

SOLDIER CANYON WATER TREATMENT AUTHORITY

(East Larimer County Water District; Fort Collins/Loveland Water District; North Weld County Water District)

WATER QUALITY REPORT

4TH QUARTER 2023

| ANALYSIS PARAMETER <small>Monitored at SCFP (not a certified lab)</small> | Report | PLANT INFLUENT | | | PLANT EFFLUENT | | | MCL *SMCL |
|--|--------|----------------|-------|-------|----------------|-------|-------|-------------|
| | Values | MIN | MAX | AVG | MIN | MAX | AVG | |
| ALKALINITY | mg/l | 26.0 | 38.0 | 28.9 | 38.0 | 55.0 | 47.8 | N/A |
| ALUMINUM | mg/l | N/A | N/A | N/A | 0.032 | 0.045 | 0.038 | *0.05 - 0.2 |
| CALCIUM HARDNESS | mg/l | 20.0 | 26.0 | 24.0 | 22.0 | 26.0 | 24.3 | N/A |
| CHLORINE | mg/l | N/A | N/A | N/A | 1.22 | 1.45 | 1.33 | 4.0 MRDL |
| CHLORITE | mg/l | N/A | N/A | N/A | 0.14 | 0.85 | 0.46 | 1.0 |
| CHLORINE DIOXIDE | mg/l | N/A | N/A | N/A | 0.00 | 0.02 | 0.00 | 0.8 |
| CONDUCTIVITY | µs/cm | 68.5 | 78.5 | 76.1 | 88.7 | 126.0 | 104.2 | N/A |
| DISSOLVED OXYGEN | mg/l | 1.0 | 9.5 | 5.9 | N/A | N/A | N/A | N/A |
| FLUORIDE | mg/l | 0.15 | 0.21 | 0.17 | 0.56 | 0.79 | 0.68 | 4.0/*2.0 |
| HARDNESS (TOTAL) | mg/l | 30.0 | 37.0 | 33.3 | 30.0 | 38.0 | 33.1 | N/A |
| IRON | mg/l | 0.04 | 0.28 | 0.12 | 0.00 | 0.02 | 0.01 | *0.3 |
| MANGANESE | mg/l | 0.009 | 0.244 | 0.106 | 0.004 | 0.021 | 0.010 | *0.05 |
| pH | VALUE | 6.85 | 8.01 | 7.32 | 7.83 | 8.48 | 8.29 | *6.5-8.5 |
| TEMPERATURE | °C | 6.3 | 10.2 | 8.8 | 7.4 | 11.9 | 10.1 | N/A |
| TRUE COLOR | APHA | 5.0 | 15.0 | 9.0 | 0.0 | 2.0 | 0.8 | *15.0 |
| TURBIDITY | NTU | 0.93 | 6.92 | 1.86 | 0.012 | 0.074 | 0.019 | **<0.3 TT |

INORGANIC CONTAMINANTS ANALYSES (SGS) - (EFFLUENT ENTRY POINT AT SCFP)

| | | RESULTS | DATE | MCL |
|-----------|------|----------|-----------|-------|
| ANTIMONY | mg/l | <0.00040 | 1/11/2023 | 0.006 |
| ARSENIC | mg/l | <0.0020 | 1/11/2023 | 0.010 |
| BARIUM | mg/l | 0.020 | 1/11/2023 | 2.000 |
| BERYLLIUM | mg/l | <0.00030 | 1/11/2023 | 0.004 |
| CADMIUM | mg/l | <0.00015 | 1/11/2023 | 0.005 |
| CHROMIUM | mg/l | <0.0020 | 1/11/2023 | 0.1 |
| FLUORIDE | mg/l | 0.60 | 1/11/2023 | 4.0 |
| MERCURY | mg/l | <0.00010 | 1/11/2023 | 0.002 |
| NICKEL | mg/l | <0.0020 | 1/11/2023 | N/A |
| SELENIUM | mg/l | <0.00070 | 1/11/2023 | 0.050 |
| SODIUM | mg/l | 8.6 | 1/11/2023 | N/A |
| THALLIUM | mg/l | <0.00020 | 1/11/2023 | 0.002 |

