EPA 525.3
105.091	009	Di(2-ethylhexyl) Adipate	EPA 525.3
105.091	018	Metolachlor	EPA 525.3
105.091	019	Metribuzin	EPA 525.3
105.091	020	Molinate	EPA 525.3
105.091	022	Propachlor	EPA 525.3
105.091	023	Simazine	EPA 525.3
105.091	024	Thiobencarb	EPA 525.3
105.100	000	Carbamates	EPA 531.1
105.100	001	Aldicarb (Temik)	EPA 531.1

Subgroup Code	Analyte Code	Analyte	Method
105.100	002	Aldicarb Sulfone	EPA 531.1
105.100	003	Aldicarb Sulfoxide	EPA 531.1
105.100	004	Carbaryl (Sevin)	EPA 531.1
105.100	005	Carbofuran (Furadan)	EPA 531.1
105.100	006	3-Hydroxycarbofuran	EPA 531.1
105.100	007	Methomyl (Lannate)	EPA 531.1
105.100	008	Oxamyl	EPA 531.1
105.106	000	Per- and Polyfluorinated Alkyl Substances (PFAS)	EPA 537.1
105.120	001	Glyphosate	EPA 547
105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.201	001	Haloacetic Acids (HAA5)	EPA 552.3

Field of Testing: 106 – Radionuclides in Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
106.092	001	Uranium	EPA 200.8

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.001	001	Total Coliform (Enumeration)	SM 9221 B,C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C,E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C,F-2006
107.007	002	Fecal Streptococci	SM 9230 B-2007
107.015	001	E. coli (Enumeration)	Colilert 18

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.017	001	Bromide	EPA 300.0 (1993 Rev. 2.1)
108.017	002	Chloride	EPA 300.0 (1993 Rev. 2.1)

Subgroup Code	Analyte Code	Analyte	Method
108.017	003	Fluoride	EPA 300.0 (1993 Rev. 2.1)
108.017	004	Nitrate (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	005	Nitrate-Nitrite (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	006	Nitrite (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	007	Phosphate,Ortho (as P)	EPA 300.0 (1993 Rev. 2.1)
108.017	008	Sulfate (as SO4)	EPA 300.0 (1993 Rev. 2.1)
108.019	001	Bromide	EPA 300.1 (1997 Rev.1.0)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen,Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.039	001	Phosphorus,Total	EPA 365.4 (1974)
108.053	002	Oil & Grease Total	EPA 1664 B
108.055	001	Color	SM 2120 B-2011
108.059	001	Turbidity	SM 2130 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.065	001	Hardness (Calculation)	SM 2340 B-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.077	001	Residue, Volatile	SM 2540 E-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.109	001	Chlorine, Total Residual	SM 4500-CI F-2011
108.109	002	Chlorine, Free	SM 4500-CI F-2011
108.114	001	Chlorine, Total Residual	SM 4500-CI G-2011
108.114	002	Chlorine, Free	SM 4500-CI G-2011
108.125	001	Cyanide, Total	SM 4500-CN E-2011
108.129	001	Cyanide, Available	SM 4500-CN G-2011
108.131	001	Fluoride	SM 4500-F C-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.159	001	Nitrate-Nitrite (as N)	SM 4500-NO3 F-2011
108.165	001	Oxygen, Dissolved	SM 4500-O C-2011
108.175	001	Phosphate,Ortho (as P)	SM 4500-P E-2011
108.175	002	Phosphorus,Total	SM 4500-P E-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011

Subgroup Code	Analyte Code	Analyte	Method
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.217	001	Organic Carbon-Total (TOC)	SM 5310 C-2011
108.225	001	Surfactants	SM 5540 C-2011

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)
109.623	004	Barium	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	007	Cadmium	EPA 200.7 (1994 Rev. 4.4)
109.623	008	Chromium	EPA 200.7 (1994 Rev. 4.4)
109.623	010	Copper	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)
109.623	012	Lead	EPA 200.7 (1994 Rev. 4.4)
109.623	015	Nickel	EPA 200.7 (1994 Rev. 4.4)
109.623	017	Silver	EPA 200.7 (1994 Rev. 4.4)
109.623	019	Tin	EPA 200.7 (1994 Rev. 4.4)
109.623	020	Titanium	EPA 200.7 (1994 Rev. 4.4)
109.623	022	Zinc	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)

Subgroup Code	Analyte Code	Analyte	Method
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	012	Iron	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	020	Tin	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.629	001	Chromium VI (Hexavalent Chromium)	EPA 218.6 (1994 Rev. 3.3)
109.639	001	Mercury	EPA 245.7 (2005 Rev. 2.0)

Field of Testing: 110 – Volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
110.040	001	Acetone	EPA 624.1
110.040	003	Acrolein	EPA 624.1
110.040	004	Acrylonitrile	EPA 624.1
110.040	005	Benzene	EPA 624.1
110.040	006	Bromodichloromethane	EPA 624.1
110.040	007	Bromoform	EPA 624.1
110.040	008	Bromomethane (Methyl Bromide)	EPA 624.1
110.040	010	Carbon Tetrachloride	EPA 624.1
110.040	011	Chlorobenzene	EPA 624.1
110.040	012	Chloroethane	EPA 624.1
110.040	013	2-Chloroethyl vinyl Ether	EPA 624.1
110.040	014	Chloroform	EPA 624.1

Subgroup Code	Analyte Code	Analyte	Method
110.040	015	Chloromethane (Methyl Chloride)	EPA 624.1
110.040	016	Dibromochloromethane (Chlorodibromomethane)	EPA 624.1
110.040	017	1,2-Dichlorobenzene	EPA 624.1
110.040	018	1,3-Dichlorobenzene	EPA 624.1
110.040	019	1,4-Dichlorobenzene	EPA 624.1
110.040	020	1,1-Dichloroethane	EPA 624.1
110.040	021	1,2-Dichloroethane	EPA 624.1
110.040	022	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 624.1
110.040	023	trans-1,2-Dichloroethylene (trans- 1,2 Dichloroethene)	EPA 624.1
110.040	024	1,2-Dichloropropane	EPA 624.1
110.040	025	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 624.1
110.040	026	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 624.1
110.040	029	Ethylbenzene	EPA 624.1
110.040	031	Methylene Chloride (Dichloromethane)	EPA 624.1
110.040	032	4-Methyl-2-pentanone (MIBK)	EPA 624.1
110.040	034	1,1,2,2-Tetrachloroethane	EPA 624.1
110.040	035	Tetrachloroethylene (Tetrachloroethene)	EPA 624.1
110.040	037	Toluene	EPA 624.1
110.040	038	1,1,1-Trichloroethane	EPA 624.1
110.040	039	1,1,2-Trichloroethane	EPA 624.1
110.040	040	Trichloroethylene (Trichloroethene)	EPA 624.1
110.040	041	Vinyl Chloride	EPA 624.1
110.040	042	m-Xylene	EPA 624.1
110.040	043	o-Xylene	EPA 624.1
110.040	044	p-Xylene	EPA 624.1
110.040	045	Trichlorofluoromethane	EPA 624.1

Field of Testing: 111 – Semi-volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
111.055	001	Aldrin	EPA 608.3
111.055	002	alpha-BHC	EPA 608.3
111.055	003	beta-BHC	EPA 608.3
111.055	004	delta-BHC	EPA 608.3
111.055	005	gamma-BHC (Lindane)	EPA 608.3
111.055	006	Chlordane	EPA 608.3

Subgroup Code	Analyte Code	Analyte	Method
111.055	007	4,4'-DDD	EPA 608.3
111.055	008	4,4'-DDE	EPA 608.3
111.055	009	4,4'-DDT	EPA 608.3
111.055	010	Dieldrin	EPA 608.3
111.055	011	Endosulfan I	EPA 608.3
111.055	012	Endosulfan II	EPA 608.3
111.055	013	Endosulfan Sulfate	EPA 608.3
111.055	014	Endrin	EPA 608.3
111.055	015	Endrin Aldehyde	EPA 608.3
111.055	016	Heptachlor	EPA 608.3
111.055	017	Heptachlor Epoxide	EPA 608.3
111.055	019	PCB-1016	EPA 608.3
111.055	020	PCB-1221	EPA 608.3
111.055	021	PCB-1232	EPA 608.3
111.055	022	PCB-1242	EPA 608.3
111.055	023	PCB-1248	EPA 608.3
111.055	024	PCB-1254	EPA 608.3
111.055	025	PCB-1260	EPA 608.3
111.055	046	Methoxychlor	EPA 608.3
111.055	051	Permethrin	EPA 608.3
111.055	060	Toxaphene	EPA 608.3
111.160	001	Acenaphthene	EPA 625.1
111.160	002	Acenaphthylene	EPA 625.1
111.160	003	Anthracene	EPA 625.1
111.160	004	Benzidine	EPA 625.1
111.160	005	Benzo(a)anthracene	EPA 625.1
111.160	006	Benzo(a)pyrene	EPA 625.1
111.160	007	Benzo(b)fluoranthene	EPA 625.1
111.160	008	Benzo(g,h,i)perylene	EPA 625.1
111.160	009	Benzo(k)fluoranthene	EPA 625.1
111.160	010	Bis(2-chloroethoxy) Methane	EPA 625.1
111.160	011	Bis(2-chloroethyl) Ether	EPA 625.1
111.160	012	Bis(2-Chloroisopropyl) ether	EPA 625.1
111.160	013	Bis(2-ethylhexyl)phthalate	EPA 625.1
111.160	014	4-Bromophenyl Phenyl Ether	EPA 625.1
111.160	015	Butyl Benzyl Phthalate	EPA 625.1
111.160	016	2-Chloronaphthalene	EPA 625.1
111.160	017	4-Chlorophenyl Phenyl Ether	EPA 625.1
111.160	018	Chrysene	EPA 625.1
111.160	019	Dibenz(a,h)anthracene	EPA 625.1
111.160	020	3,3'-Dichlorobenzidine	EPA 625.1
111.160	021	Diethyl Phthalate	EPA 625.1

Subgroup Code	Analyte Code	Analyte	Method
111.160	022	Dimethyl Phthalate	EPA 625.1
111.160	023	Di-n-butyl Phthalate	EPA 625.1
111.160	024	2,4-Dinitrotoluene	EPA 625.1
111.160	025	2,6-Dinitrotoluene	EPA 625.1
111.160	026	Di-n-octyl Phthalate	EPA 625.1
111.160	027	Fluoranthene	EPA 625.1
111.160	028	Fluorene	EPA 625.1
111.160	029	Hexachlorobenzene	EPA 625.1
111.160	030	Hexachlorobutadiene	EPA 625.1
111.160	031	Hexachloroethane	EPA 625.1
111.160	032	Indeno(1,2,3-c,d)pyrene	EPA 625.1
111.160	033	Isophorone	EPA 625.1
111.160	034	Naphthalene	EPA 625.1
111.160	035	Nitrobenzene	EPA 625.1
111.160	036	N-nitrosodi-n-propylamine	EPA 625.1
111.160	037	Phenanthrene	EPA 625.1
111.160	038	Pyrene	EPA 625.1
111.160	039	1,2,4-Trichlorobenzene	EPA 625.1
111.160	040	4-Chloro-3-methylphenol	EPA 625.1
111.160	041	2-Chlorophenol	EPA 625.1
111.160	042	2,4-Dichlorophenol	EPA 625.1
111.160	043	2,4-Dimethylphenol	EPA 625.1
111.160	044	2,4-Dinitrophenol	EPA 625.1
111.160	045	2-Methyl-4,6-dinitrophenol	EPA 625.1
111.160	046	2-Nitrophenol	EPA 625.1
111.160	047	4-Nitrophenol	EPA 625.1
111.160	048	Pentachlorophenol	EPA 625.1
111.160	049	Phenol	EPA 625.1
111.160	050	2,4,6-Trichlorophenol	EPA 625.1
111.160	098	Hexachlorocyclopentadiene	EPA 625.1
111.160	108	N-nitrosodimethylamine	EPA 625.1
111.160	110	N-nitrosodiphenylamine	EPA 625.1

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	003	Barium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B

Subgroup Code	Analyte Code	Analyte	Method
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020
114.020	004	Beryllium	EPA 6020
114.020	005	Cadmium	EPA 6020
114.020	006	Chromium	EPA 6020
114.020	007	Cobalt	EPA 6020
114.020	008	Copper	EPA 6020
114.020	009	Lead	EPA 6020
114.020	010	Molybdenum	EPA 6020
114.020	011	Nickel	EPA 6020
114.020	012	Selenium	EPA 6020
114.020	013	Silver	EPA 6020
114.020	014	Thallium	EPA 6020
114.020	015	Vanadium	EPA 6020
114.020	016	Zinc	EPA 6020
114.025	001	Mercury	EPA 6020 A
114.106	001	Chromium VI (Hexavalent Chromium)	EPA 7199
114.221	001	Cyanide, Total	EPA 9012 A
114.240	001	Corrosivity - pH Determination	EPA 9040 B
114.241	001	Corrosivity - pH Determination	EPA 9045 C
114.270	001	Fluoride	EPA 9214

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II

Field of Testing: 116 – Volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B
116.100	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT GC/MS

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.110	000	Extractable Organics	EPA 8270 C
117.111	071	Pesticides	EPA 8270 C
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.280	000	Carbamates	EPA 8321 Aqueous Only

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.003	001	Total Coliform (Enumeration)	SM 9221 B,C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C,E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C,F-2006
126.017	001	E. coli (Enumeration)	SM 9223 B-2004 Colilert 18

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

BC Laboratories, Inc.

4100 Atlas Court

Bakersfield, CA 93308

Phone: (661) 327-4911

Certificate No. 1186

Expiration Date 5/31/2021 INTERIM

***As of 9/16/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.020	001	Total Coliform P/A	SM 9221 B
101.020	002	Fecal Coliform P/A	SM 9221 B, E
101.020	004	Total Coliform (Enumeration)	SM 9221 B, C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B, E
101.020	006	E. coli (Enumeration)	SM 9221 B, F
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert
101.050	005	Total Coliform P/A	SM 9223 B Colilert 18
101.050	006	E. coli P/A	SM 9223 B Colilert 18
101.050	007	Total Coliform (Enumeration)	SM 9223 B Colilert 18
101.050	008	E. coli (Enumeration)	SM 9223 B Colilert 18
101.170	001	Enterococci	Enterolert

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.020	001	Turbidity	EPA 180.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7

Subgroup Code	Analyte Code	Analyte	Method
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	009	Sulfate (as SO ₄)	EPA 300.0
102.045	001	Perchlorate	EPA 314.0
102.050	001	Cyanide, Total	EPA 335.4
102.061	001	Nitrite (as N)	EPA 353.2
102.070	001	Phosphate, Ortho (as P)	EPA 365.1
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.174	001	Chlorine, Free	SM 4500-Cl F-2000
102.180	001	Chlorine Dioxide	SM 4500-ClO ₂ D-2000
102.241	001	Phosphate, Ortho (as P)	SM 4500-P F-1999
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8

Subgroup Code	Analyte Code	Analyte	Method
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium VI (Hexavalent Chromium)	EPA 218.6

Field of Testing: 104 – Volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
104.030	001	1,2-Dibromoethane (EDB)	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1
104.035	001	1,2,3-Trichloropropane (TCP)	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.2
104.040	026	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.2
104.040	027	trans-1,2-Dichloroethylene (trans-1,2 Dichloroethene)	EPA 524.2
104.040	028	Dichloromethane (Methylene Chloride)	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 524.2
104.040	034	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2

Subgroup Code	Analyte Code	Analyte	Method
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethylene (Tetrachloroethene)	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethylene (Trichloroethene)	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.040	061	Carbon Disulfide	EPA 524.2
104.040	062	Methyl Isobutyl Ketone (4-Methyl- 2-Pentanone)	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	005	Trichlorotrifluoroethane	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2

Field of Testing: 105 – Semi-volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
105.035	000	Organochlorine Pesticides and PCBs	EPA 508
105.035	001	Aldrin	EPA 508
105.035	002	Endosulfan I	EPA 508
105.035	003	Endosulfan II	EPA 508
105.035	004	Endosulfan Sulfate	EPA 508
105.035	005	Endrin	EPA 508
105.035	006	Endrin Aldehyde	EPA 508
105.035	007	Heptachlor	EPA 508
105.035	008	Heptachlor Epoxide	EPA 508

Subgroup Code	Analyte Code	Analyte	Method
105.035	009	Hexachlorobenzene	EPA 508
105.035	010	Lindane (HCH-gamma)	EPA 508
105.035	011	Methoxychlor	EPA 508
105.035	013	Chlordane	EPA 508
105.035	014	Toxaphene	EPA 508
105.035	015	PCBs as Aroclors	EPA 508
105.035	016	Aroclor 1016	EPA 508
105.035	017	Aroclor 1221	EPA 508
105.035	018	Aroclor 1232	EPA 508
105.035	019	Aroclor 1242	EPA 508
105.035	020	Aroclor 1248	EPA 508
105.035	021	Aroclor 1254	EPA 508
105.035	022	Aroclor 1260	EPA 508
105.070	000	Chlorinated Acids	EPA 515.1
105.070	001	Bentazon	EPA 515.1
105.070	002	2,4-D	EPA 515.1
105.070	003	Dalapon	EPA 515.1
105.070	004	Dicamba	EPA 515.1
105.070	005	Dinoseb	EPA 515.1
105.070	006	Pentachlorophenol	EPA 515.1
105.070	007	Picloram	EPA 515.1
105.070	008	2,4,5-TP (Silvex)	EPA 515.1
105.090	000	Semi-volatile Organic Compounds	EPA 525.2
105.090	001	Alachlor	EPA 525.2
105.090	002	Aldrin	EPA 525.2
105.090	003	Atrazine	EPA 525.2
105.090	004	Benzo(a)pyrene	EPA 525.2
105.090	005	Butachlor	EPA 525.2
105.090	007	Dieldrin	EPA 525.2
105.090	008	Di(2-ethylhexyl) Adipate	EPA 525.2
105.090	009	Di(2-ethylhexyl) Phthalate	EPA 525.2
105.090	013	Endrin	EPA 525.2
105.090	014	Heptachlor	EPA 525.2
105.090	015	Heptachlor Epoxide	EPA 525.2
105.090	016	Hexachlorobenzene	EPA 525.2
105.090	017	Hexachlorocyclopentadiene	EPA 525.2
105.090	018	Lindane (HCH-gamma)	EPA 525.2
105.090	019	Methoxychlor	EPA 525.2
105.090	022	Molinate	EPA 525.2
105.090	025	Simazine	EPA 525.2
105.090	028	Thiobencarb	EPA 525.2
105.101	000	Carbamates	EPA 531.2
105.101	001	Carbofuran (Furadan)	EPA 531.2
105.101	002	Oxamyl	EPA 531.2
105.101	003	Aldicarb (Temik)	EPA 531.2
105.101	004	Aldicarb Sulfone	EPA 531.2
105.101	005	Aldicarb Sulfoxide	EPA 531.2

