

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 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	30.0	34.0	32.0	39.0	41.0	40.0	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.033	0.049	0.039	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	26.0	31.0	29.0	27.0	31.0	29.0	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.18	1.42	1.33	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.14	0.42	0.27	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.04	0.00	0.8
CONDUCTIVITY	µs/cm	82.6	84.7	83.7	103.0	108.9	106.8	N/A
DISSOLVED OXYGEN	mg/l	10.0	11.7	10.8	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.13	0.19	0.17	0.61	0.78	0.69	4.0/*2.0
HARDNESS (TOTAL)	mg/l	37.0	41.0	40.0	38.0	43.0	40.0	N/A
IRON	mg/l	0.02	0.03	0.03	0.00	0.01	0.01	*0.3
MANGANESE	mg/l	0.013	0.019	0.016	0.002	0.005	0.004	*0.05
pH	VALUE	7.57	7.90	7.78	8.20	8.73	8.35	*6.5-8.5
TEMPERATURE	°C	3.0	4.3	3.7	3.2	4.1	3.7	N/A
TRUE COLOR	APHA	3.0	9.0	6.7	0.0	0.0	0.0	*15.0
TURBIDITY	NTU	0.92	9.91	1.25	0.013	0.030	0.016	**<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 (SGS) - (SCFP INFLUENT AND CF EFFLUENT)			INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L		2.7	1.7	1.06	1/11/2023	RAA - ≥1.0
			2.6	1.6	1.10	2/7/2023	RAA - ≥1.0
			2.7	1.7	1.06	3/8/2023	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l		37.5			1/11/2023	N/A
			35.0			2/7/2023	N/A
			20.0			3/8/2023	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-DICHLOROBENZENE	µg/L		ND	1/11/2023	600
para-DICHLOROBENZENE	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) - (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	1/11/2023	70
2,4,5-TP	µg/L		ND	1/11/2023	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
CARBOFURAN	µg/L		ND	1/11/2023	40
CHLORDANE	µg/L		ND	1/11/2023	2
DALAPON	µg/L		ND	1/11/2023	200
DINOSEB	µg/L		ND	1/11/2023	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	1/11/2023	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

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

			RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	1/11/2023	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	1/11/2023	50
LINDANE/BHC-GAMMA	µg/L		ND	1/11/2023	0.2
METHOXYCHLOR	µg/L		ND	1/11/2023	40
OXAMYL	µg/L		ND	1/11/2023	200
PENTACHLOROPHENOL	µg/L		ND	1/11/2023	1
PICLORAM	µg/L		ND	1/11/2023	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

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.52	1.30	0.92	Jan-23	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.46	1.16	0.92	Feb-23	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	25	0.52	1.20	0.89	Mar-23	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.37	1.31	0.81	Jan-23	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	70	0.41	1.28	0.79	Feb-23	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	70	0.42	1.23	0.74	Mar-23	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.26	1.14	0.87	Jan-23	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.48	1.12	0.88	Feb-23	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.47	1.18	0.93	Mar-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	Jan-23	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		25	0	25	Feb-23	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		25	0	25	Mar-23	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Jan-23	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		70	0	70	Feb-23	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		70	0	70	Mar-23	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Jan-23	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Feb-23	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Mar-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	37.3	80	21.6	60	1/3/2023
SAMPLE SITE - DBP002	µg/L	62.3	80	26.2	60	1/3/2023
SAMPLE SITE - DBP003	µg/L	30.8	80	21.0	60	1/3/2023
SAMPLE SITE - DBP004	µg/L	63.0	80	26.1	60	1/3/2023

<u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u>						
SAMPLE SITE - DBP001	µg/L	32.9	80	23.3	60	1/11/2023
SAMPLE SITE - DBP002	µg/L	37.4	80	22.4	60	1/11/2023
SAMPLE SITE - DBP003	µg/L	32.4	80	23.2	60	1/11/2023
SAMPLE SITE - DBP004	µg/L	31.3	80	23.8	60	1/11/2023
SAMPLE SITE - DBP005	µg/L	26.9	80	23.2	60	1/11/2023
SAMPLE SITE - DBP006	µg/L	26.9	80	19.0	60	1/11/2023
SAMPLE SITE - DBP007	µg/L	33.1	80	24.3	60	1/11/2023
SAMPLE SITE - DBP008	µg/L	34.9	80	26.9	60	1/11/2023

<u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u>						
SAMPLE SITE - DBP001	µg/L	53.20	80	24.30	60	1/16/2023
SAMPLE SITE - DBP002	µg/L	30.20	80	27.50	60	1/16/2023
SAMPLE SITE - DBP003	µg/L	29.60	80	25.50	60	1/16/2023
SAMPLE SITE - DBP004	µg/L	25.00	80	24.30	60	1/16/2023

<u>CHLORITE</u>		1ST RES	AVG RES	MAX RES	DATE	MCL
FROM DISTRIBUTION SYSTEM(S)	mg/L	0.31	0.30	0.30	1/10/2023	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	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	