

# SOLDIER CANYON WATER TREATMENT AUTHORITY

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

## WATER QUALITY REPORT

**3RD QUARTER 2022**

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	13.0	31.0	25.7	44.0	50.0	46.7	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.036	0.055	0.039	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	11.0	29.0	22.5	23.0	27.0	25.1	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.30	1.42	1.35	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.20	0.45	0.33	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.07	0.02	0.8
CONDUCTIVITY	µs/cm	40.5	78.4	65.8	110.4	120.2	113.9	N/A
DISSOLVED OXYGEN	mg/l	3.4	7.7	6.4	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.18	0.21	0.19	0.61	0.78	0.68	4.0/*2.0
HARDNESS (TOTAL)	mg/l	19.0	40.0	30.5	30.0	34.0	32.0	N/A
IRON	mg/l	0.04	0.17	0.09	0.01	0.01	0.01	*0.3
MANGANESE	mg/l	0.011	0.146	0.051	0.000	0.004	0.002	*0.05
pH	VALUE	6.93	7.73	7.38	8.03	8.46	8.29	*6.5-8.5
TEMPERATURE	°C	7.3	19.3	12.3	9.4	12.1	11.3	N/A
TRUE COLOR	APHA	4.0	30.0	11.8	0.0	1.0	0.33	*15.0
TURBIDITY	NTU	0.79	59.60	5.10	0.012	0.028	0.017	**<0.3 TT

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

		RESULTS	DATE	MCL
ANTIMONY	mg/l	<0.00040	8/10/2022	0.006
ARSENIC	mg/l	<0.0020	8/10/2022	0.010
BARIUM	mg/l	0.017	8/10/2022	2.000
BERYLLIUM	mg/l	<0.00030	8/10/2022	0.004
CADMIUM	mg/l	<0.00015	8/10/2022	0.005
CHROMIUM	mg/l	<0.0020	8/10/2022	0.1
FLUORIDE	mg/l	0.67	8/10/2022	4.0
MERCURY	mg/l	<0.0001	8/10/2022	0.002
NICKEL	mg/l	<0.002	8/10/2022	N/A
SELENIUM	mg/l	<0.0007	8/10/2022	0.050
SODIUM	mg/l	13.3	8/10/2022	N/A
THALLIUM	mg/l	<0.0002	8/10/2022	0.002

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

		RESULTS	DATE	MCL
NITRATE	mg/l	0.069	8/10/2022	10.000
NITRITE	mg/l	<0.0040	8/10/2022	1.000

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

		INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L	2.8	1.7	1.12	7/6/2022	RAA - ≥1.0
		2.7	1.6	1.16	8/10/2022	RAA - ≥1.0
		2.8	1.7	1.12	9/7/2022	RAA - ≥1.0
		INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l	35.5			7/6/2022	N/A
		31.0			8/10/2022	N/A
		30.5			9/7/2022	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	9/7/2022	200
1,1,2-TRICHLOROETHANE	µg/L		ND	9/7/2022	5
1,1-DICHLOROETHYLENE	µg/L		ND	9/7/2022	7
1,2,4-TRICHLOROBENZENE	µg/L		ND	9/7/2022	70
1,2-DICHLOROETHANE	µg/L		ND	9/7/2022	5
1,2-DICHLOROPROPANE	µg/L		ND	9/7/2022	5
BENZENE	µg/L		ND	9/7/2022	5
CARBON TETRACHLORIDE	µg/L		ND	9/7/2022	5
CHLOROBENZENE	µg/L		ND	9/7/2022	100
cis-1,2-DICHLOROETHYLENE	µg/L		ND	9/7/2022	70
DICHLOROMETHANE	µg/L		ND	9/7/2022	5
ETHYLBENZENE	µg/L		ND	9/7/2022	700
o-DICHLOROBENZENE	µg/L		ND	9/7/2022	600
para-DICHLOROBENZENE	µg/L		ND	9/7/2022	75
STYRENE	µg/L		ND	9/7/2022	100
TETRACHLOROETHYLENE	µg/L		ND	9/7/2022	5
TOLUENE	µg/L		ND	9/7/2022	1000
trans-1,2-DICHLOROETHYLENE	µg/L		ND	9/7/2022	100
TRICHLOROETHYLENE	µg/L		ND	9/7/2022	5
VINYL CHLORIDE	µg/L		ND	9/7/2022	2
XYLENES (total)	µg/L		ND	9/7/2022	10000