Subgroup Code	Analyte Code	Analyte	Method
105.101	006	Carbaryl (Sevin)	EPA 531.2
105.101	007	3-Hydroxycarbofuran	EPA 531.2
105.101	008	Methomyl (Lannate)	EPA 531.2
105.120	001	Glyphosate	EPA 547
105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.201	001	Haloacetic Acids (HAA5)	EPA 552.3

Field of Testing: 106 – Radionuclides in Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
106.092	001	Uranium	EPA 200.8

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.001	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C, F-2006
107.005	001	E. coli (Enumeration)	SM 9223 B-2004
107.011	001	Enterococci	SM 9230 D-2007
107.013	001	E. coli (Enumeration)	Colilert
107.015	001	E. coli (Enumeration)	Colilert 18
107.017	001	Enterococci	Enterolert

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.001	001	Specific Conductance	EPA 120.1 (1982 Rev.1.0)
108.007	001	Residue, Volatile	EPA 160.4 (1971)
108.009	001	Turbidity	EPA 180.1 (1993 Rev. 2.0)
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.017	001	Bromide	EPA 300.0 (1993 Rev. 2.1)
108.017	002	Chloride	EPA 300.0 (1993 Rev. 2.1)

Subgroup Code	Analyte Code	Analyte	Method
108.017	003	Fluoride	EPA 300.0 (1993 Rev. 2.1)
108.017	004	Nitrate (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	008	Sulfate (as SO ₄)	EPA 300.0 (1993 Rev. 2.1)
108.023	001	Cyanide, Total	EPA 335.4 (1993 Rev. 1.0)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen, Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.033	001	Nitrate-Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.033	002	Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.035	001	Phosphate, Ortho (as P)	EPA 365.1 (1993 Rev. 2.0)
108.039	001	Phosphorus, Total	EPA 365.4 (1974)
108.045	001	Chemical Oxygen Demand	EPA 410.4 (1993 Rev. 2.0)
108.049	001	Phenols, Total	EPA 420.4 (1993 Rev. 2.0)
108.053	002	Oil & Grease Total	EPA 1664 B
108.055	001	Color	SM 2120 B-2011
108.059	001	Turbidity	SM 2130 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.109	001	Chlorine, Total Residual	SM 4500-Cl F-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.147	001	Ammonia (as N)	SM 4500-NH ₃ G-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.177	001	Phosphate, Ortho (as P)	SM 4500-P F-2011
108.177	002	Phosphorous, Total	SM 4500-P F-2011
108.201	001	Sulfide (as S)	SM 4500-S D-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.217	001	Organic Carbon-Total (TOC)	SM 5310 C-2011
108.225	001	Surfactants	SM 5540 C-2011

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)
109.623	002	Antimony	EPA 200.7 (1994 Rev. 4.4)
109.623	003	Arsenic	EPA 200.7 (1994 Rev. 4.4)
109.623	004	Barium	EPA 200.7 (1994 Rev. 4.4)
109.623	005	Beryllium	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	007	Cadmium	EPA 200.7 (1994 Rev. 4.4)
109.623	008	Chromium	EPA 200.7 (1994 Rev. 4.4)
109.623	009	Cobalt	EPA 200.7 (1994 Rev. 4.4)
109.623	010	Copper	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)
109.623	012	Lead	EPA 200.7 (1994 Rev. 4.4)
109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.623	014	Molybdenum	EPA 200.7 (1994 Rev. 4.4)
109.623	015	Nickel	EPA 200.7 (1994 Rev. 4.4)
109.623	016	Selenium	EPA 200.7 (1994 Rev. 4.4)
109.623	017	Silver	EPA 200.7 (1994 Rev. 4.4)
109.623	018	Thallium	EPA 200.7 (1994 Rev. 4.4)
109.623	019	Tin	EPA 200.7 (1994 Rev. 4.4)
109.623	020	Titanium	EPA 200.7 (1994 Rev. 4.4)
109.623	021	Vanadium	EPA 200.7 (1994 Rev. 4.4)
109.623	022	Zinc	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)

Subgroup Code	Analyte Code	Analyte	Method
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	006	Boron	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.629	001	Chromium VI (Hexavalent Chromium)	EPA 218.6b (1994 Rev. 3.3)
109.635	001	Mercury	EPA 245.1 (1994 Rev. 3.0)
109.693	001	Iron	SM 3500-Fe B-2011

Field of Testing: 110 – Volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
110.040	001	Acetone	EPA 624.1
110.040	002	Acetonitrile	EPA 624.1
110.040	003	Acrolein	EPA 624.1
110.040	004	Acrylonitrile	EPA 624.1

Subgroup Code	Analyte Code	Analyte	Method
110.040	005	Benzene	EPA 624.1
110.040	006	Bromodichloromethane	EPA 624.1
110.040	007	Bromoform	EPA 624.1
110.040	008	Bromomethane (Methyl Bromide)	EPA 624.1
110.040	009	tert-Butyl Alcohol (TBA)	EPA 624.1
110.040	010	Carbon Tetrachloride	EPA 624.1
110.040	011	Chlorobenzene	EPA 624.1
110.040	012	Chloroethane	EPA 624.1
110.040	013	2-Chloroethyl vinyl Ether	EPA 624.1
110.040	014	Chloroform	EPA 624.1
110.040	015	Chloromethane (Methyl Chloride)	EPA 624.1
110.040	016	Dibromochloromethane (Chlorodibromomethane)	EPA 624.1
110.040	017	1,2-Dichlorobenzene	EPA 624.1
110.040	018	1,3-Dichlorobenzene	EPA 624.1
110.040	019	1,4-Dichlorobenzene	EPA 624.1
110.040	020	1,1-Dichloroethane	EPA 624.1
110.040	021	1,2-Dichloroethane	EPA 624.1
110.040	022	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 624.1
110.040	023	trans-1,2-Dichloroethylene (trans-1,2 Dichloroethene)	EPA 624.1
110.040	024	1,2-Dichloropropane	EPA 624.1
110.040	025	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 624.1
110.040	026	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 624.1
110.040	027	Ethanol	EPA 624.1
110.040	029	Ethylbenzene	EPA 624.1
110.040	031	Methylene Chloride (Dichloromethane)	EPA 624.1
110.040	032	4-Methyl-2-pentanone (MIBK)	EPA 624.1
110.040	034	1,1,2,2-Tetrachloroethane	EPA 624.1
110.040	035	Tetrachloroethylene (Tetrachloroethene)	EPA 624.1
110.040	036	Tetrahydrofuran	EPA 624.1
110.040	037	Toluene	EPA 624.1
110.040	038	1,1,1-Trichloroethane	EPA 624.1
110.040	039	1,1,2-Trichloroethane	EPA 624.1
110.040	040	Trichloroethylene (Trichloroethene)	EPA 624.1
110.040	041	Vinyl Chloride	EPA 624.1
110.040	043	o-Xylene	EPA 624.1
110.040	045	Trichlorofluoromethane	EPA 624.1
110.040	046	m+p-Xylene	EPA 624.1
110.040	047	2-Butanone (MEK)	EPA 624.1

Field of Testing: 111 – Semi-volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
111.055	001	Aldrin	EPA 608.3
111.055	002	alpha-BHC	EPA 608.3
111.055	003	beta-BHC	EPA 608.3
111.055	004	delta-BHC	EPA 608.3
111.055	005	gamma-BHC (Lindane)	EPA 608.3
111.055	006	Chlordane	EPA 608.3
111.055	007	4,4'-DDD	EPA 608.3
111.055	008	4,4'-DDE	EPA 608.3
111.055	009	4,4'-DDT	EPA 608.3
111.055	010	Dieldrin	EPA 608.3
111.055	011	Endosulfan I	EPA 608.3
111.055	012	Endosulfan II	EPA 608.3
111.055	013	Endosulfan Sulfate	EPA 608.3
111.055	014	Endrin	EPA 608.3
111.055	015	Endrin Aldehyde	EPA 608.3
111.055	016	Heptachlor	EPA 608.3
111.055	017	Heptachlor Epoxide	EPA 608.3
111.055	019	PCB-1016	EPA 608.3
111.055	020	PCB-1221	EPA 608.3
111.055	021	PCB-1232	EPA 608.3
111.055	022	PCB-1242	EPA 608.3
111.055	023	PCB-1248	EPA 608.3
111.055	024	PCB-1254	EPA 608.3
111.055	025	PCB-1260	EPA 608.3
111.055	038	Chlorothalonil	EPA 608.3
111.055	048	Mirex	EPA 608.3
111.055	050	Pentachloronitrobenzene (PCNB)	EPA 608.3
111.055	060	Toxaphene	EPA 608.3
111.070	001	Acenaphthene	EPA 610
111.070	002	Acenaphthylene	EPA 610
111.070	003	Anthracene	EPA 610
111.070	004	Benzo(a)anthracene	EPA 610
111.070	005	Benzo(a)pyrene	EPA 610
111.070	006	Benzo(b)fluoranthene	EPA 610
111.070	007	Benzo(g,h,i)perylene	EPA 610
111.070	008	Benzo(k)fluoranthene	EPA 610
111.070	009	Chrysene	EPA 610
111.070	010	Dibenzo(a,h)anthracene	EPA 610
111.070	011	Fluoranthene	EPA 610
111.070	012	Fluorene	EPA 610
111.070	013	Indeno(1,2,3-c,d)pyrene	EPA 610
111.070	014	Naphthalene	EPA 610
111.070	015	Phenanthrene	EPA 610
111.070	016	Pyrene	EPA 610
111.120	001	2,4-D	EPA 615
111.120	002	2,4-DB	EPA 615

Subgroup Code	Analyte Code	Analyte	Method
111.120	003	Dicamba	EPA 615
111.120	004	Dichloroprop	EPA 615
111.120	005	Dinoseb	EPA 615
111.120	008	2,4,5-T	EPA 615
111.120	009	2,4,5-TP (Silvex)	EPA 615
111.160	001	Acenaphthene	EPA 625.1
111.160	002	Acenaphthylene	EPA 625.1
111.160	003	Anthracene	EPA 625.1
111.160	004	Benzidine	EPA 625.1
111.160	005	Benzo(a)anthracene	EPA 625.1
111.160	006	Benzo(a)pyrene	EPA 625.1
111.160	007	Benzo(b)fluoranthene	EPA 625.1
111.160	008	Benzo(g,h,i)perylene	EPA 625.1
111.160	009	Benzo(k)fluoranthene	EPA 625.1
111.160	010	Bis(2-chloroethoxy) Methane	EPA 625.1
111.160	011	Bis(2-chloroethyl) Ether	EPA 625.1
111.160	012	Bis(2-chloroisopropyl) Ether	EPA 625.1
111.160	013	Bis(2-ethylhexyl)phthalate	EPA 625.1
111.160	014	4-Bromophenyl Phenyl Ether	EPA 625.1
111.160	015	Butyl Benzyl Phthalate	EPA 625.1
111.160	016	2-Chloronaphthalene	EPA 625.1
111.160	017	4-Chlorophenyl Phenyl Ether	EPA 625.1
111.160	018	Chrysene	EPA 625.1
111.160	019	Dibenzo(a,h)anthracene	EPA 625.1
111.160	020	3,3'-Dichlorobenzidine	EPA 625.1
111.160	021	Diethyl Phthalate	EPA 625.1
111.160	022	Dimethyl Phthalate	EPA 625.1
111.160	023	Di-n-butyl Phthalate	EPA 625.1
111.160	024	2,4-Dinitrotoluene	EPA 625.1
111.160	025	2,6-Dinitrotoluene	EPA 625.1
111.160	026	Di-n-octyl Phthalate	EPA 625.1
111.160	027	Fluoranthene	EPA 625.1
111.160	028	Fluorene	EPA 625.1
111.160	029	Hexachlorobenzene	EPA 625.1
111.160	030	Hexachlorobutadiene	EPA 625.1
111.160	031	Hexachloroethane	EPA 625.1
111.160	032	Indeno(1,2,3-c,d)pyrene	EPA 625.1
111.160	033	Isophorone	EPA 625.1
111.160	034	Naphthalene	EPA 625.1
111.160	035	Nitrobenzene	EPA 625.1
111.160	036	N-nitrosodi-n-propylamine	EPA 625.1
111.160	037	Phenanthrene	EPA 625.1
111.160	038	Pyrene	EPA 625.1
111.160	039	1,2,4-Trichlorobenzene	EPA 625.1

Subgroup Code	Analyte Code	Analyte	Method
111.160	040	4-Chloro-3-methylphenol	EPA 625.1
111.160	041	2-Chlorophenol	EPA 625.1
111.160	042	2,4-Dichlorophenol	EPA 625.1
111.160	043	2,4-Dimethylphenol	EPA 625.1
111.160	044	2,4-Dinitrophenol	EPA 625.1
111.160	045	2-Methyl-4,6-dinitrophenol	EPA 625.1
111.160	046	2-Nitrophenol	EPA 625.1
111.160	047	4-Nitrophenol	EPA 625.1
111.160	048	Pentachlorophenol	EPA 625.1
111.160	049	Phenol	EPA 625.1
111.160	050	2,4,6-Trichlorophenol	EPA 625.1
111.160	052	Aldrin	EPA 625.1
111.160	058	alpha-BHC	EPA 625.1
111.160	059	beta-BHC	EPA 625.1
111.160	060	delta-BHC	EPA 625.1
111.160	061	gamma-BHC (Lindane)	EPA 625.1
111.160	076	4,4'-DDD	EPA 625.1
111.160	077	4,4'-DDE	EPA 625.1
111.160	078	4,4'-DDT	EPA 625.1
111.160	083	Dieldrin	EPA 625.1
111.160	085	Disulfoton	EPA 625.1
111.160	086	Endosulfan I	EPA 625.1
111.160	087	Endosulfan II	EPA 625.1
111.160	088	Endosulfan Sulfate	EPA 625.1
111.160	089	Endrin	EPA 625.1
111.160	090	Endrin Aldehyde	EPA 625.1
111.160	096	Heptachlor	EPA 625.1
111.160	097	Heptachlor Epoxide	EPA 625.1
111.160	098	Hexachlorocyclopentadiene	EPA 625.1
111.160	102	Methoxychlor	EPA 625.1
111.160	108	N-nitrosodimethylamine	EPA 625.1
111.160	110	N-nitrosodiphenylamine	EPA 625.1
111.160	112	Parathion Methyl	EPA 625.1
111.160	122	Phorate	EPA 625.1
111.210	002	Barban	EPA 632
111.210	003	Carbaryl (Sevin)	EPA 632
111.210	004	Carbofuran (Furadan)	EPA 632
111.210	005	Chloroprotham	EPA 632
111.210	006	Diuron	EPA 632
111.210	007	Fenuron	EPA 632
111.210	009	Linuron	EPA 632
111.210	011	Methomyl (Lannate)	EPA 632
111.210	015	Neburon	EPA 632
111.210	016	Protham	EPA 632
111.210	017	Propoxur (Baygon)	EPA 632
111.210	018	Siduron	EPA 632

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020
114.020	004	Beryllium	EPA 6020
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311

Subgroup Code	Analyte Code	Analyte	Method
115.022	001	TCLP Extractables	EPA 1311
115.023	001	TCLP Volatiles	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

Field of Testing: 116 – Volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
116.020	031	Ethanol and Methanol	EPA 8015 B
116.030	001	Gasoline Range Organics (GRO)	EPA 8015 B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021 B
116.040	061	Aromatic Volatiles	EPA 8021 B
116.040	062	BTEX	EPA 8021 B
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B
116.100	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT GC/MS
116.100	010	BTEX and MTBE	LUFT GC/MS
116.110	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.010	001	Diesel Range Organics (DRO)	EPA 8015 B
117.015	001	Diesel Range Organics (DRO)	LUFT GC/MS
117.016	001	Diesel Range Organics (DRO)	LUFT
117.110	000	Extractable Organics	EPA 8270 C
117.111	071	Pesticides	EPA 8270 C
117.140	000	Polynuclear Aromatic Hydrocarbons	EPA 8310
117.170	000	Nitroaromatics and Nitramines	EPA 8330
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.240	000	Organophosphorus Pesticides	EPA 8141 A
117.250	000	Chlorinated Herbicides	EPA 8151 A

Field of Testing: 120 – Physical Properties of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
120.010	001	Ignitability	EPA 1010

Subgroup Code	Analyte Code	Analyte	Method
120.022	001	Ignitability	EPA 1030
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040 B
120.080	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.003	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C, F-2006
126.007	001	E. coli (Enumeration)	SM 9223 B-2004
126.013	001	Enterococci	SM 9230 D-2007
126.015	001	E. coli (Enumeration)	Colilert
126.017	001	E. coli (Enumeration)	Colilert 18
126.019	001	Enterococci	Enterolert



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

BC Laboratories, Inc.

4100 Atlas Court

Bakersfield, CA 93308

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1186**

Expiration Date: **5/31/2021**

Effective Date: **6/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

BC Laboratories, Inc.

