

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 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	20.0	33.0	27.8	38.0	47.0	43.5	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.016	0.055	0.031	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	22.0	29.0	26.0	23.0	27.0	25.5	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.28	1.30	1.29	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.23	0.56	0.40	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	<0.02	0.02	<0.02	0.8
CONDUCTIVITY	µs/cm	71.6	76.3	73.9	106.2	115.1	110.3	N/A
DISSOLVED OXYGEN	mg/l	5.4	14.2	9.0	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.16	0.21	0.19	0.12	0.77	0.34	4.0/*2.0
HARDNESS (TOTAL)	mg/l	28.0	45.0	35.7	30.0	37.0	33.7	N/A
IRON	mg/l	0.05	0.08	0.07	0.01	0.01	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.80	-1.90	-1.85	-0.74	-0.99	-0.89	N/A
MANGANESE	mg/l	0.036	0.053	0.041	0.001	0.011	0.005	*0.05
pH	VALUE	6.94	8.16	7.21	8.12	8.18	8.16	*6.5-8.5
TEMPERATURE	°C	8.9	17.8	11.9	7.5	10.3	9.0	N/A
TRUE COLOR	APHA	7.0	12.0	9.9	0.0	1.0	0.6	*15.0
TURBIDITY	NTU	1.17	38.40	2.39	0.013	0.034	0.015	**<0.3 TT

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

		RESULTS	DATE	MCL
ANTIMONY	mg/l	0.00094	8/4/2021	0.006
ARSENIC	mg/l	ND	8/4/2021	0.010
BARIUM	mg/l	0.015	8/4/2021	2.000
BERYLLIUM	mg/l	ND	8/4/2021	0.004
CADMIUM	mg/l	ND	8/4/2021	0.005
CHROMIUM	mg/l	ND	8/4/2021	0.1
FLUORIDE	mg/l	0.12	8/4/2021	4.0
MERCURY	mg/l	ND	8/4/2021	0.002
NICKEL	mg/l	ND	8/4/2021	N/A
SELENIUM	mg/l	ND	8/4/2021	0.050
SODIUM	mg/l	11.1	8/4/2021	N/A
THALLIUM	mg/l	ND	8/4/2021	0.002

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

		RESULTS	DATE	MCL
NITRATE	mg/l	0.10	8/4/2021	10.000
NITRITE	mg/l	ND	8/4/2021	1.000

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

		INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L	2.7	1.8	1.00	7/7/2021	RAA - ≥1.0
		3.3	1.9	1.21	8/4/2021	RAA - ≥1.0
		3.3	1.8	1.30	9/8/2021	RAA - ≥1.0
		INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l	23.0			7/7/2021	N/A
		30.0			8/4/2021	N/A
		30.0			9/8/2021	N/A

RADIONUCLIDE ANALYSES (UL) - (EFFLUENT ENTRY POINT AT SCFP)

			RESULTS	DATE	MCL
GROSS ALPHA	pCi/L		1.7	8/24/2011	15
URANIUM	ppb		0.01	8/24/2011	30
RADIUM 226 + 228	pCi/L		0.76	8/24/2011	5
GROSS BETA	pCi/L		2.1	8/24/2011	50

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

			RESULTS	DATE	MCL
1,1,1-TRICHLOROETHANE	µg/L		ND	8/4/2021	200
1,1,2-TRICHLOROETHANE	µg/L		ND	8/4/2021	5
1,1-DICHLOROETHYLENE	µg/L		ND	8/4/2021	7
1,2,4-TRICHLOROBENZENE	µg/L		ND	8/4/2021	70
1,2-DICHLOROETHANE	µg/L		ND	8/4/2021	5
1,2-DICHLOROPROPANE	µg/L		ND	8/4/2021	5
BENZENE	µg/L		ND	8/4/2021	5
CARBON TETRACHLORIDE	µg/L		ND	8/4/2021	5
CHLOROBENZENE	µg/L		ND	8/4/2021	100
cis-1,2-DICHLOROETHYLENE	µg/L		ND	8/4/2021	70
DICHLOROMETHANE	µg/L		ND	8/4/2021	5
ETHYLBENZENE	µg/L		ND	8/4/2021	700
o-DICHLOROBENZENE	µg/L		ND	8/4/2021	600
para-DICHLOROBENZENE	µg/L		ND	8/4/2021	75
STYRENE	µg/L		ND	8/4/2021	100
TETRACHLOROETHYLENE	µg/L		ND	8/4/2021	5
TOLUENE	µg/L		ND	8/4/2021	1000
trans-1,2-DICHLOROETHYLENE	µg/L		ND	8/4/2021	100
TRICHLOROETHYLENE	µg/L		ND	8/4/2021	5
VINYL CHLORIDE	µg/L		ND	8/4/2021	2
XYLENES (total)	µg/L		ND	8/4/2021	10000

