

SOLDIER CANYON WATER TREATMENT AUTHORITY

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

WATER QUALITY REPORT

1ST QUARTER 2021

| 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 | 28.0 | 31.0 | 30.1 | 36.0 | 40.0 | 38.0 | N/A |
| ALUMINUM | mg/l | N/A | N/A | N/A | 0.033 | 0.040 | 0.037 | *0.05 - 0.2 |
| CALCIUM HARDNESS | mg/l | 27.0 | 32.0 | 28.9 | 26.0 | 30.0 | 28.4 | N/A |
| CHLORINE | mg/l | N/A | N/A | N/A | 1.13 | 1.43 | 1.31 | 4.0 MRDL |
| CHLORITE | mg/l | N/A | N/A | N/A | <0.02 | 0.58 | 0.45 | 1.0 |
| CHLORINE DIOXIDE | mg/l | N/A | N/A | N/A | 0.31 | 0.58 | 0.45 | 0.8 |
| CONDUCTIVITY | µs/cm | 72.8 | 103.0 | 77.0 | 75.3 | 102.9 | 96.9 | N/A |
| DISSOLVED OXYGEN | mg/l | 9.9 | 11.2 | 10.6 | N/A | N/A | N/A | N/A |
| FLUORIDE | mg/l | 0.16 | 0.21 | 0.19 | 0.61 | 0.80 | 0.73 | 4.0/*2.0 |
| HARDNESS (TOTAL) | mg/l | 33.0 | 38.0 | 34.6 | 32.0 | 38.0 | 33.7 | N/A |
| IRON | mg/l | 0.03 | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | *0.3 |
| LANGLIER INDEX | S.I.# | -1.16 | -1.91 | -1.63 | -1.19 | -1.28 | -1.21 | N/A |
| MANGANESE | mg/l | 0.02 | 0.03 | 0.02 | 0.001 | 0.005 | 0.004 | *0.05 |
| pH | VALUE | 7.30 | 7.88 | 7.62 | 7.94 | 8.20 | 8.08 | *6.5-8.5 |
| TEMPERATURE | °C | 2.0 | 3.6 | 2.6 | 2.5 | 3.9 | 3.0 | N/A |
| TOTAL DISSOLVED SOLIDS | mg/l | 35.2 | 51.2 | 38.4 | 37.7 | 51.4 | 48.6 | *500 |
| TRUE COLOR | APHA | 4.0 | 12.0 | 7.6 | 0.0 | 1.0 | 0.0 | *15.0 |
| TURBIDITY | NTU | 1.32 | 2.70 | 1.86 | 0.011 | 0.068 | 0.014 | **<0.3 TT |

| INORGANIC CONTAMINANTS ANALYSES (SGS) - (EFFLUENT ENTRY POINT AT SCFP) | | | RESULTS | DATE | MCL |
|--|------|--|---------|----------|-------|
| ANTIMONY | mg/l | | ND | 1/6/2021 | 0.006 |
| ARSENIC | mg/l | | ND | 1/6/2021 | 0.010 |
| BARIUM | mg/l | | 0.021 | 1/6/2021 | 2.000 |
| BERYLLIUM | mg/l | | ND | 1/6/2021 | 0.004 |
| CADMIUM | mg/l | | ND | 1/6/2021 | 0.005 |
| CHROMIUM | mg/l | | ND | 1/6/2021 | 0.1 |
| FLUORIDE | mg/l | | 0.66 | 2/3/2021 | 4.0 |
| MERCURY | mg/l | | ND | 1/6/2021 | 0.002 |
| NICKEL | mg/l | | ND | 1/6/2021 | N/A |
| SELENIUM | mg/l | | 0.00076 | 1/6/2021 | 0.050 |
| SODIUM | mg/l | | 8.6 | 1/6/2021 | N/A |
| THALLIUM | mg/l | | ND | 1/6/2021 | 0.002 |

| NITRATE AND/OR NITRITE AS NITROGEN (SGS) - (EFFLUENT ENTRY POINT AT SCFP) | | | RESULTS | DATE | MCL |
|---|------|--|---------|----------|--------|
| NITRATE | mg/l | | 0.021 | 2/3/2021 | 10.000 |
| NITRITE | mg/l | | ND | 2/3/2021 | 1.000 |

| TOTAL ORGANIC CARBON (SGS) - (SCFP INFLUENT AND CF EFFLUENT) | | INFLUENT | EFFLUENT | TT RATIO | DATE | MCL - **TT |
|--|------|----------|----------|----------|-----------|------------|
| TOTAL ORGANIC CARBON - TOC | mg/L | 2.9 | 1.8 | 1.08 | 1/6/2021 | RAA - ≥1.0 |
| | | 2.9 | 1.70 | 1.18 | 2/3/2021 | RAA - ≥1.0 |
| | | 3.1 | 1.8 | 1.20 | 3/10/2021 | RAA - ≥1.0 |
| | | INFLUENT | | | DATE | MCL |
| ALKALINITY - (SCFP INFLUENT ONLY) | mg/l | 27.5 | | | 1/6/2021 | N/A |
| | | 25.0 | | | 2/3/2021 | N/A |
| | | 36.5 | | | 3/10/2021 | N/A |