4100 Atlas Court

Bakersfield, CA 93308

Phone: (661) 327-4911

Certificate No. 1186

Expiration Date 5/31/2021 INTERIM

***As of 9/16/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.020	001	Total Coliform P/A	SM 9221 B
101.020	002	Fecal Coliform P/A	SM 9221 B, E
101.020	004	Total Coliform (Enumeration)	SM 9221 B, C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B, E
101.020	006	E. coli (Enumeration)	SM 9221 B, F
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert
101.050	005	Total Coliform P/A	SM 9223 B Colilert 18
101.050	006	E. coli P/A	SM 9223 B Colilert 18
101.050	007	Total Coliform (Enumeration)	SM 9223 B Colilert 18
101.050	008	E. coli (Enumeration)	SM 9223 B Colilert 18
101.170	001	Enterococci	Enterolert

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.020	001	Turbidity	EPA 180.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7

Subgroup Code	Analyte Code	Analyte	Method
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	009	Sulfate (as SO ₄)	EPA 300.0
102.045	001	Perchlorate	EPA 314.0
102.050	001	Cyanide, Total	EPA 335.4
102.061	001	Nitrite (as N)	EPA 353.2
102.070	001	Phosphate, Ortho (as P)	EPA 365.1
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.174	001	Chlorine, Free	SM 4500-Cl F-2000
102.180	001	Chlorine Dioxide	SM 4500-ClO ₂ D-2000
102.241	001	Phosphate, Ortho (as P)	SM 4500-P F-1999
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8

Subgroup Code	Analyte Code	Analyte	Method
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium VI (Hexavalent Chromium)	EPA 218.6

Field of Testing: 104 – Volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
104.030	001	1,2-Dibromoethane (EDB)	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1
104.035	001	1,2,3-Trichloropropane (TCP)	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.2
104.040	026	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.2
104.040	027	trans-1,2-Dichloroethylene (trans-1,2 Dichloroethene)	EPA 524.2
104.040	028	Dichloromethane (Methylene Chloride)	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 524.2
104.040	034	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2

Subgroup Code	Analyte Code	Analyte	Method
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethylene (Tetrachloroethene)	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethylene (Trichloroethene)	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.040	061	Carbon Disulfide	EPA 524.2
104.040	062	Methyl Isobutyl Ketone (4-Methyl- 2-Pentanone)	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	005	Trichlorotrifluoroethane	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2

Field of Testing: 105 – Semi-volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
105.035	000	Organochlorine Pesticides and PCBs	EPA 508
105.035	001	Aldrin	EPA 508
105.035	002	Endosulfan I	EPA 508
105.035	003	Endosulfan II	EPA 508
105.035	004	Endosulfan Sulfate	EPA 508
105.035	005	Endrin	EPA 508
105.035	006	Endrin Aldehyde	EPA 508
105.035	007	Heptachlor	EPA 508
105.035	008	Heptachlor Epoxide	EPA 508

Subgroup Code	Analyte Code	Analyte	Method
105.035	009	Hexachlorobenzene	EPA 508
105.035	010	Lindane (HCH-gamma)	EPA 508
105.035	011	Methoxychlor	EPA 508
105.035	013	Chlordane	EPA 508
105.035	014	Toxaphene	EPA 508
105.035	015	PCBs as Aroclors	EPA 508
105.035	016	Aroclor 1016	EPA 508
105.035	017	Aroclor 1221	EPA 508
105.035	018	Aroclor 1232	EPA 508
105.035	019	Aroclor 1242	EPA 508
105.035	020	Aroclor 1248	EPA 508
105.035	021	Aroclor 1254	EPA 508
105.035	022	Aroclor 1260	EPA 508
105.070	000	Chlorinated Acids	EPA 515.1
105.070	001	Bentazon	EPA 515.1
105.070	002	2,4-D	EPA 515.1
105.070	003	Dalapon	EPA 515.1
105.070	004	Dicamba	EPA 515.1
105.070	005	Dinoseb	EPA 515.1
105.070	006	Pentachlorophenol	EPA 515.1
105.070	007	Picloram	EPA 515.1
105.070	008	2,4,5-TP (Silvex)	EPA 515.1
105.090	000	Semi-volatile Organic Compounds	EPA 525.2
105.090	001	Alachlor	EPA 525.2
105.090	002	Aldrin	EPA 525.2
105.090	003	Atrazine	EPA 525.2
105.090	004	Benzo(a)pyrene	EPA 525.2
105.090	005	Butachlor	EPA 525.2
105.090	007	Dieldrin	EPA 525.2
105.090	008	Di(2-ethylhexyl) Adipate	EPA 525.2
105.090	009	Di(2-ethylhexyl) Phthalate	EPA 525.2
105.090	013	Endrin	EPA 525.2
105.090	014	Heptachlor	EPA 525.2
105.090	015	Heptachlor Epoxide	EPA 525.2
105.090	016	Hexachlorobenzene	EPA 525.2
105.090	017	Hexachlorocyclopentadiene	EPA 525.2
105.090	018	Lindane (HCH-gamma)	EPA 525.2
105.090	019	Methoxychlor	EPA 525.2
105.090	022	Molinate	EPA 525.2
105.090	025	Simazine	EPA 525.2
105.090	028	Thiobencarb	EPA 525.2
105.101	000	Carbamates	EPA 531.2
105.101	001	Carbofuran (Furadan)	EPA 531.2
105.101	002	Oxamyl	EPA 531.2
105.101	003	Aldicarb (Temik)	EPA 531.2
105.101	004	Aldicarb Sulfone	EPA 531.2
105.101	005	Aldicarb Sulfoxide	EPA 531.2

Subgroup Code	Analyte Code	Analyte	Method
105.101	006	Carbaryl (Sevin)	EPA 531.2
105.101	007	3-Hydroxycarbofuran	EPA 531.2
105.101	008	Methomyl (Lannate)	EPA 531.2
105.120	001	Glyphosate	EPA 547
105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.201	001	Haloacetic Acids (HAA5)	EPA 552.3

Field of Testing: 106 – Radionuclides in Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
106.092	001	Uranium	EPA 200.8

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.001	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C, F-2006
107.005	001	E. coli (Enumeration)	SM 9223 B-2004
107.011	001	Enterococci	SM 9230 D-2007
107.013	001	E. coli (Enumeration)	Colilert
107.015	001	E. coli (Enumeration)	Colilert 18
107.017	001	Enterococci	Enterolert

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.001	001	Specific Conductance	EPA 120.1 (1982 Rev.1.0)
108.007	001	Residue, Volatile	EPA 160.4 (1971)
108.009	001	Turbidity	EPA 180.1 (1993 Rev. 2.0)
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.017	001	Bromide	EPA 300.0 (1993 Rev. 2.1)
108.017	002	Chloride	EPA 300.0 (1993 Rev. 2.1)

Subgroup Code	Analyte Code	Analyte	Method
108.017	003	Fluoride	EPA 300.0 (1993 Rev. 2.1)
108.017	004	Nitrate (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	008	Sulfate (as SO ₄)	EPA 300.0 (1993 Rev. 2.1)
108.023	001	Cyanide, Total	EPA 335.4 (1993 Rev. 1.0)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen, Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.033	001	Nitrate-Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.033	002	Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.035	001	Phosphate, Ortho (as P)	EPA 365.1 (1993 Rev. 2.0)
108.039	001	Phosphorus, Total	EPA 365.4 (1974)
108.045	001	Chemical Oxygen Demand	EPA 410.4 (1993 Rev. 2.0)
108.049	001	Phenols, Total	EPA 420.4 (1993 Rev. 2.0)
108.053	002	Oil & Grease Total	EPA 1664 B
108.055	001	Color	SM 2120 B-2011
108.059	001	Turbidity	SM 2130 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.109	001	Chlorine, Total Residual	SM 4500-Cl F-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.147	001	Ammonia (as N)	SM 4500-NH ₃ G-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.177	001	Phosphate, Ortho (as P)	SM 4500-P F-2011
108.177	002	Phosphorous, Total	SM 4500-P F-2011
108.201	001	Sulfide (as S)	SM 4500-S D-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.217	001	Organic Carbon-Total (TOC)	SM 5310 C-2011
108.225	001	Surfactants	SM 5540 C-2011

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)
109.623	002	Antimony	EPA 200.7 (1994 Rev. 4.4)
109.623	003	Arsenic	EPA 200.7 (1994 Rev. 4.4)
109.623	004	Barium	EPA 200.7 (1994 Rev. 4.4)
109.623	005	Beryllium	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	007	Cadmium	EPA 200.7 (1994 Rev. 4.4)
109.623	008	Chromium	EPA 200.7 (1994 Rev. 4.4)
109.623	009	Cobalt	EPA 200.7 (1994 Rev. 4.4)
109.623	010	Copper	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)
109.623	012	Lead	EPA 200.7 (1994 Rev. 4.4)
109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.623	014	Molybdenum	EPA 200.7 (1994 Rev. 4.4)
109.623	015	Nickel	EPA 200.7 (1994 Rev. 4.4)
109.623	016	Selenium	EPA 200.7 (1994 Rev. 4.4)
109.623	017	Silver	EPA 200.7 (1994 Rev. 4.4)
109.623	018	Thallium	EPA 200.7 (1994 Rev. 4.4)
109.623	019	Tin	EPA 200.7 (1994 Rev. 4.4)
109.623	020	Titanium	EPA 200.7 (1994 Rev. 4.4)
109.623	021	Vanadium	EPA 200.7 (1994 Rev. 4.4)
109.623	022	Zinc	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)

Subgroup Code	Analyte Code	Analyte	Method
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	006	Boron	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.629	001	Chromium VI (Hexavalent Chromium)	EPA 218.6b (1994 Rev. 3.3)
109.635	001	Mercury	EPA 245.1 (1994 Rev. 3.0)
109.693	001	Iron	SM 3500-Fe B-2011

Field of Testing: 110 – Volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
110.040	001	Acetone	EPA 624.1
110.040	002	Acetonitrile	EPA 624.1
110.040	003	Acrolein	EPA 624.1
110.040	004	Acrylonitrile	EPA 624.1

Subgroup Code	Analyte Code	Analyte	Method
110.040	005	Benzene	EPA 624.1
110.040	006	Bromodichloromethane	EPA 624.1
110.040	007	Bromoform	EPA 624.1
110.040	008	Bromomethane (Methyl Bromide)	EPA 624.1
110.040	009	tert-Butyl Alcohol (TBA)	EPA 624.1
110.040	010	Carbon Tetrachloride	EPA 624.1
110.040	011	Chlorobenzene	EPA 624.1
110.040	012	Chloroethane	EPA 624.1
110.040	013	2-Chloroethyl vinyl Ether	EPA 624.1
110.040	014	Chloroform	EPA 624.1
110.040	015	Chloromethane (Methyl Chloride)	EPA 624.1
110.040	016	Dibromochloromethane (Chlorodibromomethane)	EPA 624.1
110.040	017	1,2-Dichlorobenzene	EPA 624.1
110.040	018	1,3-Dichlorobenzene	EPA 624.1
110.040	019	1,4-Dichlorobenzene	EPA 624.1
110.040	020	1,1-Dichloroethane	EPA 624.1
110.040	021	1,2-Dichloroethane	EPA 624.1
110.040	022	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 624.1
110.040	023	trans-1,2-Dichloroethylene (trans-1,2 Dichloroethene)	EPA 624.1
110.040	024	1,2-Dichloropropane	EPA 624.1
110.040	025	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 624.1
110.040	026	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 624.1
110.040	027	Ethanol	EPA 624.1
110.040	029	Ethylbenzene	EPA 624.1
110.040	031	Methylene Chloride (Dichloromethane)	EPA 624.1
110.040	032	4-Methyl-2-pentanone (MIBK)	EPA 624.1
110.040	034	1,1,2,2-Tetrachloroethane	EPA 624.1
110.040	035	Tetrachloroethylene (Tetrachloroethene)	EPA 624.1
110.040	036	Tetrahydrofuran	EPA 624.1
110.040	037	Toluene	EPA 624.1
110.040	038	1,1,1-Trichloroethane	EPA 624.1
110.040	039	1,1,2-Trichloroethane	EPA 624.1
110.040	040	Trichloroethylene (Trichloroethene)	EPA 624.1
110.040	041	Vinyl Chloride	EPA 624.1
110.040	043	o-Xylene	EPA 624.1
110.040	045	Trichlorofluoromethane	EPA 624.1
110.040	046	m+p-Xylene	EPA 624.1
110.040	047	2-Butanone (MEK)	EPA 624.1

Field of Testing: 111 – Semi-volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
111.055	001	Aldrin	EPA 608.3
111.055	002	alpha-BHC	EPA 608.3
111.055	003	beta-BHC	EPA 608.3
111.055	004	delta-BHC	EPA 608.3
111.055	005	gamma-BHC (Lindane)	EPA 608.3
111.055	006	Chlordane	EPA 608.3
111.055	007	4,4'-DDD	EPA 608.3
111.055	008	4,4'-DDE	EPA 608.3
111.055	009	4,4'-DDT	EPA 608.3
111.055	010	Dieldrin	EPA 608.3
111.055	011	Endosulfan I	EPA 608.3
111.055	012	Endosulfan II	EPA 608.3
111.055	013	Endosulfan Sulfate	EPA 608.3
111.055	014	Endrin	EPA 608.3
111.055	015	Endrin Aldehyde	EPA 608.3
111.055	016	Heptachlor	EPA 608.3
111.055	017	Heptachlor Epoxide	EPA 608.3
111.055	019	PCB-1016	EPA 608.3
111.055	020	PCB-1221	EPA 608.3
111.055	021	PCB-1232	EPA 608.3
111.055	022	PCB-1242	EPA 608.3
111.055	023	PCB-1248	EPA 608.3
111.055	024	PCB-1254	EPA 608.3
111.055	025	PCB-1260	EPA 608.3
111.055	038	Chlorothalonil	EPA 608.3
111.055	048	Mirex	EPA 608.3
111.055	050	Pentachloronitrobenzene (PCNB)	EPA 608.3
111.055	060	Toxaphene	EPA 608.3
111.070	001	Acenaphthene	EPA 610
111.070	002	Acenaphthylene	EPA 610
111.070	003	Anthracene	EPA 610
111.070	004	Benzo(a)anthracene	EPA 610
111.070	005	Benzo(a)pyrene	EPA 610
111.070	006	Benzo(b)fluoranthene	EPA 610
111.070	007	Benzo(g,h,i)perylene	EPA 610
111.070	008	Benzo(k)fluoranthene	EPA 610
111.070	009	Chrysene	EPA 610
111.070	010	Dibenzo(a,h)anthracene	EPA 610
111.070	011	Fluoranthene	EPA 610
111.070	012	Fluorene	EPA 610
111.070	013	Indeno(1,2,3-c,d)pyrene	EPA 610
111.070	014	Naphthalene	EPA 610
111.070	015	Phenanthrene	EPA 610
111.070	016	Pyrene	EPA 610
111.120	001	2,4-D	EPA 615
111.120	002	2,4-DB	EPA 615

Subgroup Code	Analyte Code	Analyte	Method
111.120	003	Dicamba	EPA 615
111.120	004	Dichloroprop	EPA 615
111.120	005	Dinoseb	EPA 615
111.120	008	2,4,5-T	EPA 615
111.120	009	2,4,5-TP (Silvex)	EPA 615
111.160	001	Acenaphthene	EPA 625.1
111.160	002	Acenaphthylene	EPA 625.1
111.160	003	Anthracene	EPA 625.1
111.160	004	Benzidine	EPA 625.1
111.160	005	Benzo(a)anthracene	EPA 625.1
111.160	006	Benzo(a)pyrene	EPA 625.1
111.160	007	Benzo(b)fluoranthene	EPA 625.1
111.160	008	Benzo(g,h,i)perylene	EPA 625.1
111.160	009	Benzo(k)fluoranthene	EPA 625.1
111.160	010	Bis(2-chloroethoxy) Methane	EPA 625.1
111.160	011	Bis(2-chloroethyl) Ether	EPA 625.1
111.160	012	Bis(2-chloroisopropyl) Ether	EPA 625.1
111.160	013	Bis(2-ethylhexyl)phthalate	EPA 625.1
111.160	014	4-Bromophenyl Phenyl Ether	EPA 625.1
111.160	015	Butyl Benzyl Phthalate	EPA 625.1
111.160	016	2-Chloronaphthalene	EPA 625.1
111.160	017	4-Chlorophenyl Phenyl Ether	EPA 625.1
111.160	018	Chrysene	EPA 625.1
111.160	019	Dibenzo(a,h)anthracene	EPA 625.1
111.160	020	3,3'-Dichlorobenzidine	EPA 625.1
111.160	021	Diethyl Phthalate	EPA 625.1
111.160	022	Dimethyl Phthalate	EPA 625.1
111.160	023	Di-n-butyl Phthalate	EPA 625.1
111.160	024	2,4-Dinitrotoluene	EPA 625.1
111.160	025	2,6-Dinitrotoluene	EPA 625.1
111.160	026	Di-n-octyl Phthalate	EPA 625.1
111.160	027	Fluoranthene	EPA 625.1
111.160	028	Fluorene	EPA 625.1
111.160	029	Hexachlorobenzene	EPA 625.1
111.160	030	Hexachlorobutadiene	EPA 625.1
111.160	031	Hexachloroethane	EPA 625.1
111.160	032	Indeno(1,2,3-c,d)pyrene	EPA 625.1
111.160	033	Isophorone	EPA 625.1
111.160	034	Naphthalene	EPA 625.1
111.160	035	Nitrobenzene	EPA 625.1
111.160	036	N-nitrosodi-n-propylamine	EPA 625.1
111.160	037	Phenanthrene	EPA 625.1
111.160	038	Pyrene	EPA 625.1
111.160	039	1,2,4-Trichlorobenzene	EPA 625.1

