

# 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 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	37.0	30.3	37.0	51.0	44.0	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.007	0.051	0.035	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	21.0	26.0	23.8	24.0	26.0	25.0	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.20	1.44	1.34	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.23	0.61	0.40	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.04	0.00	0.8
CONDUCTIVITY	µs/cm	74.8	81.0	77.5	99.3	128.3	113.9	N/A
DISSOLVED OXYGEN	mg/l	2.2	9.7	6.5	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.17	0.21	0.19	0.11	0.85	0.59	4.0/*2.0
HARDNESS (TOTAL)	mg/l	27.0	37.0	34.0	28.0	36.0	32.7	N/A
IRON	mg/l	0.03	0.29	0.12	0.01	0.01	0.01	*0.3
MANGANESE	mg/l	0.009	0.170	0.073	0.002	0.006	0.005	*0.05
pH	VALUE	6.84	7.87	7.36	8.13	8.44	8.31	*6.5-8.5
TEMPERATURE	°C	5.2	13.5	9.0	5.9	8.8	7.4	N/A
TRUE COLOR	APHA	6.0	12.0	9.0	0.0	2.0	1.0	*15.0
TURBIDITY	NTU	0.43	8.55	1.69	0.009	0.320	0.019	**<0.3 TT

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

		RESULTS	DATE	MCL
ANTIMONY	mg/l	ND	12/8/2021	0.006
ARSENIC	mg/l	ND	12/8/2021	0.010
BARIUM	mg/l	0.018	12/8/2021	2.000
BERYLLIUM	mg/l	ND	12/8/2021	0.004
CADMIUM	mg/l	ND	12/8/2021	0.005
CHROMIUM	mg/l	ND	12/8/2021	0.1
FLUORIDE	mg/l	0.65	12/8/2021	4.0
MERCURY	mg/l	ND	12/8/2021	0.002
NICKEL	mg/l	ND	12/8/2021	N/A
SELENIUM	mg/l	ND	12/8/2021	0.050
SODIUM	mg/l	9.8	12/8/2021	N/A
THALLIUM	mg/l	ND	12/8/2021	0.002

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

		RESULTS	DATE	MCL
NITRATE	mg/l	0.023	12/8/2021	10.000
NITRITE	mg/l	ND	12/8/2021	1.000

### TOTAL ORGANIC CARBON (SGS) - (SCFP INFLUENT AND CF EFFLUENT)

		INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L	3.1	1.8	1.20	10/6/2021	RAA - ≥1.0
		3.2	1.8	1.25	11/3/2021	RAA - ≥1.0
		3.0	1.8	1.14	12/8/2021	RAA - ≥1.0
		INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l	35.0			10/6/2021	N/A
		30.0			11/3/2021	N/A
		35.0			12/8/2021	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	10/6/2021	200
1,1,2-TRICHLOROETHANE	µg/L		ND	10/6/2021	5
1,1-DICHLOROETHYLENE	µg/L		ND	10/6/2021	7
1,2,4-TRICHLOROBENZENE	µg/L		ND	10/6/2021	70
1,2-DICHLOROETHANE	µg/L		ND	10/6/2021	5
1,2-DICHLOROPROPANE	µg/L		ND	10/6/2021	5
BENZENE	µg/L		ND	10/6/2021	5
CARBON TETRACHLORIDE	µg/L		ND	10/6/2021	5
CHLOROBENZENE	µg/L		ND	10/6/2021	100
cis-1,2-DICHLOROETHYLENE	µg/L		ND	10/6/2021	70
DICHLOROMETHANE	µg/L		ND	10/6/2021	5
ETHYLBENZENE	µg/L		ND	10/6/2021	700
o-DICHLOROBENZENE	µg/L		ND	10/6/2021	600
para-DICHLOROBENZENE	µg/L		ND	10/6/2021	75
STYRENE	µg/L		ND	10/6/2021	100
TETRACHLOROETHYLENE	µg/L		ND	10/6/2021	5
TOLUENE	µg/L		ND	10/6/2021	1000
trans-1,2-DICHLOROETHYLENE	µg/L		ND	10/6/2021	100
TRICHLOROETHYLENE	µg/L		ND	10/6/2021	5
VINYL CHLORIDE	µg/L		ND	10/6/2021	2
XYLENES (total)	µg/L		ND	10/6/2021	10000