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

| | | | RESULTS | DATE | MCL |
|------------------|-------|--|---------|-----------|-----|
| GROSS ALPHA | pCi/L | | 1.7 | 8/24/2011 | 15 |
| URANIUM | ppb | | 0.01 | 8/24/2011 | 30 |
| RADIUM 226 + 228 | pCi/L | | 0.76 | 8/24/2011 | 5 |
| GROSS BETA | pCi/L | | 2.1 | 8/24/2011 | 50 |

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

| | | | RESULTS | DATE | MCL |
|----------------------------|------|--|---------|----------|-------|
| 1,1,1-TRICHLOROETHANE | µg/L | | ND | 1/6/2021 | 200 |
| 1,1,2-TRICHLOROETHANE | µg/L | | ND | 1/6/2021 | 5 |
| 1,1-DICHLOROETHYLENE | µg/L | | ND | 1/6/2021 | 7 |
| 1,2,4-TRICHLOROBENZENE | µg/L | | ND | 1/6/2021 | 70 |
| 1,2-DICHLOROETHANE | µg/L | | ND | 1/6/2021 | 5 |
| 1,2-DICHLOROPROPANE | µg/L | | ND | 1/6/2021 | 5 |
| BENZENE | µg/L | | ND | 1/6/2021 | 5 |
| CARBON TETRACHLORIDE | µg/L | | ND | 1/6/2021 | 5 |
| CHLOROBENZENE | µg/L | | ND | 1/6/2021 | 100 |
| cis-1,2-DICHLOROETHYLENE | µg/L | | ND | 1/6/2021 | 70 |
| DICHLOROMETHANE | µg/L | | ND | 1/6/2021 | 5 |
| ETHYLBENZENE | µg/L | | ND | 1/6/2021 | 700 |
| o-DICHLOROBENZENE | µg/L | | ND | 1/6/2021 | 600 |
| para-DICHLOROBENZENE | µg/L | | ND | 1/6/2021 | 75 |
| STYRENE | µg/L | | ND | 1/6/2021 | 100 |
| TETRACHLOROETHYLENE | µg/L | | ND | 1/6/2021 | 5 |
| TOLUENE | µg/L | | ND | 1/6/2021 | 1000 |
| trans-1,2-DICHLOROETHYLENE | µg/L | | ND | 1/6/2021 | 100 |
| TRICHLOROETHYLENE | µg/L | | ND | 1/6/2021 | 5 |
| VINYL CHLORIDE | µg/L | | ND | 1/6/2021 | 2 |
| XYLENES (total) | µg/L | | ND | 1/6/2021 | 10000 |

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

| | | | RESULTS | DATE | MCL |
|-----------------------------|------|--|---------|----------|------|
| 1,2-DIBROMO-3-CHLOROPROPANE | µg/L | | ND | 2/3/2021 | 0.2 |
| 2,4-D | µg/L | | ND | 2/3/2021 | 70 |
| 2,4,5-TP | µg/L | | ND | 2/3/2021 | 50 |
| ALACHLOR (LASSO) | µg/L | | ND | 2/3/2021 | 2 |
| ALDICARB | µg/L | | ND | 2/3/2021 | N/A |
| ALDICARB SULFONE | µg/L | | ND | 2/3/2021 | N/A |
| ALDICARB SULFOXIDE | µg/L | | ND | 2/3/2021 | N/A |
| ATRAZINE | µg/L | | ND | 2/3/2021 | 3 |
| BENZO(a)PYRENE | µg/L | | ND | 2/3/2021 | 0.2 |
| CARBOFURAN | µg/L | | ND | 2/3/2021 | 40 |
| CHLORDANE | µg/L | | ND | 2/3/2021 | 2 |
| DALAPON | µg/L | | ND | 2/3/2021 | 200 |
| DINOSEB | µg/L | | ND | 2/3/2021 | 7 |
| DIQUAT | µg/L | | ND | 2/3/2021 | 20 |
| DI(2-ethylhexyl)ADIPATE | µg/L | | ND | 2/3/2021 | 400 |
| DI(2-ethylhexyl)PHTHALATE | µg/L | | ND | 2/3/2021 | 6 |
| ENDOTHALL | µg/L | | ND | 2/3/2021 | 100 |
| ENDRIN | µg/L | | ND | 2/3/2021 | 2 |
| ETHYLENE DIBROMIDE | µg/L | | ND | 2/3/2021 | 0.05 |
| HEPTACHLOR | µg/L | | ND | 2/3/2021 | 0.4 |
| HEPTACHLOR EPOXIDE | µg/L | | ND | 2/3/2021 | 0.2 |