NITRATE AND/OR NITRITE AS NITROGEN (SGS) - (EFFLUENT ENTRY POINT AT SCFP)

| | | RESULTS | DATE | MCL |
|---------|------|---------|-----------|--------|
| NITRATE | mg/l | <0.0040 | 1/11/2023 | 10.000 |
| NITRITE | mg/l | <0.010 | 1/11/2023 | 1.000 |

TOTAL ORGANIC CARBON (CA) - (SCFP INFLUENT AND CF EFFLUENT)

| | | | INFLUENT | EFFLUENT | TT RATIO | DATE | MCL - **TT |
|-----------------------------------|------|--|----------|----------|----------|------------|------------------|
| TOTAL ORGANIC CARBON - TOC | mg/L | | 3.4 | 1.8 | 1.34 | 10/5/2023 | RAA - ≥ 1.0 |
| | | | 3.3 | 1.8 | 1.30 | 10/5/2023 | RAA - ≥ 1.0 |
| | | | 3.7 | 1.9 | 1.39 | 11/8/2023 | RAA - ≥ 1.1 |
| | | | 3.7 | 2.0 | 1.31 | 12/13/2023 | RAA - ≥ 1.2 |
| | | | INFLUENT | | | DATE | MCL |
| ALKALINITY (CA) - (SCFP INFLUENT) | mg/l | | 30.5 | | | 10/5/2023 | N/A |
| | | | 30.0 | | | 10/5/2023 | N/A |
| | | | 31.4 | | | 11/8/2023 | N/A |
| | | | 29.6 | | | 12/13/2023 | N/A |

RADIONUCLIDE ANALYSES (SGS) - (EFFLUENT ENTRY POINT AT SCFP)

| | | | RESULTS | DATE | MCL |
|------------------|-------|--|----------|----------|-----|
| GROSS ALPHA | pCi/L | | ND | 9/8/2021 | 15 |
| URANIUM | ppb | | <0.00020 | 9/8/2021 | 30 |
| RADIUM 226 + 228 | pCi/L | | ND | 9/8/2021 | 5 |
| GROSS BETA | pCi/L | | ND | 9/8/2021 | 50 |

ORGANIC CHEMICAL ANALYSES - VOC's (SGS) - (EFFLUENT ENTRY POINT AT SCFP)

| | | | RESULTS | DATE | MCL |
|----------------------------|------|--|---------|-----------|-------|
| 1,1,1-TRICHLOROETHANE | µg/L | | ND | 1/11/2023 | 200 |
| 1,1,2-TRICHLOROETHANE | µg/L | | ND | 1/11/2023 | 5 |
| 1,1-DICHLOROETHYLENE | µg/L | | ND | 1/11/2023 | 7 |
| 1,2,4-TRICHLOROBENZENE | µg/L | | ND | 1/11/2023 | 70 |
| 1,2-DICHLOROETHANE | µg/L | | ND | 1/11/2023 | 5 |
| 1,2-DICHLOROPROPANE | µg/L | | ND | 1/11/2023 | 5 |
| BENZENE | µg/L | | ND | 1/11/2023 | 5 |
| CARBON TETRACHLORIDE | µg/L | | ND | 1/11/2023 | 5 |
| CHLOROBENZENE | µg/L | | ND | 1/11/2023 | 100 |
| cis-1,2-DICHLOROETHYLENE | µg/L | | ND | 1/11/2023 | 70 |
| DICHLOROMETHANE | µg/L | | ND | 1/11/2023 | 5 |
| ETHYLBENZENE | µg/L | | ND | 1/11/2023 | 700 |
| o-DICHLOROBENZENE | µg/L | | ND | 1/11/2023 | 600 |
| para-DICHLOROBENZENE | µg/L | | ND | 1/11/2023 | 75 |
| STYRENE | µg/L | | ND | 1/11/2023 | 100 |
| TETRACHLOROETHYLENE | µg/L | | ND | 1/11/2023 | 5 |
| TOLUENE | µg/L | | ND | 1/11/2023 | 1000 |
| trans-1,2-DICHLOROETHYLENE | µg/L | | ND | 1/11/2023 | 100 |
| TRICHLOROETHYLENE | µg/L | | ND | 1/11/2023 | 5 |
| VINYL CHLORIDE | µg/L | | ND | 1/11/2023 | 2 |
| XYLENES (total) | µg/L | | ND | 1/11/2023 | 10000 |