Subgroup Code	Analyte Code	Analyte	Method
111.160	040	4-Chloro-3-methylphenol	EPA 625.1
111.160	041	2-Chlorophenol	EPA 625.1
111.160	042	2,4-Dichlorophenol	EPA 625.1
111.160	043	2,4-Dimethylphenol	EPA 625.1
111.160	044	2,4-Dinitrophenol	EPA 625.1
111.160	045	2-Methyl-4,6-dinitrophenol	EPA 625.1
111.160	046	2-Nitrophenol	EPA 625.1
111.160	047	4-Nitrophenol	EPA 625.1
111.160	048	Pentachlorophenol	EPA 625.1
111.160	049	Phenol	EPA 625.1
111.160	050	2,4,6-Trichlorophenol	EPA 625.1
111.160	052	Aldrin	EPA 625.1
111.160	058	alpha-BHC	EPA 625.1
111.160	059	beta-BHC	EPA 625.1
111.160	060	delta-BHC	EPA 625.1
111.160	061	gamma-BHC (Lindane)	EPA 625.1
111.160	076	4,4'-DDD	EPA 625.1
111.160	077	4,4'-DDE	EPA 625.1
111.160	078	4,4'-DDT	EPA 625.1
111.160	083	Dieldrin	EPA 625.1
111.160	085	Disulfoton	EPA 625.1
111.160	086	Endosulfan I	EPA 625.1
111.160	087	Endosulfan II	EPA 625.1
111.160	088	Endosulfan Sulfate	EPA 625.1
111.160	089	Endrin	EPA 625.1
111.160	090	Endrin Aldehyde	EPA 625.1
111.160	096	Heptachlor	EPA 625.1
111.160	097	Heptachlor Epoxide	EPA 625.1
111.160	098	Hexachlorocyclopentadiene	EPA 625.1
111.160	102	Methoxychlor	EPA 625.1
111.160	108	N-nitrosodimethylamine	EPA 625.1
111.160	110	N-nitrosodiphenylamine	EPA 625.1
111.160	112	Parathion Methyl	EPA 625.1
111.160	122	Phorate	EPA 625.1
111.210	002	Barban	EPA 632
111.210	003	Carbaryl (Sevin)	EPA 632
111.210	004	Carbofuran (Furadan)	EPA 632
111.210	005	Chloroprotham	EPA 632
111.210	006	Diuron	EPA 632
111.210	007	Fenuron	EPA 632
111.210	009	Linuron	EPA 632
111.210	011	Methomyl (Lannate)	EPA 632
111.210	015	Neburon	EPA 632
111.210	016	Protham	EPA 632
111.210	017	Propoxur (Baygon)	EPA 632
111.210	018	Siduron	EPA 632

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020
114.020	004	Beryllium	EPA 6020
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311

Subgroup Code	Analyte Code	Analyte	Method
115.022	001	TCLP Extractables	EPA 1311
115.023	001	TCLP Volatiles	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

Field of Testing: 116 – Volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
116.020	031	Ethanol and Methanol	EPA 8015 B
116.030	001	Gasoline Range Organics (GRO)	EPA 8015 B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021 B
116.040	061	Aromatic Volatiles	EPA 8021 B
116.040	062	BTEX	EPA 8021 B
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B
116.100	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT GC/MS
116.100	010	BTEX and MTBE	LUFT GC/MS
116.110	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.010	001	Diesel Range Organics (DRO)	EPA 8015 B
117.015	001	Diesel Range Organics (DRO)	LUFT GC/MS
117.016	001	Diesel Range Organics (DRO)	LUFT
117.110	000	Extractable Organics	EPA 8270 C
117.111	071	Pesticides	EPA 8270 C
117.140	000	Polynuclear Aromatic Hydrocarbons	EPA 8310
117.170	000	Nitroaromatics and Nitramines	EPA 8330
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.240	000	Organophosphorus Pesticides	EPA 8141 A
117.250	000	Chlorinated Herbicides	EPA 8151 A

Field of Testing: 120 – Physical Properties of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
120.010	001	Ignitability	EPA 1010

Subgroup Code	Analyte Code	Analyte	Method
120.022	001	Ignitability	EPA 1030
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040 B
120.080	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.003	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C, F-2006
126.007	001	E. coli (Enumeration)	SM 9223 B-2004
126.013	001	Enterococci	SM 9230 D-2007
126.015	001	E. coli (Enumeration)	Colilert
126.017	001	E. coli (Enumeration)	Colilert 18
126.019	001	Enterococci	Enterolert

Appendix B. Laboratory ELAP Certificates



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

BSK Associates

Laboratory Services - Fresno Analytical Laboratory

1414 Stanislaus Street

Fresno, CA 93706-1623

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1180**

Expiration Date: **4/30/2021**

Effective Date: **5/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

BC Laboratories, Inc.

4100 Atlas Court

Bakersfield, CA 93308

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1186**

Expiration Date: **5/31/2021**

Effective Date: **6/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

BC Laboratories, Inc.

4100 Atlas Court

Bakersfield, CA 93308

Phone: (661) 327-4911

Certificate No. 1186

Expiration Date 5/31/2021 INTERIM

***As of 9/16/2020, this list supersedes all previous lists for this certificate number.**

Customers: Please verify the current accreditation standing with the State.

Field of Testing: 101 – Microbiology of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
101.010	001	Heterotrophic Bacteria	SM 9215 B
101.020	001	Total Coliform P/A	SM 9221 B
101.020	002	Fecal Coliform P/A	SM 9221 B, E
101.020	004	Total Coliform (Enumeration)	SM 9221 B, C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B, E
101.020	006	E. coli (Enumeration)	SM 9221 B, F
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert
101.050	005	Total Coliform P/A	SM 9223 B Colilert 18
101.050	006	E. coli P/A	SM 9223 B Colilert 18
101.050	007	Total Coliform (Enumeration)	SM 9223 B Colilert 18
101.050	008	E. coli (Enumeration)	SM 9223 B Colilert 18
101.170	001	Enterococci	Enterolert

Field of Testing: 102 – Inorganic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.020	001	Turbidity	EPA 180.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7

Subgroup Code	Analyte Code	Analyte	Method
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	009	Sulfate (as SO ₄)	EPA 300.0
102.045	001	Perchlorate	EPA 314.0
102.050	001	Cyanide, Total	EPA 335.4
102.061	001	Nitrite (as N)	EPA 353.2
102.070	001	Phosphate, Ortho (as P)	EPA 365.1
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.174	001	Chlorine, Free	SM 4500-Cl F-2000
102.180	001	Chlorine Dioxide	SM 4500-ClO ₂ D-2000
102.241	001	Phosphate, Ortho (as P)	SM 4500-P F-1999
102.262	001	Organic Carbon-Total (TOC)	SM 5310 C-2000
102.263	001	Dissolved Organic Carbon (DOC)	SM 5310 C-2000
102.270	001	Surfactants	SM 5540 C-2000

Field of Testing: 103 – Toxic Chemical Elements of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8

Subgroup Code	Analyte Code	Analyte	Method
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium VI (Hexavalent Chromium)	EPA 218.6

Field of Testing: 104 – Volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
104.030	001	1,2-Dibromoethane (EDB)	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1
104.035	001	1,2,3-Trichloropropane (TCP)	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.2
104.040	026	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.2
104.040	027	trans-1,2-Dichloroethylene (trans-1,2 Dichloroethene)	EPA 524.2
104.040	028	Dichloromethane (Methylene Chloride)	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 524.2
104.040	034	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2

Subgroup Code	Analyte Code	Analyte	Method
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethylene (Tetrachloroethene)	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethylene (Trichloroethene)	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.040	061	Carbon Disulfide	EPA 524.2
104.040	062	Methyl Isobutyl Ketone (4-Methyl- 2-Pentanone)	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	005	Trichlorotrifluoroethane	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2

Field of Testing: 105 – Semi-volatile Organic Chemistry of Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
105.035	000	Organochlorine Pesticides and PCBs	EPA 508
105.035	001	Aldrin	EPA 508
105.035	002	Endosulfan I	EPA 508
105.035	003	Endosulfan II	EPA 508
105.035	004	Endosulfan Sulfate	EPA 508
105.035	005	Endrin	EPA 508
105.035	006	Endrin Aldehyde	EPA 508
105.035	007	Heptachlor	EPA 508
105.035	008	Heptachlor Epoxide	EPA 508

Subgroup Code	Analyte Code	Analyte	Method
105.035	009	Hexachlorobenzene	EPA 508
105.035	010	Lindane (HCH-gamma)	EPA 508
105.035	011	Methoxychlor	EPA 508
105.035	013	Chlordane	EPA 508
105.035	014	Toxaphene	EPA 508
105.035	015	PCBs as Aroclors	EPA 508
105.035	016	Aroclor 1016	EPA 508
105.035	017	Aroclor 1221	EPA 508
105.035	018	Aroclor 1232	EPA 508
105.035	019	Aroclor 1242	EPA 508
105.035	020	Aroclor 1248	EPA 508
105.035	021	Aroclor 1254	EPA 508
105.035	022	Aroclor 1260	EPA 508
105.070	000	Chlorinated Acids	EPA 515.1
105.070	001	Bentazon	EPA 515.1
105.070	002	2,4-D	EPA 515.1
105.070	003	Dalapon	EPA 515.1
105.070	004	Dicamba	EPA 515.1
105.070	005	Dinoseb	EPA 515.1
105.070	006	Pentachlorophenol	EPA 515.1
105.070	007	Picloram	EPA 515.1
105.070	008	2,4,5-TP (Silvex)	EPA 515.1
105.090	000	Semi-volatile Organic Compounds	EPA 525.2
105.090	001	Alachlor	EPA 525.2
105.090	002	Aldrin	EPA 525.2
105.090	003	Atrazine	EPA 525.2
105.090	004	Benzo(a)pyrene	EPA 525.2
105.090	005	Butachlor	EPA 525.2
105.090	007	Dieldrin	EPA 525.2
105.090	008	Di(2-ethylhexyl) Adipate	EPA 525.2
105.090	009	Di(2-ethylhexyl) Phthalate	EPA 525.2
105.090	013	Endrin	EPA 525.2
105.090	014	Heptachlor	EPA 525.2
105.090	015	Heptachlor Epoxide	EPA 525.2
105.090	016	Hexachlorobenzene	EPA 525.2
105.090	017	Hexachlorocyclopentadiene	EPA 525.2
105.090	018	Lindane (HCH-gamma)	EPA 525.2
105.090	019	Methoxychlor	EPA 525.2
105.090	022	Molinate	EPA 525.2
105.090	025	Simazine	EPA 525.2
105.090	028	Thiobencarb	EPA 525.2
105.101	000	Carbamates	EPA 531.2
105.101	001	Carbofuran (Furadan)	EPA 531.2
105.101	002	Oxamyl	EPA 531.2
105.101	003	Aldicarb (Temik)	EPA 531.2
105.101	004	Aldicarb Sulfone	EPA 531.2
105.101	005	Aldicarb Sulfoxide	EPA 531.2

Subgroup Code	Analyte Code	Analyte	Method
105.101	006	Carbaryl (Sevin)	EPA 531.2
105.101	007	3-Hydroxycarbofuran	EPA 531.2
105.101	008	Methomyl (Lannate)	EPA 531.2
105.120	001	Glyphosate	EPA 547
105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.201	001	Haloacetic Acids (HAA5)	EPA 552.3

Field of Testing: 106 – Radionuclides in Drinking Water

Subgroup Code	Analyte Code	Analyte	Method
106.092	001	Uranium	EPA 200.8

Field of Testing: 107 – Microbiological Methods for Non-Potable Water and Sewage Sludge

Subgroup Code	Analyte Code	Analyte	Method
107.001	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C, F-2006
107.005	001	E. coli (Enumeration)	SM 9223 B-2004
107.011	001	Enterococci	SM 9230 D-2007
107.013	001	E. coli (Enumeration)	Colilert
107.015	001	E. coli (Enumeration)	Colilert 18
107.017	001	Enterococci	Enterolert

Field of Testing: 108 – Inorganic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
108.001	001	Specific Conductance	EPA 120.1 (1982 Rev.1.0)
108.007	001	Residue, Volatile	EPA 160.4 (1971)
108.009	001	Turbidity	EPA 180.1 (1993 Rev. 2.0)
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.017	001	Bromide	EPA 300.0 (1993 Rev. 2.1)
108.017	002	Chloride	EPA 300.0 (1993 Rev. 2.1)

Subgroup Code	Analyte Code	Analyte	Method
108.017	003	Fluoride	EPA 300.0 (1993 Rev. 2.1)
108.017	004	Nitrate (as N)	EPA 300.0 (1993 Rev. 2.1)
108.017	008	Sulfate (as SO ₄)	EPA 300.0 (1993 Rev. 2.1)
108.023	001	Cyanide, Total	EPA 335.4 (1993 Rev. 1.0)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen, Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.033	001	Nitrate-Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.033	002	Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.035	001	Phosphate, Ortho (as P)	EPA 365.1 (1993 Rev. 2.0)
108.039	001	Phosphorus, Total	EPA 365.4 (1974)
108.045	001	Chemical Oxygen Demand	EPA 410.4 (1993 Rev. 2.0)
108.049	001	Phenols, Total	EPA 420.4 (1993 Rev. 2.0)
108.053	002	Oil & Grease Total	EPA 1664 B
108.055	001	Color	SM 2120 B-2011
108.059	001	Turbidity	SM 2130 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.109	001	Chlorine, Total Residual	SM 4500-Cl F-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.147	001	Ammonia (as N)	SM 4500-NH ₃ G-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.177	001	Phosphate, Ortho (as P)	SM 4500-P F-2011
108.177	002	Phosphorous, Total	SM 4500-P F-2011
108.201	001	Sulfide (as S)	SM 4500-S D-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.217	001	Organic Carbon-Total (TOC)	SM 5310 C-2011
108.225	001	Surfactants	SM 5540 C-2011

Field of Testing: 109 – Metals and Trace Elements in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)
109.623	002	Antimony	EPA 200.7 (1994 Rev. 4.4)
109.623	003	Arsenic	EPA 200.7 (1994 Rev. 4.4)
109.623	004	Barium	EPA 200.7 (1994 Rev. 4.4)
109.623	005	Beryllium	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	007	Cadmium	EPA 200.7 (1994 Rev. 4.4)
109.623	008	Chromium	EPA 200.7 (1994 Rev. 4.4)
109.623	009	Cobalt	EPA 200.7 (1994 Rev. 4.4)
109.623	010	Copper	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)
109.623	012	Lead	EPA 200.7 (1994 Rev. 4.4)
109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.623	014	Molybdenum	EPA 200.7 (1994 Rev. 4.4)
109.623	015	Nickel	EPA 200.7 (1994 Rev. 4.4)
109.623	016	Selenium	EPA 200.7 (1994 Rev. 4.4)
109.623	017	Silver	EPA 200.7 (1994 Rev. 4.4)
109.623	018	Thallium	EPA 200.7 (1994 Rev. 4.4)
109.623	019	Tin	EPA 200.7 (1994 Rev. 4.4)
109.623	020	Titanium	EPA 200.7 (1994 Rev. 4.4)
109.623	021	Vanadium	EPA 200.7 (1994 Rev. 4.4)
109.623	022	Zinc	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)

Subgroup Code	Analyte Code	Analyte	Method
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	006	Boron	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.629	001	Chromium VI (Hexavalent Chromium)	EPA 218.6b (1994 Rev. 3.3)
109.635	001	Mercury	EPA 245.1 (1994 Rev. 3.0)
109.693	001	Iron	SM 3500-Fe B-2011

Field of Testing: 110 – Volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
110.040	001	Acetone	EPA 624.1
110.040	002	Acetonitrile	EPA 624.1
110.040	003	Acrolein	EPA 624.1
110.040	004	Acrylonitrile	EPA 624.1

Subgroup Code	Analyte Code	Analyte	Method
110.040	005	Benzene	EPA 624.1
110.040	006	Bromodichloromethane	EPA 624.1
110.040	007	Bromoform	EPA 624.1
110.040	008	Bromomethane (Methyl Bromide)	EPA 624.1
110.040	009	tert-Butyl Alcohol (TBA)	EPA 624.1
110.040	010	Carbon Tetrachloride	EPA 624.1
110.040	011	Chlorobenzene	EPA 624.1
110.040	012	Chloroethane	EPA 624.1
110.040	013	2-Chloroethyl vinyl Ether	EPA 624.1
110.040	014	Chloroform	EPA 624.1
110.040	015	Chloromethane (Methyl Chloride)	EPA 624.1
110.040	016	Dibromochloromethane (Chlorodibromomethane)	EPA 624.1
110.040	017	1,2-Dichlorobenzene	EPA 624.1
110.040	018	1,3-Dichlorobenzene	EPA 624.1
110.040	019	1,4-Dichlorobenzene	EPA 624.1
110.040	020	1,1-Dichloroethane	EPA 624.1
110.040	021	1,2-Dichloroethane	EPA 624.1
110.040	022	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 624.1
110.040	023	trans-1,2-Dichloroethylene (trans-1,2 Dichloroethene)	EPA 624.1
110.040	024	1,2-Dichloropropane	EPA 624.1
110.040	025	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 624.1
110.040	026	trans-1,3-Dichloropropylene (trans- 1,3 Dichloropropene)	EPA 624.1
110.040	027	Ethanol	EPA 624.1
110.040	029	Ethylbenzene	EPA 624.1
110.040	031	Methylene Chloride (Dichloromethane)	EPA 624.1
110.040	032	4-Methyl-2-pentanone (MIBK)	EPA 624.1
110.040	034	1,1,2,2-Tetrachloroethane	EPA 624.1
110.040	035	Tetrachloroethylene (Tetrachloroethene)	EPA 624.1
110.040	036	Tetrahydrofuran	EPA 624.1
110.040	037	Toluene	EPA 624.1
110.040	038	1,1,1-Trichloroethane	EPA 624.1
110.040	039	1,1,2-Trichloroethane	EPA 624.1
110.040	040	Trichloroethylene (Trichloroethene)	EPA 624.1
110.040	041	Vinyl Chloride	EPA 624.1
110.040	043	o-Xylene	EPA 624.1
110.040	045	Trichlorofluoromethane	EPA 624.1
110.040	046	m+p-Xylene	EPA 624.1
110.040	047	2-Butanone (MEK)	EPA 624.1

