

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 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	27.0	34.0	31.5	40.0	55.0	45.7	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.031	0.048	0.042	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	22.0	28.0	26.8	25.0	29.0	27.3	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.22	1.42	1.32	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.23	0.46	0.32	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.02	0.00	0.8
CONDUCTIVITY	µs/cm	78.7	84.9	81.7	105.2	139.0	118.4	N/A
DISSOLVED OXYGEN	mg/l	1.1	10.3	6.5	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.15	0.20	0.19	0.57	1.04	0.68	4.0/*2.0
HARDNESS (TOTAL)	mg/l	29.0	39.0	35.3	33.0	38.0	34.7	N/A
IRON	mg/l	0.03	0.10	0.06	0.00	0.01	0.01	*0.3
MANGANESE	mg/l	0.010	0.216	0.070	0.002	0.006	0.004	*0.05
pH	VALUE	6.82	7.92	7.51	8.03	8.41	8.34	*6.5-8.5
TEMPERATURE	°C	4.1	13.6	8.9	4.5	11.5	9.1	N/A
TRUE COLOR	APHA	5.0	17.0	9.3	0.0	1.0	0.3	*15.0
TURBIDITY	NTU	0.34	2.80	1.41	0.013	0.046	0.015	**<0.3 TT

<u>INORGANIC CONTAMINANTS ANALYSES (SGS) - (EFFLUENT ENTRY POINT AT SCFP)</u>			RESULTS	DATE	MCL
ANTIMONY	mg/l		<0.00040	11/9/2022	0.006
ARSENIC	mg/l		<0.0020	11/9/2022	0.010
BARIUM	mg/l		0.015	11/9/2022	2.000
BERYLLIUM	mg/l		<0.00030	11/9/2022	0.004
CADMIUM	mg/l		<0.00015	11/9/2022	0.005
CHROMIUM	mg/l		<0.0020	11/9/2022	0.1
FLUORIDE	mg/l		0.58	11/9/2022	4.0
MERCURY	mg/l		<0.00010	11/9/2022	0.002
NICKEL	mg/l		<0.0020	11/9/2022	N/A
SELENIUM	mg/l		<0.00070	11/9/2022	0.050
SODIUM	mg/l		16.0	11/9/2022	N/A
THALLIUM	mg/l		<0.00020	11/9/2022	0.002

<u>NITRATE AND/OR NITRITE AS NITROGEN (SGS) - (EFFLUENT ENTRY POINT AT SCFP)</u>			RESULTS	DATE	MCL
NITRATE	mg/l		0.130	11/9/2022	10.000
NITRITE	mg/l		ND	11/9/2022	1.000

<u>TOTAL ORGANIC CARBON (SGS) - (SCFP INFLUENT AND CF EFFLUENT)</u>			INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L		2.6	1.6	1.10	10/12/2022	RAA - ≥1.0
			2.7	1.7	1.06	11/9/2022	RAA - ≥1.0
			2.7	1.7	1.06	12/7/2022	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l		35.0			10/12/2022	N/A
			29.5			11/9/2022	N/A
			30.5			12/7/2022	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	11/9/2022	200
1,1,2-TRICHLOROETHANE	µg/L		ND	11/9/2022	5
1,1-DICHLOROETHYLENE	µg/L		ND	11/9/2022	7
1,2,4-TRICHLOROBENZENE	µg/L		ND	11/9/2022	70
1,2-DICHLOROETHANE	µg/L		ND	11/9/2022	5
1,2-DICHLOROPROPANE	µg/L		ND	11/9/2022	5
BENZENE	µg/L		ND	11/9/2022	5
CARBON TETRACHLORIDE	µg/L		ND	11/9/2022	5
CHLOROBENZENE	µg/L		ND	11/9/2022	100
cis-1,2-DICHLOROETHYLENE	µg/L		ND	11/9/2022	70
DICHLOROMETHANE	µg/L		ND	11/9/2022	5
ETHYLBENZENE	µg/L		ND	11/9/2022	700
o-DICHLOROBENZENE	µg/L		ND	11/9/2022	600
para-DICHLOROBENZENE	µg/L		ND	11/9/2022	75
STYRENE	µg/L		ND	11/9/2022	100
TETRACHLOROETHYLENE	µg/L		ND	11/9/2022	5
TOLUENE	µg/L		ND	11/9/2022	1000
trans-1,2-DICHLOROETHYLENE	µg/L		ND	11/9/2022	100
TRICHLOROETHYLENE	µg/L		ND	11/9/2022	5
VINYL CHLORIDE	µg/L		ND	11/9/2022	2
XYLENES (total)	µg/L		ND	11/9/2022	10000