| ORGANIC CHEMICAL ANALYSES - SOC's (SGS)(CA) - (EFFLUENT ENTRY POINT AT SCFP) | | | RESULTS | DATE | MCL |
|--|------|--|---------|-----------|------|
| 1,2-DIBROMO-3-CHLOROPROPANE | µg/L | | ND | 1/11/2023 | 0.2 |
| 2,4-D | µg/L | | ND | 5/3/2023 | 70 |
| 2,4,5-TP | µg/L | | ND | 5/3/2023 | 50 |
| ALACHLOR (LASSO) | µg/L | | ND | 1/11/2023 | 2 |
| ALDICARB | µg/L | | ND | 1/11/2023 | N/A |
| ALDICARB SULFONE | µg/L | | ND | 1/11/2023 | N/A |
| ALDICARB SULFOXIDE | µg/L | | ND | 1/11/2023 | N/A |
| ATRAZINE | µg/L | | ND | 1/11/2023 | 3 |
| BENZO(a)PYRENE | µg/L | | ND | 1/11/2023 | 0.2 |
| BHC-GAMMA/LINDANE | µg/L | | ND | 6/28/2023 | 0.2 |
| CARBOFURAN | µg/L | | ND | 1/11/2023 | 40 |
| CHLORDANE | µg/L | | ND | 1/11/2023 | 2 |
| DALAPON | µg/L | | ND | 5/3/2023 | 200 |
| DINOSEB | µg/L | | ND | 5/3/2023 | 7 |
| DIQUAT | µg/L | | ND | 1/11/2023 | 20 |
| DI(2-ethylhexyl)ADIPATE | µg/L | | ND | 1/11/2023 | 400 |
| DI(2-ethylhexyl)PHTHALATE | µg/L | | ND | 5/3/2023 | 6 |
| ENDOTHALL | µg/L | | ND | 1/11/2023 | 100 |
| ENDRIN | µg/L | | ND | 1/11/2023 | 2 |
| ETHYLENE DIBROMIDE | µg/L | | ND | 1/11/2023 | 0.05 |
| HEPTACHLOR | µg/L | | ND | 1/11/2023 | 0.4 |
| HEPTACHLOR EPOXIDE | µg/L | | ND | 1/11/2023 | 0.2 |
| HEXACHLOROBENZENE | µg/L | | ND | 1/11/2023 | 1 |
| HEXACHLOROCYCLOPENTADIENE | µg/L | | ND | 1/11/2023 | 50 |
| METHOXYCHLOR | µg/L | | ND | 1/11/2023 | 40 |
| OXAMYL | µg/L | | ND | 1/11/2023 | 200 |
| PENTACHLOROPHENOL | µg/L | | ND | 5/3/2023 | 1 |
| PICLORAM | µg/L | | ND | 5/3/2023 | 500 |
| POLYCHLORINATED BIPHENYLS | µg/L | | ND | 1/11/2023 | 0.5 |
| SIMAZINE | µg/L | | ND | 1/11/2023 | 4 |
| TOXAPHENE | µg/L | | ND | 1/11/2023 | 3 |

| POLYFLUOROALKYL SUBSTANCES (PFAS)(CA) | | | EPA PROPOSED MCL/HI | | | |
|---------------------------------------|------|--|---------------------|----------|-----------|------------|
| | | | RESULTS | HI CALC. | DATE | MCL/HI |
| PFOA - Perfluorooctanoic | ng/L | | ND | NA | 7/18/2023 | 4.0 ng/L |
| PFOS - Perfluorooctanesulfonic acid | ng/L | | ND | NA | 7/18/2023 | 4.0 ng/L |
| PFNA - Perfluorononanoic acid | ng/L | | ND | 0 | 7/18/2023 | HI |
| PFHxS - Perfluorohexanesulfonic acid | ng/L | | ND | 0 | 7/18/2023 | HI |
| PFBS - Perfluorobutanesulfonic acid | ng/L | | 0.23 | 0.000115 | 7/18/2023 | HI |
| HFPO-DA (GenX) | ng/L | | ND | 0 | 7/18/2023 | HI |
| HAZARD INDEX TOTAL | ng/L | | | 0.000115 | 7/18/2023 | 1.0 HI MCL |