ORGANIC CHEMICAL ANALYSES - SOC's (SGS) (con't)

| | | | RESULTS | DATE | MCL |
|---------------------------|------|--|---------|----------|-----|
| HEXACHLOROBENZENE | µg/L | | ND | 2/3/2021 | 1 |
| HEXACHLOROCYCLOPENTADIENE | µg/L | | ND | 2/3/2021 | 50 |
| LINDANE/BHC-GAMMA | µg/L | | ND | 2/3/2021 | 0.2 |
| METHOXYCHLOR | µg/L | | ND | 2/3/2021 | 40 |
| OXAMYL | µg/L | | ND | 2/3/2021 | 200 |
| PENTACHLOROPHENOL | µg/L | | ND | 2/3/2021 | 1 |
| PICLORAM | µg/L | | ND | 2/3/2021 | 500 |
| POLYCHLORINATED BIPHENYLS | µg/L | | ND | 2/3/2021 | 0.5 |
| SIMAZINE | µg/L | | ND | 2/3/2021 | 4 |
| TOXAPHENE | µg/L | | ND | 2/3/2021 | 3 |

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

| | | TOTAL SAMPLES | MIN | MAX | AVG | DATE | MRDL |
|-------------------------------------|------|---------------|------|------|------|--------|------|
| EAST LARIMER COUNTY WATER DISTRICT | mg/L | 20 | 0.39 | 1.28 | 0.86 | Jan-21 | 4.0 |
| EAST LARIMER COUNTY WATER DISTRICT | mg/L | 20 | 0.57 | 1.27 | 0.93 | Feb-21 | 4.0 |
| EAST LARIMER COUNTY WATER DISTRICT | mg/L | 20 | 0.46 | 1.12 | 0.92 | Mar-21 | 4.0 |
| FORTCOLLINS/LOVELAND WATER DISTRICT | mg/L | 50 | 0.26 | 1.38 | 0.70 | Jan-21 | 4.0 |
| FORTCOLLINS/LOVELAND WATER DISTRICT | mg/L | 50 | 0.27 | 1.34 | 0.79 | Feb-21 | 4.0 |
| FORTCOLLINS/LOVELAND WATER DISTRICT | mg/L | 50 | 0.38 | 1.17 | 0.80 | Mar-21 | 4.0 |
| NORTH WELD COUNTY WATER DISTRICT | mg/L | 18 | 0.31 | 0.95 | 0.73 | Jan-21 | 4.0 |
| NORTH WELD COUNTY WATER DISTRICT | mg/L | 18 | 0.67 | 1.07 | 0.86 | Feb-21 | 4.0 |
| NORTH WELD COUNTY WATER DISTRICT | mg/L | 18 | 0.76 | 1.03 | 0.88 | Mar-21 | 4.0 |

TOTAL COLIFORMS (MMS/WCL)

| | | TOTAL SAMPLES | # POSITIVE | # NEGATIVE | DATE | MCL **TT LEVEL 1 or 2 |
|------------------------------------|--|---------------|------------|------------|--------|-----------------------|
| EAST LARIMER COUNTY WATER DISTRICT | | 20 | 0 | 20 | Jan-21 | NO/NO |
| EAST LARIMER COUNTY WATER DISTRICT | | 20 | 0 | 20 | Feb-21 | NO/NO |
| EAST LARIMER COUNTY WATER DISTRICT | | 20 | 0 | 20 | Mar-21 | NO/NO |
| FT COLLINS/LOVELAND WATER DISTRICT | | 50 | 0 | 50 | Jan-21 | NO/NO |
| FT COLLINS/LOVELAND WATER DISTRICT | | 50 | 0 | 50 | Feb-21 | NO/NO |
| FT COLLINS/LOVELAND WATER DISTRICT | | 50 | 0 | 50 | Mar-21 | NO/NO |
| NORTH WELD COUNTY WATER DISTRICT | | 18 | 0 | 18 | Jan-21 | NO/NO |
| NORTH WELD COUNTY WATER DISTRICT | | 18 | 0 | 18 | Feb-21 | NO/NO |
| NORTH WELD COUNTY WATER DISTRICT | | 18 | 0 | 18 | Mar-21 | NO/NO |

