

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 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	17.0	38.0	26.2	39.0	49.0	43.0	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.045	0.055	0.051	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	15.0	28.0	21.3	20.0	25.0	22.5	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.26	1.51	1.38	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.06	0.66	0.42	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.04	0.00	0.8
CONDUCTIVITY	µs/cm	47.7	80.6	67.1	122.1	108.0	113.5	N/A
DISSOLVED OXYGEN	mg/l	4.0	9.7	6.8	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.19	0.23	0.21	0.17	0.74	0.67	4.0/*2.0
HARDNESS (TOTAL)	mg/l	20.0	39.0	30.4	29.0	36.0	33.0	N/A
IRON	mg/l	0.00	0.24	0.08	0.00	0.01	0.01	*0.3
MANGANESE	mg/l	0.014	0.085	0.044	0.001	0.005	0.003	*0.05
pH	VALUE	6.97	8.17	7.41	7.71	8.58	8.33	*6.5-8.5
TEMPERATURE	°C	7.4	19.8	12.3	10.1	13.7	11.8	N/A
TRUE COLOR	APHA	7.0	29.0	12.8	0.0	1.0	0.4	*15.0
TURBIDITY	NTU	0.67	29.53	2.17	0.013	0.034	0.014	**<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		3.3	1.7	1.39	7/18/2023	RAA - ≥1.0
			3.3	1.7	1.39	7/18/2023	RAA - ≥1.0
			3.5	1.8	1.39	8/8/2023	RAA - ≥1.1
			3.4	1.8	1.34	8/8/2023	RAA - ≥1.2
			3.5	1.9	1.31	9/13/2023	RAA - ≥1.0
			3.5	1.9	1.31	9/13/2023	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY (CA) - (SCFP INFLUENT)	mg/l		36.0			7/18/2023	N/A
			24.5			7/18/2023	N/A
			30.2			8/8/2023	N/A
			30.3			8/8/2023	N/A
			29.8			9/13/2023	N/A
			29.4			9/13/2023	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-DICHLOROENZENE	µg/L		ND	1/11/2023	600
para-DICHLOROENZENE	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	0.64	1.34	1.03	Jul-23	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.59	1.08	0.89	Aug-23	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.64	1.11	0.94	Sep-23	4.0
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FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	70	0.53	1.33	0.88	Jul-23	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	70	0.43	1.25	0.84	Aug-23	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	70	0.50	1.31	0.87	Sep-23	4.0
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NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.34	1.12	0.80	Jul-23	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.38	1.18	0.89	Aug-23	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.49	1.16	0.82	Sep-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	Jul-23	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		25	0	25	Aug-23	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		25	0	25	Sep-23	NO/NO
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FT COLLINS/LOVELAND WATER DISTRICT		70	0	70	Jul-23	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		70	0	70	Aug-23	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		70	0	70	Sep-23	NO/NO
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NORTH WELD COUNTY WATER DISTRICT		18	0	18	Jul-23	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Aug-23	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Sep-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	42.2	80	35.8	60	7/10/2023
SAMPLE SITE - DBP002	µg/L	36.5	80	29.1	60	7/10/2023
SAMPLE SITE - DBP003	µg/L	26.8	80	32.9	60	7/10/2023
SAMPLE SITE - DBP004	µg/L	60.7	80	25.5	60	7/10/2023

<u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u>						
SAMPLE SITE - DBP001	µg/L	25.3	80	23.9	60	7/7/2023
SAMPLE SITE - DBP002	µg/L	43.8	80	31.8	60	7/7/2023
SAMPLE SITE - DBP003	µg/L	35.8	80	33.4	60	7/7/2023
SAMPLE SITE - DBP004	µg/L	30.9	80	26.6	60	7/7/2023
SAMPLE SITE - DBP005	µg/L	34.4	80	30.5	60	7/7/2023
SAMPLE SITE - DBP006	µg/L	31.0	80	29.3	60	7/7/2023
SAMPLE SITE - DBP007	µg/L	38.5	80	32.2	60	7/7/2023
SAMPLE SITE - DBP008	µg/L	40.5	80	31.2	60	7/7/2023

<u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u>						
SAMPLE SITE - DBP001	µg/L	90.96	80	24.90	60	7/12/2023
SAMPLE SITE - DBP002	µg/L	46.30	80	31.90	60	7/12/2023
SAMPLE SITE - DBP003	µg/L	52.63	80	30.00	60	7/12/2023
SAMPLE SITE - DBP004	µg/L	33.55	80	30.20	60	7/12/2023

<u>CHLORITE</u>		1ST RES	AVG RES	MAX RES	DATE	MCL
FROM DISTRIBUTION SYSTEM(S)	mg/L	0.29	0.29	0.29	8/8/2023	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