Field of Testing: 111 – Semi-volatile Organic Constituents in Non-Potable Water

Subgroup Code	Analyte Code	Analyte	Method
111.055	001	Aldrin	EPA 608.3
111.055	002	alpha-BHC	EPA 608.3
111.055	003	beta-BHC	EPA 608.3
111.055	004	delta-BHC	EPA 608.3
111.055	005	gamma-BHC (Lindane)	EPA 608.3
111.055	006	Chlordane	EPA 608.3
111.055	007	4,4'-DDD	EPA 608.3
111.055	008	4,4'-DDE	EPA 608.3
111.055	009	4,4'-DDT	EPA 608.3
111.055	010	Dieldrin	EPA 608.3
111.055	011	Endosulfan I	EPA 608.3
111.055	012	Endosulfan II	EPA 608.3
111.055	013	Endosulfan Sulfate	EPA 608.3
111.055	014	Endrin	EPA 608.3
111.055	015	Endrin Aldehyde	EPA 608.3
111.055	016	Heptachlor	EPA 608.3
111.055	017	Heptachlor Epoxide	EPA 608.3
111.055	019	PCB-1016	EPA 608.3
111.055	020	PCB-1221	EPA 608.3
111.055	021	PCB-1232	EPA 608.3
111.055	022	PCB-1242	EPA 608.3
111.055	023	PCB-1248	EPA 608.3
111.055	024	PCB-1254	EPA 608.3
111.055	025	PCB-1260	EPA 608.3
111.055	038	Chlorothalonil	EPA 608.3
111.055	048	Mirex	EPA 608.3
111.055	050	Pentachloronitrobenzene (PCNB)	EPA 608.3
111.055	060	Toxaphene	EPA 608.3
111.070	001	Acenaphthene	EPA 610
111.070	002	Acenaphthylene	EPA 610
111.070	003	Anthracene	EPA 610
111.070	004	Benzo(a)anthracene	EPA 610
111.070	005	Benzo(a)pyrene	EPA 610
111.070	006	Benzo(b)fluoranthene	EPA 610
111.070	007	Benzo(g,h,i)perylene	EPA 610
111.070	008	Benzo(k)fluoranthene	EPA 610
111.070	009	Chrysene	EPA 610
111.070	010	Dibenzo(a,h)anthracene	EPA 610
111.070	011	Fluoranthene	EPA 610
111.070	012	Fluorene	EPA 610
111.070	013	Indeno(1,2,3-c,d)pyrene	EPA 610
111.070	014	Naphthalene	EPA 610
111.070	015	Phenanthrene	EPA 610
111.070	016	Pyrene	EPA 610
111.120	001	2,4-D	EPA 615
111.120	002	2,4-DB	EPA 615

Subgroup Code	Analyte Code	Analyte	Method
111.120	003	Dicamba	EPA 615
111.120	004	Dichloroprop	EPA 615
111.120	005	Dinoseb	EPA 615
111.120	008	2,4,5-T	EPA 615
111.120	009	2,4,5-TP (Silvex)	EPA 615
111.160	001	Acenaphthene	EPA 625.1
111.160	002	Acenaphthylene	EPA 625.1
111.160	003	Anthracene	EPA 625.1
111.160	004	Benzidine	EPA 625.1
111.160	005	Benzo(a)anthracene	EPA 625.1
111.160	006	Benzo(a)pyrene	EPA 625.1
111.160	007	Benzo(b)fluoranthene	EPA 625.1
111.160	008	Benzo(g,h,i)perylene	EPA 625.1
111.160	009	Benzo(k)fluoranthene	EPA 625.1
111.160	010	Bis(2-chloroethoxy) Methane	EPA 625.1
111.160	011	Bis(2-chloroethyl) Ether	EPA 625.1
111.160	012	Bis(2-chloroisopropyl) Ether	EPA 625.1
111.160	013	Bis(2-ethylhexyl)phthalate	EPA 625.1
111.160	014	4-Bromophenyl Phenyl Ether	EPA 625.1
111.160	015	Butyl Benzyl Phthalate	EPA 625.1
111.160	016	2-Chloronaphthalene	EPA 625.1
111.160	017	4-Chlorophenyl Phenyl Ether	EPA 625.1
111.160	018	Chrysene	EPA 625.1
111.160	019	Dibenzo(a,h)anthracene	EPA 625.1
111.160	020	3,3'-Dichlorobenzidine	EPA 625.1
111.160	021	Diethyl Phthalate	EPA 625.1
111.160	022	Dimethyl Phthalate	EPA 625.1
111.160	023	Di-n-butyl Phthalate	EPA 625.1
111.160	024	2,4-Dinitrotoluene	EPA 625.1
111.160	025	2,6-Dinitrotoluene	EPA 625.1
111.160	026	Di-n-octyl Phthalate	EPA 625.1
111.160	027	Fluoranthene	EPA 625.1
111.160	028	Fluorene	EPA 625.1
111.160	029	Hexachlorobenzene	EPA 625.1
111.160	030	Hexachlorobutadiene	EPA 625.1
111.160	031	Hexachloroethane	EPA 625.1
111.160	032	Indeno(1,2,3-c,d)pyrene	EPA 625.1
111.160	033	Isophorone	EPA 625.1
111.160	034	Naphthalene	EPA 625.1
111.160	035	Nitrobenzene	EPA 625.1
111.160	036	N-nitrosodi-n-propylamine	EPA 625.1
111.160	037	Phenanthrene	EPA 625.1
111.160	038	Pyrene	EPA 625.1
111.160	039	1,2,4-Trichlorobenzene	EPA 625.1

Subgroup Code	Analyte Code	Analyte	Method
111.160	040	4-Chloro-3-methylphenol	EPA 625.1
111.160	041	2-Chlorophenol	EPA 625.1
111.160	042	2,4-Dichlorophenol	EPA 625.1
111.160	043	2,4-Dimethylphenol	EPA 625.1
111.160	044	2,4-Dinitrophenol	EPA 625.1
111.160	045	2-Methyl-4,6-dinitrophenol	EPA 625.1
111.160	046	2-Nitrophenol	EPA 625.1
111.160	047	4-Nitrophenol	EPA 625.1
111.160	048	Pentachlorophenol	EPA 625.1
111.160	049	Phenol	EPA 625.1
111.160	050	2,4,6-Trichlorophenol	EPA 625.1
111.160	052	Aldrin	EPA 625.1
111.160	058	alpha-BHC	EPA 625.1
111.160	059	beta-BHC	EPA 625.1
111.160	060	delta-BHC	EPA 625.1
111.160	061	gamma-BHC (Lindane)	EPA 625.1
111.160	076	4,4'-DDD	EPA 625.1
111.160	077	4,4'-DDE	EPA 625.1
111.160	078	4,4'-DDT	EPA 625.1
111.160	083	Dieldrin	EPA 625.1
111.160	085	Disulfoton	EPA 625.1
111.160	086	Endosulfan I	EPA 625.1
111.160	087	Endosulfan II	EPA 625.1
111.160	088	Endosulfan Sulfate	EPA 625.1
111.160	089	Endrin	EPA 625.1
111.160	090	Endrin Aldehyde	EPA 625.1
111.160	096	Heptachlor	EPA 625.1
111.160	097	Heptachlor Epoxide	EPA 625.1
111.160	098	Hexachlorocyclopentadiene	EPA 625.1
111.160	102	Methoxychlor	EPA 625.1
111.160	108	N-nitrosodimethylamine	EPA 625.1
111.160	110	N-nitrosodiphenylamine	EPA 625.1
111.160	112	Parathion Methyl	EPA 625.1
111.160	122	Phorate	EPA 625.1
111.210	002	Barban	EPA 632
111.210	003	Carbaryl (Sevin)	EPA 632
111.210	004	Carbofuran (Furadan)	EPA 632
111.210	005	Chloroprotham	EPA 632
111.210	006	Diuron	EPA 632
111.210	007	Fenuron	EPA 632
111.210	009	Linuron	EPA 632
111.210	011	Methomyl (Lannate)	EPA 632
111.210	015	Neburon	EPA 632
111.210	016	Protham	EPA 632
111.210	017	Propoxur (Baygon)	EPA 632
111.210	018	Siduron	EPA 632

Field of Testing: 114 – Inorganic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020
114.020	004	Beryllium	EPA 6020
114.010	001	Antimony	EPA 6010 B
114.010	002	Arsenic	EPA 6010 B
114.010	003	Barium	EPA 6010 B
114.010	004	Beryllium	EPA 6010 B
114.010	005	Cadmium	EPA 6010 B
114.010	006	Chromium	EPA 6010 B
114.010	007	Cobalt	EPA 6010 B
114.010	008	Copper	EPA 6010 B
114.010	009	Lead	EPA 6010 B
114.010	010	Molybdenum	EPA 6010 B
114.010	011	Nickel	EPA 6010 B
114.010	012	Selenium	EPA 6010 B
114.010	013	Silver	EPA 6010 B
114.010	014	Thallium	EPA 6010 B
114.010	015	Vanadium	EPA 6010 B
114.010	016	Zinc	EPA 6010 B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020

Field of Testing: 115 – Extraction Test of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311

Subgroup Code	Analyte Code	Analyte	Method
115.022	001	TCLP Extractables	EPA 1311
115.023	001	TCLP Volatiles	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

Field of Testing: 116 – Volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
116.020	031	Ethanol and Methanol	EPA 8015 B
116.030	001	Gasoline Range Organics (GRO)	EPA 8015 B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021 B
116.040	061	Aromatic Volatiles	EPA 8021 B
116.040	062	BTEX	EPA 8021 B
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B
116.100	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT GC/MS
116.100	010	BTEX and MTBE	LUFT GC/MS
116.110	001	Total Petroleum Hydrocarbons - Gasoline (GRO)	LUFT

Field of Testing: 117 – Semi-volatile Organic Chemistry of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
117.010	001	Diesel Range Organics (DRO)	EPA 8015 B
117.015	001	Diesel Range Organics (DRO)	LUFT GC/MS
117.016	001	Diesel Range Organics (DRO)	LUFT
117.110	000	Extractable Organics	EPA 8270 C
117.111	071	Pesticides	EPA 8270 C
117.140	000	Polynuclear Aromatic Hydrocarbons	EPA 8310
117.170	000	Nitroaromatics and Nitramines	EPA 8330
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.240	000	Organophosphorus Pesticides	EPA 8141 A
117.250	000	Chlorinated Herbicides	EPA 8151 A

Field of Testing: 120 – Physical Properties of Hazardous Waste

Subgroup Code	Analyte Code	Analyte	Method
120.010	001	Ignitability	EPA 1010

Subgroup Code	Analyte Code	Analyte	Method
120.022	001	Ignitability	EPA 1030
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040 B
120.080	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 126 – Microbiological Methods for Ambient Water

Subgroup Code	Analyte Code	Analyte	Method
126.003	001	Total Coliform (Enumeration)	SM 9221 B, C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C, E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C, F-2006
126.007	001	E. coli (Enumeration)	SM 9223 B-2004
126.013	001	Enterococci	SM 9230 D-2007
126.015	001	E. coli (Enumeration)	Colilert
126.017	001	E. coli (Enumeration)	Colilert 18
126.019	001	Enterococci	Enterolert



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Monterey One Water (M1W)

Laboratory Division

14811 Del Monte Boulevard

Marina, CA 93933

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1195**

Expiration Date: **5/31/2021**

Effective Date: **6/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Monterey County Consolidated Environmental Laboratory

1270 Natividad Road

Salinas, CA 93906

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1395**

Expiration Date: **12/31/2020**

Effective Date: **1/1/2019**

Sacramento, California
subject to forfeiture or revocation

A handwritten signature in black ink, reading "Christine Sotelo".

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Alpha Analytical Laboratories, Inc. - Ukiah

208 Mason Street

Ukiah, CA 95482

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1551**

Expiration Date: **6/30/2021**

Effective Date: **7/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Fruit Growers Laboratory, Inc.

Santa Paula

853 Corporation Street

Santa Paula, CA 93060

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1573**

Expiration Date: **7/31/2021**

Effective Date: **8/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

McC Campbell Analytical, Inc.

1534 Willow Pass Road

Pittsburg, CA 94565

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1644**

Expiration Date: **10/31/2021**

Effective Date: **11/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



**CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing**



McC Campbell Analytical, Inc.

1534 Willow Pass Road
Pittsburg, CA 94565
Phone: 9252529262

**Certificate No. 1644
Expiration Date 10/31/2021**

Field of Testing: 101 - Microbiology of Drinking Water

101.010	001	Heterotrophic Bacteria	SM 9215 B
101.010	002	Heterotrophic Bacteria	SimPlate
101.020	001	Total Coliform P/A	SM 9221 B
101.020	002	Fecal Coliform P/A	SM 9221 B,E
101.020	003	E. coli P/A	SM 9221 B,F
101.020	004	Total Coliform (Enumeration)	SM 9221 B,C
101.020	005	Fecal Coliform (Enumeration)	SM 9221 B,E
101.020	006	E. coli (Enumeration)	SM 9221 B,F
101.040	001	Total Coliform P/A	SM 9222 B
101.040	002	Fecal Coliform P/A	SM 9222 D
101.040	005	Total Coliform (Enumeration)	SM 9222 B
101.040	006	Fecal Coliform (Enumeration)	SM 9222 D
101.050	001	Total Coliform P/A	SM 9223 B Colilert
101.050	002	E. coli P/A	SM 9223 B Colilert
101.050	003	Total Coliform (Enumeration)	SM 9223 B Colilert
101.050	004	E. coli (Enumeration)	SM 9223 B Colilert
101.140	001	Enterococci	SM 9230 B
101.170	001	Enterococci	Enterolert

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.020	001	Turbidity	EPA 180.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.026	006	Hardness (Calculation)	EPA 200.7
102.040	001	Bromide	EPA 300.1
102.040	002	Chlorite	EPA 300.1
102.040	003	Chlorate	EPA 300.1
102.040	004	Bromate	EPA 300.1
102.040	005	Chloride	EPA 300.1
102.040	006	Fluoride	EPA 300.1

102.040	007	Nitrate (as N)	EPA 300.1
102.040	008	Nitrite (as N)	EPA 300.1
102.040	009	Phosphate,Ortho (as P)	EPA 300.1
102.040	010	Sulfate (as SO ₄)	EPA 300.1
102.045	001	Perchlorate	EPA 314.0
102.050	001	Cyanide, Total	EPA 335.4
102.086	001	Dissolved Organic Carbon (DOC)	EPA 415.3 Revision 1.2
102.086	003	Organic Carbon-Total (TOC)	EPA 415.3 Revision 1.2
102.095	001	Turbidity	SM 2130 B-2001
102.100	001	Alkalinity	SM 2320 B-1997
102.120	001	Hardness (Calculation)	SM 2340 B-1997
102.121	001	Hardness	SM 2340 C-1997
102.130	001	Specific Conductance	SM 2510 B-1997
102.140	001	Residue, Filterable TDS	SM 2540 C-1997
102.175	001	Chlorine, Free	SM 4500-Cl G-2000
102.175	002	Chlorine, Total Residual	SM 4500-Cl G-2000
102.190	001	Cyanide, Total	SM 4500-CN E-1999
102.192	001	Cyanide, Amenable	SM 4500-CN G-1999
102.203	001	Hydrogen Ion (pH)	SM 4500-H+ B-2000
102.243	001	Silica	SM 4500-SiO ₂ D-1997
102.260	001	Organic Carbon-Total (TOC)	SM 5310 B-2000
102.261	001	Dissolved Organic Carbon (DOC)	SM 5310 B-2000
102.270	001	Surfactants	SM 5540 C-2000
102.280	001	UV254	SM 5910 B-2011
102.564	001	Cyanide, Total	Kelada-01

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.130	001	Aluminum	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8

103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.161	001	Mercury	EPA 245.2
103.310	001	Chromium VI (Hexavalent Chromium)	EPA 218.6
103.311	001	Chromium VI (Hexavalent Chromium)	EPA 218.7

Field of Testing: 104 - Volatile Organic Chemistry of Drinking Water

104.035	001	1,2,3-Trichloropropane (TCP)	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.2
104.040	026	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.2
104.040	027	trans-1,2-Dichloroethylene (trans- 1,2 Dichloroethene)	EPA 524.2
104.040	028	Dichloromethane (Methylene Chloride)	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 524.2
104.040	034	trans-1,3-Dichloropropylene (trans-1,3 Dichloropropene)	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethylene (Tetrachloroethene)	EPA 524.2
104.040	046	Toluene	EPA 524.2

104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethylene (Trichloroethene)	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.040	061	Carbon Disulfide	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	005	Trichlorotrifluoroethane	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2
104.055	000	Volatile Organic Compounds	EPA 524.3
104.055	001	Benzene	EPA 524.3
104.055	002	Carbon Tetrachloride	EPA 524.3
104.055	003	Chlorobenzene	EPA 524.3
104.055	004	1,2-Dichlorobenzene	EPA 524.3
104.055	005	1,4-Dichlorobenzene	EPA 524.3
104.055	006	1,2-Dichloroethane	EPA 524.3
104.055	007	cis-1,2-Dichloroethylene (cis 1,2 Dichloroethene)	EPA 524.3
104.055	008	trans-1,2-Dichloroethylene (trans- 1,2 Dichloroethene)	EPA 524.3
104.055	009	Dichloromethane (Methylene Chloride)	EPA 524.3
104.055	010	1,2-Dichloropropane	EPA 524.3
104.055	011	Ethylbenzene	EPA 524.3
104.055	012	Styrene	EPA 524.3
104.055	013	Tetrachloroethylene (Tetrachloroethene)	EPA 524.3
104.055	014	1,1,1-Trichloroethane	EPA 524.3
104.055	015	Trichloroethylene (Trichloroethene)	EPA 524.3
104.055	016	Toluene	EPA 524.3
104.055	017	1,2,4-Trichlorobenzene	EPA 524.3
104.055	018	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 524.3
104.055	019	1,1,2-Trichloroethane	EPA 524.3