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

			RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L		ND	9/7/2022	0.2
2,4-D	µg/L		ND	9/7/2022	70
2,4,5-TP	µg/L		ND	9/7/2022	50
ALACHLOR (LASSO)	µg/L		ND	9/7/2022	2
ALDICARB	µg/L		ND	9/7/2022	N/A
ALDICARB SULFONE	µg/L		ND	9/7/2022	N/A
ALDICARB SULFOXIDE	µg/L		ND	9/7/2022	N/A
ATRAZINE	µg/L		ND	9/7/2022	3
BENZO(a)PYRENE	µg/L		ND	9/7/2022	0.2
CARBOFURAN	µg/L		ND	9/7/2022	40
CHLORDANE	µg/L		ND	9/7/2022	2
DALAPON	µg/L		ND	9/7/2022	200
DINOSEB	µg/L		ND	9/7/2022	7
DIQUAT	µg/L		ND	4/6/2022	20
DI(2-ethylhexyl)ADIPATE	µg/L		ND	9/7/2022	400
DI(2-ethylhexyl)PHTHALATE	µg/L		ND	9/7/2022	6
ENDOTHALL	µg/L		ND	9/7/2022	100
ENDRIN	µg/L		ND	9/7/2022	2
ETHYLENE DIBROMIDE	µg/L		ND	9/7/2022	0.05
HEPTACHLOR	µg/L		ND	9/7/2022	0.4
HEPTACHLOR EPOXIDE	µg/L		ND	9/7/2022	0.2

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

			RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	9/7/2022	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	9/7/2022	50
LINDANE/BHC-GAMMA	µg/L		ND	9/7/2022	0.2
METHOXYCHLOR	µg/L		ND	9/7/2022	40
OXAMYL	µg/L		ND	9/7/2022	200
PENTACHLOROPHENOL	µg/L		ND	9/7/2022	1
PICLORAM	µg/L		ND	9/7/2022	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	9/7/2022	0.5
SIMAZINE	µg/L		ND	9/7/2022	4
TOXAPHENE	µg/L		ND	9/7/2022	3

**DISTRIBUTION SYSTEMS SAMPLES**

**CHLORINE (Districts Measure)**

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.74	1.17	0.99	Jul-22	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.70	1.18	0.98	Aug-22	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.69	1.19	0.95	Sep-22	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.63	1.57	0.87	Jul-22	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.52	1.43	0.86	Aug-22	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.43	1.22	0.86	Sep-22	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.40	1.12	0.83	Jul-22	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.32	1.16	0.78	Aug-22	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.22	1.16	0.73	Sep-22	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	Jul-22	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Aug-22	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Sep-22	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Jul-22	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Aug-22	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Sep-22	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Jul-22	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Aug-22	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Sep-22	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	39.6	80	25.9	60	7/25/2022
SAMPLE SITE - DBP002	µg/L	54.7	80	32.5	60	7/25/2022
SAMPLE SITE - DBP003	µg/L	31.0	80	23.1	60	7/25/2022
SAMPLE SITE - DBP004	µg/L	58.6	80	29.5	60	7/25/2022

<u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u>						
SAMPLE SITE - DBP001	µg/L	19.5	80	17.8	60	7/7/2022
SAMPLE SITE - DBP002	µg/L	28.0	80	22.0	60	7/7/2022
SAMPLE SITE - DBP003	µg/L	23.9	80	21.2	60	7/7/2022
SAMPLE SITE - DBP004	µg/L	25.1	80	21.6	60	7/7/2022
SAMPLE SITE - DBP005	µg/L	32.5	80	22.1	60	7/7/2022
SAMPLE SITE - DBP006	µg/L	26.5	80	21.8	60	7/7/2022
SAMPLE SITE - DBP007	µg/L	26.9	80	22.5	60	7/7/2022
SAMPLE SITE - DBP008	µg/L	27.1	80	22.8	60	7/7/2022

<u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u>						
SAMPLE SITE - DBP001	µg/L	48.14	80	21.60	60	7/12/2022
SAMPLE SITE - DBP002	µg/L	36.02	80	23.20	60	7/12/2022
SAMPLE SITE - DBP003	µg/L	36.73	80	25.70	60	7/12/2022
SAMPLE SITE - DBP004	µg/L	32.12	80	22.30	60	7/12/2022

<u>CHLORITE</u>		1ST RES	AVG RES	MAX RES	DATE	MCL
FROM DISTRIBUTION SYSTEM(S)	mg/L	0.35	0.35	0.34	7/5/2022	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	JAN-FEB 2022	0.015
COPPER	mg/L	0.147	JAN-FEB 2022	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**