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

			RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L		ND	12/8/2021	0.2
2,4-D	µg/L		ND	12/8/2021	70
2,4,5-TP	µg/L		ND	12/8/2021	50
ALACHLOR (LASSO)	µg/L		ND	12/8/2021	2
ALDICARB	µg/L		ND	12/8/2021	N/A
ALDICARB SULFONE	µg/L		ND	12/8/2021	N/A
ALDICARB SULFOXIDE	µg/L		ND	12/8/2021	N/A
ATRAZINE	µg/L		ND	12/8/2021	3
BENZO(a)PYRENE	µg/L		ND	12/8/2021	0.2
CARBOFURAN	µg/L		ND	12/8/2021	40
CHLORDANE	µg/L		ND	12/8/2021	2
DALAPON	µg/L		ND	12/8/2021	200
DINOSEB	µg/L		ND	12/8/2021	7
DIQUAT	µg/L		ND	12/8/2021	20
DI(2-ethylhexyl)ADIPATE	µg/L		ND	12/8/2021	400
DI(2-ethylhexyl)PHTHALATE	µg/L		ND	12/8/2021	6
ENDOTHALL	µg/L		ND	12/8/2021	100
ENDRIN	µg/L		ND	12/8/2021	2
ETHYLENE DIBROMIDE	µg/L		ND	12/8/2021	0.05
HEPTACHLOR	µg/L		ND	12/8/2021	0.4
HEPTACHLOR EPOXIDE	µg/L		ND	12/8/2021	0.2

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

			RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	12/8/2021	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	12/8/2021	50
LINDANE/BHC-GAMMA	µg/L		ND	12/8/2021	0.2
METHOXYCHLOR	µg/L		ND	12/8/2021	40
OXAMYL	µg/L		ND	12/8/2021	200
PENTACHLOROPHENOL	µg/L		ND	12/8/2021	1
PICLORAM	µg/L		ND	12/8/2021	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	12/8/2021	0.5
SIMAZINE	µg/L		ND	12/8/2021	4
TOXAPHENE	µg/L		ND	12/8/2021	3

**DISTRIBUTION SYSTEMS SAMPLES**

**CHLORINE (Districts Measure)**

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.66	1.07	0.87	Oct-21	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.44	1.09	0.83	Nov-21	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.42	1.14	0.88	Dec-21	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.27	1.21	0.66	Oct-21	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.24	1.11	0.64	Nov-21	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.30	1.26	0.66	Dec-21	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.23	0.99	0.76	Oct-21	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.31	0.93	0.72	Nov-21	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.37	1.11	0.77	Dec-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	Oct-21	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Nov-21	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Dec-21	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Oct-21	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Nov-21	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Dec-21	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Oct-21	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Nov-21	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Dec-21	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	43.5	80	21.4	60	10/26/2021
SAMPLE SITE - DBP002	µg/L	65.2	80	28.7	60	10/26/2021
SAMPLE SITE - DBP003	µg/L	27.3	80	14.7	60	10/26/2021
SAMPLE SITE - DBP004	µg/L	69.7	80	27.9	60	10/26/2021

<u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u>						
SAMPLE SITE - DBP001	µg/L	18.2	80	17.4	60	10/7/2021
SAMPLE SITE - DBP002	µg/L	32.0	80	16.8	60	10/7/2021
SAMPLE SITE - DBP003	µg/L	26.3	80	17.8	60	10/7/2021
SAMPLE SITE - DBP004	µg/L	26.9	80	17.8	60	10/7/2021
SAMPLE SITE - DBP005	µg/L	22.6	80	16.3	60	10/7/2021
SAMPLE SITE - DBP006	µg/L	25.0	80	18.2	60	10/7/2021
SAMPLE SITE - DBP007	µg/L	27.6	80	19.5	60	10/7/2021
SAMPLE SITE - DBP008	µg/L	33.4	80	21.7	60	10/7/2021

<u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u>						
SAMPLE SITE - DBP001	µg/L	39.20	80	23.00	60	10/12/2021
SAMPLE SITE - DBP002	µg/L	31.09	80	27.10	60	10/12/2021
SAMPLE SITE - DBP003	µg/L	34.74	80	28.60	60	10/12/2021
SAMPLE SITE - DBP004	µg/L	25.68	80	26.70	60	10/12/2021

<u>CHLORITE</u>		1ST RES	AVG RES	MAX RES	DATE	MCL
FROM DISTRIBUTION SYSTEM(S)	mg/L	0.41	0.43	0.41	10/5/2021	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	0.0052	Jun-Jul-2021	0.015
COPPER	mg/L	0.23	Jun-Jul-2021	1.3

<u>FORT COLLINS LOVELAND WATER DISTRICT (CA)</u>		60 SAMPLES COLLECTED		
LEAD	mg/L	0.005	Sep-Nov 2021	0.015
COPPER	mg/L	0.236	Sep-Nov 2021	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**

**\*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**