104.055	020	Vinyl Chloride	EPA 524.3
104.055	021	Xylenes, Total	EPA 524.3
104.055	022	1,2-Dibromo-3-chloropropane (DBCP)	EPA 524.3
104.055	023	1,2-Dibromoethane (EDB)	EPA 524.3
104.056	000	Trihalomethanes, Total	EPA 524.3
104.056	001	Bromodichloromethane	EPA 524.3
104.056	002	Bromoform	EPA 524.3
104.056	003	Chloroform	EPA 524.3
104.056	004	Dibromochloromethane (Chlorodibromomethane)	EPA 524.3
104.057	000	Gasoline Additives	EPA 524.3
104.057	001	Di-isopropyl Ether (DIPE)	EPA 524.3
104.057	002	Methyl tert-butyl Ether (MTBE)	EPA 524.3
104.057	003	tert-Amyl Methyl Ether (TAME)	EPA 524.3
104.057	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.3
104.057	005	Trichlorofluoromethane	EPA 524.3
104.057	006	tert-Butyl Alcohol (TBA)	EPA 524.3
104.057	007	Trichlorotrifluoroethane (Freon 113)	EPA 524.3

Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water

105.010	000	Organochlorine Pesticides and PCBs	EPA 505
105.010	004	Chlordane	EPA 505
105.010	006	Endrin	EPA 505
105.010	007	Heptachlor	EPA 505
105.010	008	Heptachlor Epoxide	EPA 505
105.010	009	Hexachlorobenzene	EPA 505
105.010	010	Hexachlorocyclopentadiene	EPA 505
105.010	011	Lindane (HCH-gamma)	EPA 505
105.010	012	Methoxychlor	EPA 505
105.010	014	Toxaphene	EPA 505
105.010	015	PCBs as Aroclors (screen)	EPA 505
105.082	000	Chlorinated Acids	EPA 515.3
105.082	001	2,4-D	EPA 515.3
105.082	002	Dinoseb	EPA 515.3
105.082	003	Pentachlorophenol	EPA 515.3
105.082	004	Picloram	EPA 515.3
105.082	005	2,4,5-TP (Silvex)	EPA 515.3
105.082	006	Bentazon	EPA 515.3
105.082	007	Dalapon	EPA 515.3
105.082	008	Dicamba	EPA 515.3
105.090	000	Semi-volatile Organic Compounds	EPA 525.2
105.090	003	Atrazine	EPA 525.2
105.090	004	Benzo(a)pyrene	EPA 525.2
105.090	008	Di(2-ethylhexyl) Adipate	EPA 525.2

105.090	009	Di(2-ethylhexyl) Phthalate	EPA 525.2
105.090	016	Hexachlorobenzene	EPA 525.2
105.090	017	Hexachlorocyclopentadiene	EPA 525.2
105.090	022	Molinate	EPA 525.2
105.090	023	Pentachlorophenol	EPA 525.2
105.090	025	Simazine	EPA 525.2
105.091	000	Semi-volatile Organic Compounds	EPA 525.3
105.091	001	Alachlor	EPA 525.3
105.091	003	Atrazine	EPA 525.3
105.091	005	Benzo(a)pyrene	EPA 525.3
105.091	009	Di(2-ethylhexyl) Adipate	EPA 525.3
105.091	011	Endrin	EPA 525.3
105.091	012	Heptachlor	EPA 525.3
105.091	013	Heptachlor Epoxide	EPA 525.3
105.091	014	Hexachlorobenzene	EPA 525.3
105.091	015	Hexachlorocyclopentadiene	EPA 525.3
105.091	016	Lindane (HCH-gamma)	EPA 525.3
105.091	017	Methoxychlor	EPA 525.3
105.091	020	Molinate	EPA 525.3
105.091	021	Pentachlorophenol	EPA 525.3
105.091	023	Simazine	EPA 525.3
105.091	024	Thiobencarb	EPA 525.3
105.091	026	PCBs as Aroclors	EPA 525.3
105.100	000	Carbamates	EPA 531.1
105.100	001	Aldicarb (Temik)	EPA 531.1
105.100	002	Aldicarb Sulfone	EPA 531.1
105.100	003	Aldicarb Sulfoxide	EPA 531.1
105.100	004	Carbaryl (Sevin)	EPA 531.1
105.100	005	Carbofuran (Furadan)	EPA 531.1
105.100	006	3-Hydroxycarbofuran	EPA 531.1
105.100	007	Methomyl (Lannate)	EPA 531.1
105.100	008	Oxamyl	EPA 531.1
105.101	000	Carbamates	EPA 531.2
105.101	001	Carbofuran (Furadan)	EPA 531.2
105.101	002	Oxamyl	EPA 531.2
105.101	003	Aldicarb (Temik)	EPA 531.2
105.101	004	Aldicarb Sulfone	EPA 531.2
105.101	005	Aldicarb Sulfoxide	EPA 531.2
105.101	006	Carbaryl (Sevin)	EPA 531.2
105.101	007	3-Hydroxycarbofuran	EPA 531.2
105.101	008	Methomyl (Lannate)	EPA 531.2
105.120	001	Glyphosate	EPA 547

105.140	001	Endothall	EPA 548.1
105.150	001	Diquat	EPA 549.2
105.200	001	Bromoacetic Acid	EPA 552.2
105.200	003	Chloroacetic Acid	EPA 552.2
105.200	005	Dibromoacetic Acid	EPA 552.2
105.200	006	Dichloroacetic Acid	EPA 552.2
105.200	007	Trichloroacetic Acid	EPA 552.2
105.200	008	Haloacetic Acids (HAA5)	EPA 552.2
105.230	000	Dioxins	EPA 1613
105.230	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613
105.230	002	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Screening Only	EPA 1613

Field of Testing: 107 - Microbiological Methods for Non-Potable Water and Sewage Sludge

107.001	001	Total Coliform (Enumeration)	SM 9221 B,C-2006
107.001	002	Fecal Coliform (Enumeration)	SM 9221 C,E-2006
107.001	003	E. coli (Enumeration)	SM 9221 C,F-2006
107.003	001	Total Coliform (Enumeration)	SM 9222 B-2006
107.003	002	Fecal Coliform (Enumeration)	SM 9222 D-2006
107.005	001	E. coli (Enumeration)	SM 9223 B-2004
107.007	001	Enterococci	SM 9230 B-2007
107.017	001	Enterococci	Enterolert

Field of Testing: 108 - Inorganic Constituents in Non-Potable Water

108.001	001	Specific Conductance	EPA 120.1 (1982 Rev.1.0)
108.007	001	Residue, Volatile	EPA 160.4 (1971)
108.009	001	Turbidity	EPA 180.1 (1993 Rev. 2.0)
108.013	001	Calcium	EPA 200.7 (1994 Rev. 4.4)
108.013	002	Magnesium	EPA 200.7 (1994 Rev. 4.4)
108.013	003	Phosphorus, Total	EPA 200.7 (1994 Rev. 4.4)
108.013	004	Potassium	EPA 200.7 (1994 Rev. 4.4)
108.013	005	Silica, Dissolved	EPA 200.7 (1994 Rev. 4.4)
108.013	006	Sodium	EPA 200.7 (1994 Rev. 4.4)
108.015	001	Calcium	EPA 200.8 (1994 Rev. 5.4)
108.015	002	Magnesium	EPA 200.8 (1994 Rev. 5.4)
108.015	003	Potassium	EPA 200.8 (1994 Rev. 5.4)
108.015	005	Sodium	EPA 200.8 (1994 Rev. 5.4)
108.019	001	Bromide	EPA 300.1 (1997 Rev.1.0)
108.019	002	Chloride	EPA 300.1 (1997 Rev.1.0)
108.019	003	Fluoride	EPA 300.1 (1997 Rev.1.0)
108.019	004	Nitrate (as N)	EPA 300.1 (1997 Rev.1.0)
108.019	005	Nitrate-Nitrite (as N)	EPA 300.1 (1997 Rev.1.0)
108.019	006	Nitrite (as N)	EPA 300.1 (1997 Rev.1.0)
108.019	007	Phosphate, Ortho (as P)	EPA 300.1 (1997 Rev.1.0)
108.019	008	Sulfate (as SO ₄)	EPA 300.1 (1997 Rev.1.0)

108.021	001	Alkalinity	EPA 310.2 (1974 Rev. 1.0)
108.023	001	Cyanide, Total	EPA 335.4 (1993 Rev. 1.0)
108.025	001	Ammonia (as N)	EPA 350.1 (1993 Rev. 2.0)
108.029	001	Kjeldahl Nitrogen, Total (as N)	EPA 351.2 (1993 Rev. 2.0)
108.033	001	Nitrate-Nitrite (as N)	EPA 353.2 (1993 Rev. 2.0)
108.035	002	Phosphorus, Total	EPA 365.1 (1993 Rev. 2.0)
108.037	001	Phosphate, Ortho (as P)	EPA 365.3 (1978)
108.045	001	Chemical Oxygen Demand	EPA 410.4 (1993 Rev. 2.0)
108.047	001	Phenols, Total	EPA 420.1 (1978 Rev. 1.0)
108.049	001	Phenols, Total	EPA 420.4 (1993 Rev. 2.0)
108.053	001	Oil & Grease Total	EPA 1664 A
108.055	001	Color	SM 2120 B-2011
108.059	001	Turbidity	SM 2130 B-2011
108.061	001	Acidity	SM 2310 B-2011
108.063	001	Alkalinity	SM 2320 B-2011
108.065	001	Hardness (Calculation)	SM 2340 B-2011
108.067	001	Hardness	SM 2340 C-2011
108.069	001	Specific Conductance	SM 2510 B-2011
108.071	001	Residue, Total	SM 2540 B-2011
108.073	001	Residue, Filterable TDS	SM 2540 C-2011
108.075	001	Residue, Non-filterable TSS	SM 2540 D-2011
108.077	001	Residue, Volatile	SM 2540 E-2011
108.079	001	Residue, Settleable	SM 2540 F-2011
108.108	001	Chlorine, Total Residual	SM 4500-Cl E-2011
108.114	001	Chlorine, Total Residual	SM 4500-Cl G-2011
108.114	002	Chlorine, Free	SM 4500-Cl G-2011
108.125	001	Cyanide, Total	SM 4500-CN E-2011
108.129	001	Cyanide, Available	SM 4500-CN G-2011
108.137	001	Hydrogen Ion (pH)	SM 4500-H+ B-2011
108.147	001	Ammonia (as N)	SM 4500-NH3 G-2011
108.159	001	Nitrate-Nitrite (as N)	SM 4500-NO3 F-2011
108.173	001	Oxygen, Dissolved	SM 4500-O G-2011
108.207	001	Biochemical Oxygen Demand	SM 5210 B-2011
108.207	002	Carbonaceous BOD	SM 5210 B-2011
108.213	001	Chemical Oxygen Demand	SM 5220 D-2011
108.215	001	Organic Carbon-Total (TOC)	SM 5310 B-2011
108.225	001	Surfactants	SM 5540 C-2011
108.335	001	Cyanide, Total	Kelada-01

Field of Testing: 109 - Metals and Trace Elements in Non-Potable Water

109.623	001	Aluminum	EPA 200.7 (1994 Rev. 4.4)
109.623	006	Boron	EPA 200.7 (1994 Rev. 4.4)
109.623	011	Iron	EPA 200.7 (1994 Rev. 4.4)

109.623	013	Manganese	EPA 200.7 (1994 Rev. 4.4)
109.625	001	Aluminum	EPA 200.8 (1994 Rev. 5.4)
109.625	002	Antimony	EPA 200.8 (1994 Rev. 5.4)
109.625	003	Arsenic	EPA 200.8 (1994 Rev. 5.4)
109.625	004	Barium	EPA 200.8 (1994 Rev. 5.4)
109.625	005	Beryllium	EPA 200.8 (1994 Rev. 5.4)
109.625	006	Boron	EPA 200.8 (1994 Rev. 5.4)
109.625	007	Cadmium	EPA 200.8 (1994 Rev. 5.4)
109.625	008	Chromium	EPA 200.8 (1994 Rev. 5.4)
109.625	009	Cobalt	EPA 200.8 (1994 Rev. 5.4)
109.625	010	Copper	EPA 200.8 (1994 Rev. 5.4)
109.625	012	Iron	EPA 200.8 (1994 Rev. 5.4)
109.625	013	Lead	EPA 200.8 (1994 Rev. 5.4)
109.625	014	Manganese	EPA 200.8 (1994 Rev. 5.4)
109.625	015	Molybdenum	EPA 200.8 (1994 Rev. 5.4)
109.625	016	Nickel	EPA 200.8 (1994 Rev. 5.4)
109.625	017	Selenium	EPA 200.8 (1994 Rev. 5.4)
109.625	018	Silver	EPA 200.8 (1994 Rev. 5.4)
109.625	019	Thallium	EPA 200.8 (1994 Rev. 5.4)
109.625	020	Tin	EPA 200.8 (1994 Rev. 5.4)
109.625	021	Titanium	EPA 200.8 (1994 Rev. 5.4)
109.625	022	Vanadium	EPA 200.8 (1994 Rev. 5.4)
109.625	023	Zinc	EPA 200.8 (1994 Rev. 5.4)
109.629	001	Chromium VI (Hexavalent Chromium)	EPA 218.6 (1994 Rev. 3.3)
109.635	001	Mercury	EPA 245.1 (1994 Rev. 3.0)
109.637	001	Mercury	EPA 245.2 (1974)
109.657	001	Mercury	EPA 1631 E (2002)

Field of Testing: 110 - Volatile Organic Constituents in Non-Potable Water

110.040	001	Acetone	EPA 624.1
110.040	003	Acrolein	EPA 624.1
110.040	004	Acrylonitrile	EPA 624.1
110.040	005	Benzene	EPA 624.1
110.040	006	Bromodichloromethane	EPA 624.1
110.040	007	Bromoform	EPA 624.1
110.040	008	Bromomethane (Methyl Bromide)	EPA 624.1
110.040	010	Carbon Tetrachloride	EPA 624.1
110.040	011	Chlorobenzene	EPA 624.1
110.040	012	Chloroethane	EPA 624.1
110.040	013	2-Chloroethyl vinyl Ether	EPA 624.1
110.040	014	Chloroform	EPA 624.1
110.040	015	Chloromethane (Methyl Chloride)	EPA 624.1
110.040	016	Dibromochloromethane (Chlorodibromomethane)	EPA 624.1

110.040	017	1,2-Dichlorobenzene	EPA 624.1
110.040	018	1,3-Dichlorobenzene	EPA 624.1
110.040	019	1,4-Dichlorobenzene	EPA 624.1
110.040	020	1,1-Dichloroethane	EPA 624.1
110.040	021	1,2-Dichloroethane	EPA 624.1
110.040	022	1,1-Dichloroethylene (1,1-Dichloroethene)	EPA 624.1
110.040	024	1,2-Dichloropropane	EPA 624.1
110.040	025	cis-1,3-Dichloropropylene (cis 1,3 Dichloropropene)	EPA 624.1
110.040	026	trans-1,3-Dichloropropylene (trans-1,3 Dichloropropene)	EPA 624.1
110.040	029	Ethylbenzene	EPA 624.1
110.040	031	Methylene Chloride (Dichloromethane)	EPA 624.1
110.040	032	4-Methyl-2-pentanone (MIBK)	EPA 624.1
110.040	034	1,1,2,2-Tetrachloroethane	EPA 624.1
110.040	035	Tetrachloroethylene (Tetrachloroethene)	EPA 624.1
110.040	037	Toluene	EPA 624.1
110.040	038	1,1,1-Trichloroethane	EPA 624.1
110.040	039	1,1,2-Trichloroethane	EPA 624.1
110.040	040	Trichloroethylene (Trichloroethene)	EPA 624.1
110.040	041	Vinyl Chloride	EPA 624.1
110.040	042	m-Xylene	EPA 624.1
110.040	043	o-Xylene	EPA 624.1
110.040	044	p-Xylene	EPA 624.1
110.040	045	Trichlorofluoromethane	EPA 624.1

Field of Testing: 111 - Semi-volatile Organic Constituents in Non-Potable Water

111.055	001	Aldrin	EPA 608.3
111.055	002	alpha-BHC	EPA 608.3
111.055	003	beta-BHC	EPA 608.3
111.055	004	delta-BHC	EPA 608.3
111.055	005	gamma-BHC (Lindane)	EPA 608.3
111.055	006	Chlordane	EPA 608.3
111.055	007	4,4'-DDD	EPA 608.3
111.055	008	4,4'-DDE	EPA 608.3
111.055	009	4,4'-DDT	EPA 608.3
111.055	010	Dieldrin	EPA 608.3
111.055	011	Endosulfan I	EPA 608.3
111.055	012	Endosulfan II	EPA 608.3
111.055	013	Endosulfan Sulfate	EPA 608.3
111.055	014	Endrin	EPA 608.3
111.055	015	Endrin Aldehyde	EPA 608.3
111.055	016	Heptachlor	EPA 608.3
111.055	017	Heptachlor Epoxide	EPA 608.3
111.055	019	PCB-1016	EPA 608.3

111.055	020	PCB-1221	EPA 608.3
111.055	021	PCB-1232	EPA 608.3
111.055	022	PCB-1242	EPA 608.3
111.055	023	PCB-1248	EPA 608.3
111.055	024	PCB-1254	EPA 608.3
111.055	025	PCB-1260	EPA 608.3
111.055	046	Methoxychlor	EPA 608.3
111.055	060	Toxaphene	EPA 608.3
111.070	001	Acenaphthene	EPA 610
111.070	002	Acenaphthylene	EPA 610
111.070	003	Anthracene	EPA 610
111.070	004	Benzo(a)anthracene	EPA 610
111.070	005	Benzo(a)pyrene	EPA 610
111.070	006	Benzo(b)fluoranthene	EPA 610
111.070	007	Benzo(g,h,i)perylene	EPA 610
111.070	008	Benzo(k)fluoranthene	EPA 610
111.070	009	Chrysene	EPA 610
111.070	010	Dibenz(a,h)anthracene	EPA 610
111.070	011	Fluoranthene	EPA 610
111.070	012	Fluorene	EPA 610
111.070	013	Indeno(1,2,3-c,d)pyrene	EPA 610
111.070	014	Naphthalene	EPA 610
111.070	015	Phenanthrene	EPA 610
111.070	016	Pyrene	EPA 610
111.110	001	Azinphos Methyl	EPA 614
111.110	004	Diazinon	EPA 614
111.110	005	Disulfoton	EPA 614
111.110	006	Ethion	EPA 614
111.110	007	Malathion	EPA 614
111.110	008	Parathion Ethyl	EPA 614
111.110	009	Parathion Methyl	EPA 614
111.160	001	Acenaphthene	EPA 625.1
111.160	002	Acenaphthylene	EPA 625.1
111.160	003	Anthracene	EPA 625.1
111.160	004	Benzidine	EPA 625.1
111.160	005	Benzo(a)anthracene	EPA 625.1
111.160	006	Benzo(a)pyrene	EPA 625.1
111.160	007	Benzo(b)fluoranthene	EPA 625.1
111.160	008	Benzo(g,h,i)perylene	EPA 625.1
111.160	009	Benzo(k)fluoranthene	EPA 625.1
111.160	010	Bis(2-chloroethoxy) Methane	EPA 625.1
111.160	011	Bis(2-chloroethyl) Ether	EPA 625.1