DISTRIBUTION SYSTEMS SAMPLES - CONTINUED

| <u>TOTAL TRIHALOMETHANES AND HALOACETIC ACIDS</u> | | TTHM RESULTS | MCL (LRAA) | HAA RESULTS | MCL (LRAA) | DATE |
|---|------|--------------|------------|-------------|------------|----------|
| EAST LARIMER COUNTY WATER DISTRICT (SGS) | | | | | | |
| SAMPLE SITE - DBP001 | µg/L | 41.3 | 80 | 22.3 | 60 | 1/5/2021 |
| SAMPLE SITE - DBP002 | µg/L | 65.3 | 80 | 30.4 | 60 | 1/5/2021 |
| SAMPLE SITE - DBP003 | µg/L | 26.9 | 80 | 21.4 | 60 | 1/5/2021 |
| SAMPLE SITE - DBP004 | µg/L | 59.8 | 80 | 29.8 | 60 | 1/5/2021 |

| | | | | | | |
|--|------|------|----|------|----|-----------|
| FORT COLLINS/LOVELAND WATER DISTRICT (CA) | | | | | | |
| SAMPLE SITE - DBP001 | µg/L | 38.2 | 80 | 21.2 | 60 | 1/12/2021 |
| SAMPLE SITE - DBP002 | µg/L | 30.2 | 80 | 15.6 | 60 | 1/12/2021 |
| SAMPLE SITE - DBP003 | µg/L | 26.8 | 80 | 20.0 | 60 | 1/12/2021 |
| SAMPLE SITE - DBP004 | µg/L | 19.7 | 80 | 12.2 | 60 | 1/12/2021 |

| | | | | | | |
|---|------|-------|----|-------|----|-----------|
| NORTH WELD COUNTY WATER DISTRICT (WCL) | | | | | | |
| SAMPLE SITE - DBP001 | µg/L | 34.88 | 80 | 19.40 | 60 | 1/12/2021 |
| SAMPLE SITE - DBP002 | µg/L | 23.86 | 80 | 24.60 | 60 | 1/12/2021 |
| SAMPLE SITE - DBP003 | µg/L | 27.77 | 80 | 24.00 | 60 | 1/12/2021 |
| SAMPLE SITE - DBP004 | µg/L | 21.48 | 80 | 23.60 | 60 | 1/12/2021 |

| <u>CHLORITE</u> | | 1ST RES | AVG RES | MAX RES | DATE | MCL |
|-------------------------------|------|---------|---------|---------|-----------|-----|
| EAST LARIMER COUNTY WD (FCL) | mg/L | 0.42 | 0.42 | 0.37 | 1/19/2021 | 1.0 |
| FORT COLLINS/LOVELAND WD (CA) | mg/L | 0.40 | 0.39 | 0.17 | 1/12/2021 | 1.0 |
| NORTH WELD COUNTY WD (WCL) | mg/L | 0.44 | 0.43 | 0.44 | 2/22/2021 | 1.0 |

| <u>LEAD AND COPPER</u> | | 90TH PERCENTILE mg/L | DATE | 90th% ACTION LEVEL mg/L |
|--|------|----------------------|--------------|-------------------------|
| EAST LARIMER COUNTY WATER DISTRICT (AL) | | 30 SAMPLES COLLECTED | | |
| LEAD | mg/L | 0.0032 | Jun-Jul-2020 | 0.015 |
| COPPER | mg/L | 0.22 | Jun-Jul-2020 | 1.3 |

| | | | | |
|--|------|----------------------|--------|-------|
| FORT COLLINS LOVELAND WATER DISTRICT (CA) | | 30 SAMPLES COLLECTED | | |
| LEAD | mg/L | 0.002 | Jun-20 | 0.015 |
| COPPER | mg/L | 0.211 | Jun-20 | 1.3 |

| | | | | |
|---|------|----------------------|--------|-------|
| NORTH WELD COUNTY WATER DISTRICT (WCL) | | 30 SAMPLES COLLECTED | | |
| LEAD | mg/L | 0.0024 | Jul-20 | 0.015 |
| COPPER | mg/L | <0.2 | Jul-20 | 1.3 |

MCL = Maximum Contaminate Level - Enforcable

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

****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

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