For more information on PFAS, please visit the EPA website at:
<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

| | | TOTAL SAMPLES | MIN | MAX | AVG | DATE | MRDL |
|-------------------------------------|------|---------------|------|------|------|--------|------|
| EAST LARIMER COUNTY WATER DISTRICT | mg/L | 25 | 0.62 | 1.05 | 0.88 | Oct-23 | 4.0 |
| EAST LARIMER COUNTY WATER DISTRICT | mg/L | 25 | 0.41 | 1.03 | 0.80 | Nov-23 | 4.0 |
| EAST LARIMER COUNTY WATER DISTRICT | mg/L | 25 | 0.37 | 1.05 | 0.79 | Dec-23 | 4.0 |
| <hr/> | | | | | | | |
| FORTCOLLINS/LOVELAND WATER DISTRICT | mg/L | 70 | 0.43 | 1.20 | 0.77 | Oct-23 | 4.0 |
| FORTCOLLINS/LOVELAND WATER DISTRICT | mg/L | 70 | 0.31 | 1.18 | 0.68 | Nov-23 | 4.0 |
| FORTCOLLINS/LOVELAND WATER DISTRICT | mg/L | 70 | 0.28 | 1.18 | 0.68 | Dec-23 | 4.0 |
| <hr/> | | | | | | | |
| NORTH WELD COUNTY WATER DISTRICT | mg/L | 18 | 0.42 | 1.16 | 0.81 | Oct-23 | 4.0 |
| NORTH WELD COUNTY WATER DISTRICT | mg/L | 18 | 0.39 | 1.05 | 0.76 | Nov-23 | 4.0 |
| NORTH WELD COUNTY WATER DISTRICT | mg/L | 18 | 0.37 | 1.03 | 0.79 | Dec-23 | 4.0 |

TOTAL COLIFORMS (MMS/WCL)

| | | TOTAL SAMPLES | # POSITIVE | # NEGATIVE | DATE | MCL **TT LEVEL 1 or 2 |
|------------------------------------|--|---------------|------------|------------|--------|-----------------------|
| EAST LARIMER COUNTY WATER DISTRICT | | 25 | 0 | 25 | Oct-23 | NO/NO |
| EAST LARIMER COUNTY WATER DISTRICT | | 25 | 0 | 25 | Nov-23 | NO/NO |
| EAST LARIMER COUNTY WATER DISTRICT | | 25 | 0 | 25 | Dec-23 | NO/NO |
| <hr/> | | | | | | |
| FT COLLINS/LOVELAND WATER DISTRICT | | 70 | 0 | 70 | Oct-23 | NO/NO |
| FT COLLINS/LOVELAND WATER DISTRICT | | 70 | 0 | 70 | Nov-23 | NO/NO |
| FT COLLINS/LOVELAND WATER DISTRICT | | 70 | 0 | 70 | Dec-23 | NO/NO |
| <hr/> | | | | | | |
| NORTH WELD COUNTY WATER DISTRICT | | 18 | 0 | 18 | Oct-23 | NO/NO |
| NORTH WELD COUNTY WATER DISTRICT | | 18 | 0 | 18 | Nov-23 | NO/NO |
| NORTH WELD COUNTY WATER DISTRICT | | 18 | 0 | 18 | Dec-23 | NO/NO |

DISTRIBUTION SYSTEMS SAMPLES - CONTINUED

| <u>TOTAL TRIHALOMETHANES AND HALOACETIC ACIDS</u> | | TTHM RESULTS | MCL (LRAA) | HAA RESULTS | MCL (LRAA) | DATE |
|---|------|--------------|------------|-------------|------------|-----------|
| <u>EAST LARIMER COUNTY WATER DISTRICT (SGS)</u> | | | | | | |
| SAMPLE SITE - DBP001 | µg/L | 31.5 | 80 | 20.4 | 60 | 10/2/2023 |
| SAMPLE SITE - DBP002 | µg/L | 37.7 | 80 | 27.6 | 60 | 10/2/2023 |
| SAMPLE SITE - DBP003 | µg/L | 38.8 | 80 | 27.7 | 60 | 10/2/2023 |
| SAMPLE SITE - DBP004 | µg/L | 18.1 | 80 | 15.0 | 60 | 10/2/2023 |