111.160	013	Bis(2-ethylhexyl)phthalate	EPA 625.1
111.160	014	4-Bromophenyl Phenyl Ether	EPA 625.1
111.160	015	Butyl Benzyl Phthalate	EPA 625.1
111.160	016	2-Chloronaphthalene	EPA 625.1
111.160	017	4-Chlorophenyl Phenyl Ether	EPA 625.1
111.160	018	Chrysene	EPA 625.1
111.160	019	Dibenz(a,h)anthracene	EPA 625.1
111.160	020	3,3'-Dichlorobenzidine	EPA 625.1
111.160	021	Diethyl Phthalate	EPA 625.1
111.160	022	Dimethyl Phthalate	EPA 625.1
111.160	023	Di-n-butyl Phthalate	EPA 625.1
111.160	024	2,4-Dinitrotoluene	EPA 625.1
111.160	025	2,6-Dinitrotoluene	EPA 625.1
111.160	026	Di-n-octyl Phthalate	EPA 625.1
111.160	027	Fluoranthene	EPA 625.1
111.160	028	Fluorene	EPA 625.1
111.160	029	Hexachlorobenzene	EPA 625.1
111.160	030	Hexachlorobutadiene	EPA 625.1
111.160	031	Hexachloroethane	EPA 625.1
111.160	032	Indeno(1,2,3-c,d)pyrene	EPA 625.1
111.160	033	Isophorone	EPA 625.1
111.160	034	Naphthalene	EPA 625.1
111.160	035	Nitrobenzene	EPA 625.1
111.160	036	N-nitrosodi-n-propylamine	EPA 625.1
111.160	037	Phenanthrene	EPA 625.1
111.160	038	Pyrene	EPA 625.1
111.160	039	1,2,4-Trichlorobenzene	EPA 625.1
111.160	040	4-Chloro-3-methylphenol	EPA 625.1
111.160	041	2-Chlorophenol	EPA 625.1
111.160	042	2,4-Dichlorophenol	EPA 625.1
111.160	043	2,4-Dimethylphenol	EPA 625.1
111.160	044	2,4-Dinitrophenol	EPA 625.1
111.160	045	2-Methyl-4,6-dinitrophenol	EPA 625.1
111.160	046	2-Nitrophenol	EPA 625.1
111.160	047	4-Nitrophenol	EPA 625.1
111.160	048	Pentachlorophenol	EPA 625.1
111.160	049	Phenol	EPA 625.1
111.160	050	2,4,6-Trichlorophenol	EPA 625.1
111.160	056	Azinphos Methyl	EPA 625.1
111.160	081	Diazinon	EPA 625.1
111.160	085	Disulfoton	EPA 625.1
111.160	091	Ethion	EPA 625.1

111.160	098	Hexachlorocyclopentadiene	EPA 625.1
111.160	100	Malathion	EPA 625.1
111.160	108	N-nitrosodimethylamine	EPA 625.1
111.160	109	N-nitrosodi-n-propylamine	EPA 625.1
111.160	110	N-nitrosodiphenylamine	EPA 625.1
111.160	112	Parathion Methyl	EPA 625.1
111.160	134	Terbufos	EPA 625.1
111.250	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613 B
111.250	002	Total Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613 B
111.250	003	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	EPA 1613 B
111.250	004	Total Tetrachlorodibenzofuran (TCDF)	EPA 1613 B
111.250	005	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	EPA 1613 B
111.250	006	Total Pentachlorodibenzo-p-dioxin (PeCDD)	EPA 1613 B
111.250	007	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	EPA 1613 B
111.250	008	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	EPA 1613 B
111.250	009	Total Pentachlorodibenzofuran (PeCDF)	EPA 1613 B
111.250	010	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	011	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	012	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	013	Total Hexachlorodibenzo-p-dioxin (HxCDD)	EPA 1613 B
111.250	014	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	015	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	016	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	017	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	018	Total Hexachlorodibenzofuran (HxCDF)	EPA 1613 B
111.250	019	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	EPA 1613 B
111.250	020	Total Heptachlorodibenzo-p-dioxin (HpCDD)	EPA 1613 B
111.250	021	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	EPA 1613 B
111.250	022	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	EPA 1613 B
111.250	023	Total Heptachlorodibenzofuran (HpCDF)	EPA 1613 B
111.250	024	OCDD	EPA 1613 B
111.250	025	OCDF	EPA 1613 B
111.99	001	Bifenthrin	EPA 1660m
111.99	002	Cyfluthrin	EPA 1660m
111.99	003	Cypermethrin	EPA 1660m
111.99	004	Esfenvalerate	EPA 1660m
111.99	005	Lambda-Cyhalothrin	EPA 1660m
111.99	006	Permethrin (total)	EPA 1660m

Field of Testing: 113 - Environmental Toxicity Methods

113.010	001	Fathead Minnow (<i>P. promelas</i>)	Polisini & Miller (CDFG 1988)
113.010	003	Rainbow trout (<i>O. mykiss</i>)	Polisini & Miller (CDFG 1988)
113.011	001A	Fathead Minnow (<i>P. promelas</i>)	EPA 2000.0, Static

113.011	001B	Fathead Minnow (<i>P. promelas</i>)	EPA 2000.0, Static Renewal
113.011	001C	Fathead Minnow (<i>P. promelas</i>)	EPA 2000.0, Continuous Flow
113.012	011A	Daphnid (<i>C. dubia</i>)	EPA 2002.0, Static
113.012	011B	Daphnid (<i>C. dubia</i>)	EPA 2002.0, Static Renewal
113.013	003A	Rainbow trout (<i>O. mykiss</i>)	EPA 2019.0, Static
113.013	003B	Rainbow trout (<i>O. mykiss</i>)	EPA 2019.0, Static Renewal
113.013	003C	Rainbow trout (<i>O. mykiss</i>)	EPA 2019.0, Continuous Flow
113.014	012A	Daphnids (<i>Daphnia</i> spp.)	EPA 2021.0, Static
113.014	012B	Daphnids (<i>Daphnia</i> spp.)	EPA 2021.0, Static Renewal
113.015	017A	Amphipod (<i>Hyalella</i> spp.)	EPA-821-R-02-012, Static
113.015	017B	Amphipod (<i>Hyalella</i> spp.)	EPA-821-R-02-012, Static Renewal
113.020	002A	Sheepshead minnow (<i>C. variegatus</i>)	EPA 2004.0, Static
113.020	002B	Sheepshead minnow (<i>C. variegatus</i>)	EPA 2004.0, Static Renewal
113.021	006A	Silverside (<i>Menidia</i> spp.)	EPA 2006.0, Static
113.021	006B	Silverside (<i>Menidia</i> spp.)	EPA 2006.0, Static Renewal
113.022	009A	Mysid (<i>M. bahia</i>)	EPA 2007.0, Static
113.022	009B	Mysid (<i>M. bahia</i>)	EPA 2007.0, Static Renewal
113.030	001	Fathead Minnow (<i>P. promelas</i>)	EPA 1000.0
113.032	011	Daphnid (<i>C. dubia</i>)	EPA 1002.0
113.033	025	Green algae (<i>S. capricornutum</i>)	EPA 1003.0
113.034	025	Green algae (<i>S. capricornutum</i>)	ASTM E1218-04
113.040	002	Sheepshead minnow (<i>C. variegatus</i>)	EPA 1004.0
113.042	006	Silverside (<i>Menidia</i> spp.)	EPA 1006.0
113.043	009	Mysid (<i>M. bahia</i>)	EPA 1007.0
113.045	007	Topsmelt (<i>A. affinis</i>)	EPA 600/R-95/136
113.045	019B	Sand dollar (<i>D. excentricus</i>)	EPA 600/R-95/136, Development Test
113.045	021A	Purple sea urchin (<i>S. purpuratus</i>)	EPA 600/R-95/136, Fertilization Test
113.045	021B	Purple sea urchin (<i>S. purpuratus</i>)	EPA 600/R-95/136, Development Test
113.045	022	Red abalone (<i>H. rufescens</i>)	EPA 600/R-95/136
113.045	023	Mussels (<i>Mytilus</i> spp.)	EPA 600/R-95/136
113.045	024	Giant Kelp (<i>M. pyrifera</i>)	EPA 600/R-95/136
113.046	025	Diatom (<i>T. pseudonana</i>)	ASTM E1218-04
113.050	013	Amphipod (<i>H. azteca</i>)	EPA 600/R-99/064, EPA 100.1
113.051	008	Midge (<i>C. tentans</i>)	EPA 600/R-99/064, EPA 100.2
113.060	014	Amphipod (<i>E. estuarii</i>)	EPA 600/R-94/025, EPA 100.4
113.060	015	Amphipod (<i>L. plumulosus</i>)	EPA 600/R-94/025, EPA 100.4
113.060	016	Amphipod (<i>R. abronius</i>)	EPA 600/R-94/025, EPA 100.4
113.060	028	Amphipod (<i>A. abdita</i>)	EPA 600/R-94/025, EPA 100.4

Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste

114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020

114.020	004	Beryllium	EPA 6020
114.020	005	Cadmium	EPA 6020
114.020	006	Chromium	EPA 6020
114.020	007	Cobalt	EPA 6020
114.020	008	Copper	EPA 6020
114.020	009	Lead	EPA 6020
114.020	010	Molybdenum	EPA 6020
114.020	011	Nickel	EPA 6020
114.020	012	Selenium	EPA 6020
114.020	013	Silver	EPA 6020
114.020	014	Thallium	EPA 6020
114.020	015	Vanadium	EPA 6020
114.020	016	Zinc	EPA 6020
114.025	001	Mercury	EPA 6020 A
114.106	001	Chromium VI (Hexavalent Chromium)	EPA 7199
114.240	001	Corrosivity - pH Determination	EPA 9040 B
114.241	001	Corrosivity - pH Determination	EPA 9045 C
114.280	001	Organic Lead	HML 939-M
114.999	000	Chlorine, Total	EPA 9075

Field of Testing: 115 - Extraction Test of Hazardous Waste

115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

Field of Testing: 116 - Volatile Organic Chemistry of Hazardous Waste

116.030	001	Gasoline Range Organics (GRO)	EPA 8015 B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021 B
116.040	062	BTEX	EPA 8021 B
116.080	000	Volatile Organic Compounds	EPA 8260 B
116.080	120	Oxygenates	EPA 8260 B

Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste

117.010	001	Diesel Range Organics (DRO)	EPA 8015 B
117.016	001	Diesel Range Organics (DRO)	LUFT
117.017	001	TRPH Screening	EPA 418.1
117.110	000	Extractable Organics	EPA 8270 C
117.111	071	Pesticides	EPA 8270 C
117.130	000	Dioxins and Dibenzofurans	EPA 8290
117.140	000	Polynuclear Aromatic Hydrocarbons	EPA 8310
117.150	000	Carbonyl Compounds	EPA 8315 A
117.171	000	Nitroaromatics and Nitramines	EPA 8330 A
117.210	000	Organochlorine Pesticides	EPA 8081 A
117.220	000	PCBs	EPA 8082
117.250	000	Chlorinated Herbicides	EPA 8151 A

117.270	000	Carbamates, N-methylcarbamates	EPA 8318

Field of Testing: 120 - Physical Properties of Hazardous Waste

120.010	001	Ignitability	EPA 1010
120.022	001	Ignitability	EPA 1030
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040 B
120.080	001	Corrosivity - pH Determination	EPA 9045 C

Field of Testing: 126 - Microbiological Methods for Ambient Water

126.003	001	Total Coliform (Enumeration)	SM 9221 B,C-2006
126.003	002	Fecal Coliform (Enumeration)	SM 9221 C,E-2006
126.003	003	E. coli (Enumeration)	SM 9221 C,F-2006
126.005	001	Total Coliform (Enumeration)	SM 9222 B-2006
126.005	003	Fecal Coliform (Enumeration)	SM 9222 D-2006
126.007	001	E. coli (Enumeration)	SM 9223 B-2004
126.009	001	Fecal Streptococci	SM 9230 B-2007
126.019	001	Enterococci	Enterolert



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

EMSL Analytical, Inc.

South Pasadena, CA

520 Mission Street

South Pasadena, CA 91030

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2283**

Expiration Date: **12/31/2020**

Effective Date: **1/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Alpha Analytical Laboratories Inc. - North Bay

North Bay

110 Liberty Street

Petaluma, CA 94952

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2303**

Expiration Date: **3/31/2022**

Effective Date: **4/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Monterey Bay Analytical Services, Inc.

4 Justin Court, Suite D

Monterey, CA 93940

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2385**

Expiration Date: **10/31/2021**

Effective Date: **11/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



Interim

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins Calscience

Irvine

17461 Derian Avenue

Irvine, CA 92614-5817

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2706**

Expiration Date: **6/30/2021**

Effective Date: **7/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA

Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Interim

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Alpha Analytical Laboratories, Inc.

Livermore Lab

262 Rickenbacker Circle

Livermore, CA 94551

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2728**

Expiration Date: **6/30/2020**

Effective Date: **7/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins Eaton Analytical, LLC - Monrovia

750 Royal Oaks Drive, Suite 100

Monrovia, CA 91016

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2813**

Expiration Date: **2/1/2021**

Effective Date: **2/2/2019**

Sacramento, California
subject to forfeiture or revocation

A handwritten signature in cursive script, reading "Christine Sotelo".

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2939**

Expiration Date: **6/30/2021**

Effective Date: **7/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



Interim



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Eurofins Calscience, LLC

7440 Lincoln Way

Garden Grove, CA 92841-1427

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2944**

Expiration Date: **9/30/2021**

Effective Date: **10/1/2020**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE



ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Ceres Analytical Laboratory, Inc.

4919 Windplay Drive, Suite 1

El Dorado Hills, CA 95762

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **3046**

Expiration Date: **4/30/2021**

Effective Date: **5/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

Appendix C. 2019 CalAm Water System #2710004 Consumer Confidence Report



2019 ANNUAL WATER QUALITY REPORT

MONTEREY | PWS ID: 2710004



CALIFORNIA
AMERICAN WATER

WE KEEP LIFE FLOWING™



RICHARD SVINDLAND
President

A Message from California American Water President RICHARD SVINDLAND

Dear California American Water Customer,

Having access to safe, clean water is something that can be easily taken for granted. At California American Water, our top priority is providing safe, reliable drinking water to our more than 690,000 customers.

I am pleased to share with you our 2019 Consumer Confidence Report, which is a testament to the hard work and dedication of our employees who work to provide high quality drinking water.

During the COVID-19 public health emergency, California American Water activated business continuity plans to strengthen our ability to provide reliable, high quality service to our customers, continue to deliver water and wastewater services and protect our employees and customers.

According to the U.S. Environmental Protection Agency (USEPA) based on current research, the risk to water supplies is low. The USEPA has also relayed that Americans can continue to use and drink water from their tap as usual.

California American Water remains committed to the delivery of safe, reliable water. That includes operation of drinking water treatment barriers, which provide an added layer of protection that includes filtration and disinfection of our surface water supplies (e.g., those from lakes, reservoirs or rivers) and disinfection of our groundwater sources (e.g., underground wells).

We have rigorous safeguards in place to help provide water to you that meets or surpasses increasingly stringent water quality standards. Across California, we conducted approximately 650 different tests on over 25,000 water samples for nearly 3,000 constituents last year. We are proud and pleased to confirm that those tests showed that we met every primary and secondary state and federal water quality standard.

SERVICE: Last year, we invested more than \$74 million in water infrastructure in the California communities we serve. This investment helps maintain the safety and reliability of the facilities and technology needed to draw, treat, and distribute water.

VALUE: While costs to provide water service continue to increase across the country, our investments help us provide high quality water service that remains an exceptional value for such an essential service.

We are proud to continue to supply water that meets or surpasses all state and federal water quality standards. If you have any questions or concerns, you can contact us by phone, email, online at www.californiaamwater.com, or in person at our local Customer Center. Please take the time to review this report. It provides details about the source and quality of your drinking water, using data from water-quality testing conducted for your local system between January and December 2019.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard Svindland".

RICHARD SVINDLAND
President

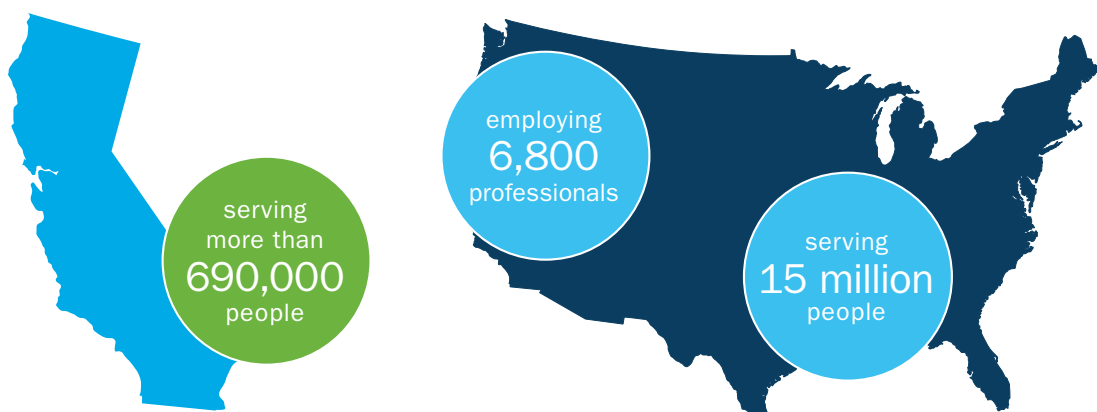


OUR COMMITMENT TO QUALITY

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). This CCR covers compliance testing completed through December 2019. As in the past, we are committed to delivering high quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.