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

			RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L		ND	11/9/2022	0.2
2,4-D	µg/L		ND	11/9/2022	70
2,4,5-TP	µg/L		ND	11/9/2022	50
ALACHLOR (LASSO)	µg/L		ND	11/9/2022	2
ALDICARB	µg/L		ND	11/9/2022	N/A
ALDICARB SULFONE	µg/L		ND	11/9/2022	N/A
ALDICARB SULFOXIDE	µg/L		ND	11/9/2022	N/A
ATRAZINE	µg/L		ND	11/9/2022	3
BENZO(a)PYRENE	µg/L		ND	11/9/2022	0.2
CARBOFURAN	µg/L		ND	11/9/2022	40
CHLORDANE	µg/L		ND	11/9/2022	2
DALAPON	µg/L		ND	11/9/2022	200
DINOSEB	µg/L		ND	11/9/2022	7
DIQUAT	µg/L		ND	11/9/2022	20
DI(2-ethylhexyl)ADIPATE	µg/L		ND	11/9/2022	400
DI(2-ethylhexyl)PHTHALATE	µg/L		ND	11/9/2022	6
ENDOTHALL	µg/L		ND	12/7/2022	100
ENDRIN	µg/L		ND	11/9/2022	2
ETHYLENE DIBROMIDE	µg/L		ND	11/9/2022	0.05
HEPTACHLOR	µg/L		ND	11/9/2022	0.4
HEPTACHLOR EPOXIDE	µg/L		ND	11/9/2022	0.2

ORGANIC CHEMICAL ANALYSES - SOC's (SGS) (con't)			RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	11/9/2022	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	11/9/2022	50
LINDANE/BHC-GAMMA	µg/L		ND	11/9/2022	0.2
METHOXYCHLOR	µg/L		ND	11/9/2022	40
OXAMYL	µg/L		ND	11/9/2022	200
PENTACHLOROPHENOL	µg/L		ND	11/9/2022	1
PICLORAM	µg/L		ND	11/9/2022	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	11/9/2022	0.5
SIMAZINE	µg/L		ND	11/9/2022	4
TOXAPHENE	µg/L		ND	11/9/2022	3

DISTRIBUTION SYSTEMS SAMPLES

<u>CHLORINE (Districts Measure)</u>		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.58	1.28	0.91	Oct-22	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.33	1.38	0.82	Nov-22	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.44	1.30	0.89	Dec-22	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.32	1.34	0.82	Oct-22	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.27	1.11	0.68	Nov-22	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.33	1.23	0.80	Dec-22	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.28	1.07	0.78	Oct-22	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.25	0.98	0.74	Nov-22	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.21	1.15	0.81	Dec-22	4.0

<u>TOTAL COLIFORMS (MMS/WCL)</u>		TOTAL SAMPLES	# POSITIVE	# NEGATIVE	DATE	MCL **TT LEVEL 1 or 2
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Oct-22	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		25	0	20	Nov-22	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		25	0	20	Dec-22	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Oct-22	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Nov-22	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Dec-22	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Oct-22	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Nov-22	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Dec-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	48.1	80	27	60	10/10/2022
SAMPLE SITE - DBP002	µg/L	63.6	80	30.3	60	10/10/2022
SAMPLE SITE - DBP003	µg/L	29.1	80	21.9	60	10/10/2022
SAMPLE SITE - DBP004	µg/L	68.8	80	21.7	60	10/10/2022

<u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u>						
SAMPLE SITE - DBP001	µg/L	21.0	80	19.3	60	10/5/2022
SAMPLE SITE - DBP002	µg/L	40.5	80	18.5	60	10/5/2022
SAMPLE SITE - DBP003	µg/L	28.4	80	22.7	60	10/5/2022
SAMPLE SITE - DBP004	µg/L	25.4	80	19.1	60	10/5/2022
SAMPLE SITE - DBP005	µg/L	25.5	80	20.0	60	10/5/2022
SAMPLE SITE - DBP006	µg/L	24.2	80	19.3	60	10/5/2022
SAMPLE SITE - DBP007	µg/L	28.8	80	20.9	60	10/5/2022
SAMPLE SITE - DBP008	µg/L	29.1	80	23.2	60	10/5/2022

<u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u>						
SAMPLE SITE - DBP001	µg/L	56.54	80	19.90	60	10/12/2022
SAMPLE SITE - DBP002	µg/L	39.98	80	26.70	60	10/12/2022
SAMPLE SITE - DBP003	µg/L	44.14	80	26.30	60	10/12/2022
SAMPLE SITE - DBP004	µg/L	33.68	80	26.50	60	10/12/2022

<u>CHLORITE</u>		1ST RES	AVG RES	MAX RES	DATE	MCL
FROM DISTRIBUTION SYSTEM(S)	mg/L	0.30	0.31	0.30	10/11/2022	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	BDL = Below Detectable Limit
*SMCL = Secondary Maximum Contaminate Level - Recomendad	ND = Not Detected NT = Not Tested
**TT = Treatment Technique	N/A = Not applicable
SOC = Synthetic Organic Chemicals	VOC = Volatile Organic Chemicals
RAA = Running Annual Average	LRAA = Location Running Annual Average
ACTION LEVEL = Addition treatment required if exceeded	MRDL = Maximum Residual Disinfectant Level
< = Less Than	> = Greater 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	