| | | | | | | |
|--|------|------|----|------|----|-----------|
| <u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u> | | | | | | |
| SAMPLE SITE - DBP001 | µg/L | 24.8 | 80 | 21.9 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP002 | µg/L | 34.2 | 80 | 23.9 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP003 | µg/L | 32.6 | 80 | 24.9 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP004 | µg/L | 32.7 | 80 | 26.4 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP005 | µg/L | 29.2 | 80 | 25.2 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP006 | µg/L | 31.1 | 80 | 26.9 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP007 | µg/L | 34.3 | 80 | 28.0 | 60 | 10/4/2023 |
| SAMPLE SITE - DBP008 | µg/L | 36.6 | 80 | 29.2 | 60 | 10/4/2023 |

| | | | | | | |
|---|------|-------|----|-------|----|------------|
| <u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u> | | | | | | |
| SAMPLE SITE - DBP001 | µg/L | 53.10 | 80 | 21.40 | 60 | 10/10/2023 |
| SAMPLE SITE - DBP002 | µg/L | 32.33 | 80 | 27.30 | 60 | 10/10/2023 |
| SAMPLE SITE - DBP003 | µg/L | 37.27 | 80 | 27.10 | 60 | 10/10/2023 |
| SAMPLE SITE - DBP004 | µg/L | 31.02 | 80 | 25.70 | 60 | 10/10/2023 |

| <u>CHLORITE</u> | | 1ST RES | AVG RES | MAX RES | DATE | MCL |
|-----------------------------|------|---------|---------|---------|-----------|-----|
| FROM DISTRIBUTION SYSTEM(S) | mg/L | 0.34 | 0.33 | 0.31 | 10/5/2023 | 1.0 |

| <u>LEAD AND COPPER</u> | | 90TH PERCENTILE mg/L | DATE | 90th% ACTION LEVEL mg/L |
|--|------|----------------------|--------------|-------------------------|
| <u>EAST LARIMER COUNTY WATER DISTRICT (AL)</u> | | 30 SAMPLES COLLECTED | | |
| LEAD | mg/L | 0.004 | Jun-Jul-2022 | 0.015 |
| COPPER | mg/L | 0.19 | Jun-Jul-2022 | 1.3 |

| | | | | |
|--|------|----------------------|--------------|-------|
| <u>FORT COLLINS LOVELAND WATER DISTRICT (CA)</u> | | 60 SAMPLES COLLECTED | | |
| LEAD | mg/L | 0.003 | JUN-JUL 2023 | 0.015 |
| COPPER | mg/L | 0.154 | JUN-JUL 2023 | 1.3 |

| | | | | |
|---|------|----------------------|--------|-------|
| <u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u> | | 30 SAMPLES COLLECTED | | |
| LEAD | mg/L | 0.00279 | Jun-21 | 0.015 |
| COPPER | mg/L | 0.26 | Jun-21 | 1.3 |

MCL = Maximum Contaminate Level - Enforcable

PFAS = Per- and Polyfluorinated Alkyl Substances

mg/L (ppm) = Milligrams Per Liter (Parts Per Million)

ng/L (ppt) = Nanograms Per Liter (Parts Per Trillion)

APHA = American Public Health Association color scale

***SMCL = Secondary Maximum Contaminate Level - Recomendado**

****TT = Treatment Technique**

SOC = Synthetic Organic Chemicals

RAA = Running Annual Average

ACTION LEVEL = Addition treatment required if exceeded

< = Less Than

(FCL) = Fort Collins Lab (UL) = United Lab (SGS) = SGS Lab (MMS) = MMS Environmental (WCL) = Weld County Lab

(CA) = Colorado Analytical Lab (EA) = Eurofins Eaton Analytical (SCFP) = Soldier Canyon Filter Plant

BDL = Below Detectable Limit

HI - Hazard Index

µg/L (ppb) = Micrograms Per Liter (Parts Per Billion)

pCi/L = Picocuries Per Liter

µs/L = MicroSiemens Per Centimeter

ND = Not Detected NT = Not Tested

N/A = Not applicable

VOC = Volatile Organic Chemicals

LRAA = Location Running Annual Average

MRDL = Maximum Residual Disinfectant Level

> = Greater Than