ABOUT CALIFORNIA AMERICAN WATER (CAW) AND AMERICAN WATER (AW)

California American Water, a subsidiary of American Water Works Company, Inc. (NYSE: AWK), provides high quality and reliable water and/or wastewater services to more than 690,000 people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to help keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.



A smiling man with short dark hair and a beard, wearing a light gray long-sleeved shirt, is sitting on a light-colored couch. He is looking at a laptop screen which is partially visible in the foreground. The background is a bright, modern living room with a white shelf and some plants.

WHAT IS A CONSUMER CONFIDENCE REPORT (CCR)?

The CCR is an annual water quality report containing data that California American Water and all associated water suppliers collected during 2019. CCRs let consumers know what contaminants, if any, are in their drinking water as well as related health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

In 2019, we collected numerous samples at various sampling points in your water system. The water quality data presented is a combination of data compiled from American Water's nationally recognized water quality laboratory and local commercial laboratories, all certified in drinking water testing by the State Board's Division of Drinking Water. If you have any questions about this report or your drinking water, please contact our Customer Service Center at (888) 237-1333.

A large photograph of a seagull perched on a tall, jagged rock formation. The background shows a coastal town and the ocean under a clear blue sky.

ABOUT YOUR WATER

Monterey is served by groundwater sources from the Santa Margarita, Paso Robles, and Carmel Alluvial aquifers as well as surface water from the Sand City Desalination Plant.

Drinking water treatment technologies used are reverse osmosis, iron and manganese removal, corrosion control, and disinfection for bacteriological quality.

The water supply is distributed for residential and commercial use in the communities of Carmel-by-the-Sea, Carmel Highlands, Carmel Valley, Del Rey Oaks, Monterey, Pacific Grove, Pebble Beach, Sand City, and Seaside.

NOTICE OF SOURCE WATER ASSESSMENT (SWA)

An assessment of the drinking water sources for the California American Water - Monterey water system was completed in February 2003. This assessment is an evaluation of drinking water sources to determine the “possible contaminating activities” (PCAs) to which a source is most vulnerable. PCAs are current or historic human activities that are actual or potential origins of contamination for a drinking water source. PCAs include activities that use, store, produce or dispose of chemicals that have the potential to contaminate drinking water supplies.

The Monterey system’s water sources that are considered to be vulnerable include drinking water treatment plants and water supply wells.

Tetrachloroethylene and methyl tert-butyl ether, associated with industrial activities, have historically been detected in two groundwater sources. These sources are now tested with increased frequency to monitor these contaminants.

A copy of the completed assessment may be viewed at California American Water, 511 Forest Lodge Road, Suite 100, Pacific Grove, CA. You may request a summary of the assessment be sent to you by contacting Dr. Jack Wang, Water Quality and Environmental Compliance Director, at (831) 646-3269.

The Monterey water system completed a “Watershed Sanitary Survey” covering the period of 2001–2006. This survey examines the potential impacts of the Carmel River watershed.



WHAT ARE THE SOURCES OF CONTAMINANTS?

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from animal or human activity and even radioactive material. In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board set regulations limiting the amount of certain contaminants in water provided by public water systems. Contaminants that may be present in source water include:

ORGANIC CHEMICAL CONTAMINANTS

including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

INORGANIC CONTAMINANTS

such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

PESTICIDES AND HERBICIDES

which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.

MICROBIAL CONTAMINANTS

such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

RADIOACTIVE CONTAMINANTS

which can be naturally occurring or may be the result of oil and gas production and mining activities.

A smiling woman with curly hair, wearing a blue sleeveless top, is in the foreground. In the background, a man and a child are visible in a kitchen setting with large windows.

CRYPTOSPORIDIUM

CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface waters throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Monitoring does not indicate the presence of these organisms in either the source or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their health care provider regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. You can obtain more information on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.



RADON & UCMR

RADON

Radon is a radioactive gas and known human carcinogen, found throughout the U.S., that you cannot see, taste, or smell. It can move up through the ground and into a home through cracks and holes in the foundation and can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. When entering the home through tap water, radon is usually found in minor amounts in indoor air, compared to when it enters the home through soil.

Breathing air containing radon can lead to lung cancer. Drinking water containing radon may

cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air inside your home. Testing is inexpensive and easy. You should pursue radon removal if the level of radon in your air is four picocuries per liter (pCi/L) of air or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your State Radon Program at (800) 745-7236, or the U.S. EPA Safe Drinking Water Act Hotline at (800) 426-4791, or the National Safety Council's Radon Hotline at (800) SOS-RADON.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

The USEPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in determining the occurrence of unregulated contaminants in drinking water and whether new regulations are warranted. The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed in 2003 for a list of contaminants specified by the USEPA. Unregulated contaminants are those for which the USEPA has not established drinking water standards. The second testing cycle (UCMR2) was conducted between November 2008 and August 2009. The third testing cycle (UCMR3) in the Monterey system was conducted between January 2013 and December 2015. The fourth testing cycle (UCMR4) in the system started in 2018 and will be completed in 2020. The results from the UCMR monitoring are reported directly to the USEPA and mostly not detected. The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at (888) 237-1333.



LEAD

LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. California American Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

There are steps that you can take to reduce your household's exposure to lead in drinking water. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. For more information, please review our Lead and Drinking Water Fact Sheet at www.amwater.com/caaw/water-quality/lead-and-drinking-water.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead.



PFOA/PFOS MONITORING

PFOA/PFOS Monitoring

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) are fluorinated organic chemicals that are part of a larger group of chemicals referred to as per- and poly-fluoroalkyl substances (PFASs). PFOS and PFOA have been extensively produced and studied in the United States. They have been used in consumer products such as carpets, clothing, fabrics for furniture, paper packaging for food, and other materials (e.g., cookware) designed to be waterproof, stain-resistant or non-stick. In addition, they have been used in fire-retarding foam and various industrial processes.

Exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes). While people are exposed to PFOS and PFOA largely through food, food packaging, consumer products, and house dust, the exposure through drinking water has become an increasing concern due to the tendency of PFASs to accumulate in groundwater. In 2019, Division of Drinking Water (DDW) established Notification Levels (NLs) at 6.5 ppt for PFOS and 5.1 ppt for PFOA in drinking water.

California American Water conducted voluntary PFOA/PFOS monitoring in the source waters and treatment plants of Monterey water system in 2019. Out of a total 23 monitoring locations, only one well had a detection of PFOA and PFOS in the range of 5.5 to 6.2 ppt.

A background image of a young woman with long brown hair, smiling and looking upwards. She is wearing a red jacket and holding a blue water bottle. The background is a blurred outdoor scene with trees and a bright sky.

EDUCATIONAL & SPECIAL HEALTH INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available through the USEPA's Safe Drinking Water Hotline at (800) 426-4791.



MEASUREMENTS

Water is sampled and tested consistently throughout the year to ensure the best possible quality. Contaminants are measured in:

- **Parts per million (ppm) or milligrams per liter (mg/L)**
- **Parts per billion (ppb) or micrograms per liter ($\mu\text{g/L}$)**
- **Parts per trillion (ppt) or nanograms per liter (ng/L)**
- **Grains per gallon (grains/gal)** – A measurement of water hardness often used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.
- **MicroSiemens per centimeter ($\mu\text{S/cm}$)** – A measurement of a solution's ability to conduct electricity.
- **Nephelometric Turbidity Units (NTU)** – A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.
- **PicoCuries per liter (pCi/L)** – A measurement of radioactivity in water.

PARTS PER MILLION:

1 second
in 12 days

PARTS PER BILLION:

1 second
in 32 years

PARTS PER TRILLION:

1 second
in 32,000 years

1 second

12
days

1 second

32
years

1 second

32,000
years



HOW TO READ THIS TABLE

California American Water conducts extensive monitoring to determine if your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2019, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the “Definition of Terms” section.

- 1 Starting with a **Substance**, read across.
- 2 **Year Sampled** is usually in 2019 or year prior.
- 3 **MCL/MRDL/Action Level** shows the highest level of substance (contaminant) allowed.
- 4 **MCLG/PHG/MRDLG** is the goal level for that substance (this may be lower than what is allowed).
- 5 **Average Amount Detected** represents the measured amount (less is better).
- 6 **Range** tells the highest and lowest amounts measured.
- 7 A **No** under **Violation** indicates government requirements were met.
- 8 **Typical Source** tells where the substance usually originates.

Unregulated substances are measured, but maximum contaminant levels have not been established by the government.

Water Quality Results: Monterey

Regulated Substances (Measured on the Water Leaving the Treatment Facility and/or the Source)

Substance (units)	Year Sampled*	MCL	PHG (MCLG)	Average Amount Detected	Range of Detections		Violation	Typical Source
					Low	High		
Gross Beta Particle Activity (pCi/L)	2012	50	(0)	1.35	ND	4.05	No	Erosion of natural deposits
Chromium VI (Hexavalent Chromium) (ppb)	2016 - 2018	NA	0.02	0.16	ND	2.23	No	Erosion of natural deposits
Arsenic (ppb) ¹	2019	10	0.004	1.4	ND	7	No	Erosion of natural deposits
Fluoride (naturally occurring) (ppm) ²	2019	2.0	1	0.25	ND	0.42	No	Erosion of natural deposits
Nitrate as N (ppm) ³	2019	10	10	1.06	ND	6.58	No	Erosion of natural deposits
Selenium (ppb)	2019	50	30	1.1	ND	7	No	Erosion of natural deposits

Turbidity – A Measure of the Clarity of the Water (at the Sand City Desalination Facility)

Plant	Year Sampled	TT	PHG	Highest Single Measurement	Violation	Typical Source
Turbidity (NTU) ⁴	2019	1 NTU	NA	0.196	No	Soil runoff
		At least 95% of samples < 0.1 NTU		Lowest % of measurements <0.1	Violation	
				99.16%	No	

Disinfection By-products, Disinfectant Residuals, and Disinfection By-products Precursors (Measured on the Water within the Distribution System)

Substance (units)	Year Sampled	MCL (MRDL)	MCLG	Average Amount Detected	Range of Detections		Violation	Typical Source
					Low	High		
Total Trihalomethanes (TTHM) (ppb) ⁵	2019	80	NA ⁵	37.2 (system-wide)	ND	87.8	No	By-product of drinking water chlorination
				50.9 (highest location)				
Total Haloacetic Acids (HAA 5) (ppb) ⁵	2019	60	NA ⁵	11.5 (system-wide)	ND	23.0	No	By-product of drinking water chlorination
				16.0 (highest location)				
Chlorine (ppm)	2019	(4.0) (as Cl ₂)	(4.0) (as Cl ₂)	1.13	ND	2.7	No	Drinking water disinfectant added for treatment

Tap Water Samples: Lead and Copper Results (Measured on Water in the Distribution System)

Substance (units)	Year Sampled	Action Level	PHG	Number of Samples	90 th Percentile	Number of Samples Above Action Level	Violation	Typical Source
Copper (ppm)	2018	1.3	0.3	31	0.719	0	No	Internal corrosion of household plumbing system; Erosion of natural deposits
Lead (ppb)	2018	15	0.2	31	2	0	No	Internal corrosion of household plumbing system; Erosion of natural deposits

Bacterial Results (Measured on the Water in the Distribution System)

Substance (units)	Year Sampled	MCL	MCLG	Highest percentage detected	Violation	Typical Source
Total Coliform Bacteria	2019	5% of monthly samples are positive	(0)	0.901	No	Naturally present in the environment

Secondary Substances (Measured on the Water Leaving the Treatment Facility and/or Source)

There are no PHGs, MCLGs, or mandatory standard health effects language for these substances. The secondary MCLs are set on the basis of aesthetic concerns.

Substance (units)	Year Sampled*	SMCL	Average Amount Detected	Range of Detections		Typical Source
				Low	High	
Chloride (ppm)	2019	500	51	10	202	Leaching from natural deposits; Seawater influence
Iron (ppb)	2019	300	25	ND	510	Leaching from natural deposits
Manganese (ppb)	2018 - 2019	50	3	ND	29	Leaching from natural deposits
Odor (Units)	2019	3	1.4	1	3	Naturally-occurring organic materials
Specific Conductance (µmhos/cm)	2019	1600	521	229	1431	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2019	500	59	1	104	Leaching from natural deposits
Total Dissolved Solids (ppm)	2019	1000	289	112	710	Leaching from natural deposits
Turbidity (units)	2019	5	0.1	ND	0.6	Soil runoff
Zinc (ppm)	2019	5	0.02	ND	0.2	Leaching from natural deposits; Treatment Process

Additional Water Quality Parameters of Interest (Measured on the Water Leaving the Treatment Facility and/or the Source)

This table shows average levels of additional water quality parameters, which are often of interest to consumers. Values shown here are averages of operating data through 2019. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

Substance (units)	Year Sampled*	Average Amount Detected	Range of Detections	
			Low	High
Alkalinity as CaCO ₃ (ppm)	2019	135	78	214
Boron (ppm)	2019	0.2	ND	1.0
Calcium (ppm)	2019	41	25	75
Magnesium (ppm)	2019	13	ND	25
pH (pH Units)	2019	7.40	6.44	7.99
Sodium (ppm)	2019	45	16	132
Strontium (ppb)	2019	227	ND	500
Total Hardness as CaCO ₃ (ppm)	2019	161	102	276
Total Hardness as Grains per Gallon (gpg)	2019	9	6	16
Vanadium (ppb)	2019	0.2	ND	5

Unregulated Substances (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled*	Average Amount Detected	Range of Detections	
			Low	High
Bromochloromethane (ppb)	2013 - 2015	0.14	0.08	0.19
Chlorate (ppb)	2013 - 2015	189	26	490
Molybdenum (ppb)	2013 - 2015	6	2.2	14.4
Strontium (ppb)	2013 - 2015	284	90.8	397.7
Vanadium (ppb)	2013 - 2015	1.41	0.3	5.6
Bromochloroacetic Acid (ppb)	2019	4.1	0.7	7.4
Bromodichloroacetic Acid (ppb)	2019	3.8	ND	6.3
Chlorodibromoacetic Acid (ppb)	2019	2.1	ND	3.5
Dibromoacetic Acid (ppb)	2019	1.8	0.3	3.3
Dichloroacetic Acid (ppb)	2019	5.3	0.5	13
Monobromoacetic Acid (ppb)	2019	0.3	ND	0.6
Total Haloacetic Acids - Br (ppb)	2019	12	1.4	21
Total Haloacetic Acids - HAA 9 (ppb)	2019	22	2	40
Trichloroacetic Acid (ppb)	2019	4.6	ND	7.5

* The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

¹ Arsenic - While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

² Fluoride - California American Water does not add fluoride to the water in the Monterey Peninsula area. Fluoride occurs naturally in the groundwater we serve.

³ Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

⁴ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

⁵ TTHM/HAA5 - Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants. Trihalomethanes: bromodichloromethane (zero); bromoform (zero); chloroform (0.07mg/L); dibromochloromethane (0.06 mg/L). Haloacetic Acids: Dichloroacetic Acid (zero); Trichloroacetic Acid (0.02mg/L). Monochloroacetic Acid (0.07mg/L), Bromoacetic Acid and Dibromoacetic Acid are regulated with this group but have no MCLGs.

Additional Monitoring - In addition to the parameters in this table, other parameters were monitored for, including regulated pesticides, herbicides, petroleum by-products and metals. None of those parameters were detected in the water. If you have any questions about this report or your drinking water, please call Customer Service at 1-888-237-1333.



DEFINITION OF TERMS

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

DDW: Division of Drinking Water

LRAA: Locational Running Annual Average

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Secondary MCLs (SMCL) are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MFL: Million fibers per liter.

micromhos per centimeter ($\mu\text{mhos/cm}$): A measure of electrical conductance.

NA: Not applicable

N/A: No data available

ND: Not detected

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of the water.

Notification Level (NL): The concentration of a contaminant, which, if exceeded, requires notification to DDW and the consumer. Not an enforceable standard.

pH: A measurement of acidity, 7.0 being neutral.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

parts per billion (ppb): One part substance per billion parts water, or micrograms per liter.

parts per million (ppm): One part substance per million parts water, or milligrams per liter.

parts per trillion (ppt): One part substance per trillion parts water, or nanograms per liter.

Primary Drinking Water Standard (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

RAA: Running Annual Average

Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

SWRCB: State Water Resources Control Board

TON: Threshold Odor Number

Total Dissolved Solids (TDS): An overall indicator of the amount of minerals in water.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State or USEPA permission not to meet an MCL or utilize a treatment technique under certain conditions.

%: Percent



HOW TO CONTACT US

If you have any questions about this report, your drinking water, or service, please call California American Water's Customer Service toll free at (888) 237-1333.

WATER INFORMATION SOURCES

California American Water
www.californiaamwater.com

State Water Resources Control Board, Division of Drinking Water
www.waterboards.ca.gov/drinking_water/programs/index.shtml

United States Environmental Protection Agency (USEPA)
www.epa.gov/safewater

Safe Drinking Water Hotline
(800) 426-4791

Centers for Disease Control and Prevention
www.cdc.gov

American Water Works Association
www.awwa.org

Water Quality Association
www.wqa.org

National Library of Medicine/National Institute of Health
www.nlm.nih.gov/medlineplus/drinkingwater.html

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at (888) 237-1333.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al (888) 237-1333.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm (888) 237-1333.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電(888) 237-1333 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया (888) 237-1333 पर हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону (888) 237-1333.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa (888) 237-1333.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số (888) 237-1333.

Appendix D. GeoTracker Report Access Instructions for Quarterly Monitoring Reports

GeoTracker: <https://geotracker.waterboards.ca.gov/>

- Search WDR100039680 and click on 'PURE WATER MONTEREY GROUNDWATER REPLENISHMENT PROJECT (WDR100039680)' when it appears below the search box.
- Reports can be found under the 'Site Maps / Documents' tab.