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

			RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L		ND	9/8/2021	0.2
2,4-D	µg/L		ND	9/8/2021	70
2,4,5-TP	µg/L		ND	9/8/2021	50
ALACHLOR (LASSO)	µg/L		ND	9/8/2021	2
ALDICARB	µg/L		ND	9/8/2021	N/A
ALDICARB SULFONE	µg/L		ND	9/8/2021	N/A
ALDICARB SULFOXIDE	µg/L		ND	9/8/2021	N/A
ATRAZINE	µg/L		ND	9/8/2021	3
BENZO(a)PYRENE	µg/L		ND	9/8/2021	0.2
CARBOFURAN	µg/L		ND	9/8/2021	40
CHLORDANE	µg/L		ND	9/8/2021	2
DALAPON	µg/L		ND	9/8/2021	200
DINOSEB	µg/L		ND	9/8/2021	7
DIQUAT	µg/L		ND	9/8/2021	20
DI(2-ethylhexyl)ADIPATE	µg/L		ND	9/8/2021	400
DI(2-ethylhexyl)PHTHALATE	µg/L		ND	9/8/2021	6
ENDOTHALL	µg/L		ND	9/8/2021	100
ENDRIN	µg/L		ND	9/8/2021	2
ETHYLENE DIBROMIDE	µg/L		ND	9/8/2021	0.05
HEPTACHLOR	µg/L		ND	9/8/2021	0.4
HEPTACHLOR EPOXIDE	µg/L		ND	9/8/2021	0.2

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

			RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	9/8/2021	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	9/8/2021	50
LINDANE/BHC-GAMMA	µg/L		ND	9/8/2021	0.2
METHOXYCHLOR	µg/L		ND	9/8/2021	40
OXAMYL	µg/L		ND	9/8/2021	200
PENTACHLOROPHENOL	µg/L		ND	9/8/2021	1
PICLORAM	µg/L		ND	9/8/2021	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	9/8/2021	0.5
SIMAZINE	µg/L		ND	9/8/2021	4
TOXAPHENE	µg/L		ND	9/8/2021	3

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.43	1.39	0.95	Jul-21	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.69	1.15	0.95	Aug-21	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.65	1.15	0.94	Sep-21	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.56	1.26	0.87	Jul-21	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.41	1.13	0.80	Aug-21	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	60	0.33	1.27	0.82	Sep-21	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.40	1.10	0.77	Jul-21	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.32	1.05	0.75	Aug-21	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	18	0.25	1.08	0.76	Sep-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	Jul-21	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Aug-21	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Sep-21	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Jul-21	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Aug-21	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		60	0	60	Sep-21	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Jul-21	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Aug-21	NO/NO
NORTH WELD COUNTY WATER DISTRICT		18	0	18	Sep-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	23.5	80	19.2	60	7/21/2021
SAMPLE SITE - DBP002	µg/L	34.7	80	22.9	60	7/21/2021
SAMPLE SITE - DBP003	µg/L	17.4	80	15.1	60	7/21/2021
SAMPLE SITE - DBP004	µg/L	40.8	80	24.7	60	7/21/2021

<u>FORT COLLINS/LOVELAND WATER DISTRICT (CA)</u>						
SAMPLE SITE - DBP001	µg/L	14.4	80	15.0	60	7/8/2021
SAMPLE SITE - DBP002	µg/L	20.0	80	15.2	60	7/8/2021
SAMPLE SITE - DBP003	µg/L	18.9	80	18.1	60	7/8/2021
SAMPLE SITE - DBP004	µg/L	19.6	80	16.9	60	7/8/2021
SAMPLE SITE - DBP005	µg/L	18.5	80	16.7	60	7/8/2021
SAMPLE SITE - DBP006	µg/L	19.1	80	16.6	60	7/8/2021
SAMPLE SITE - DBP007	µg/L	21.1	80	17.8	60	7/8/2021
SAMPLE SITE - DBP008	µg/L	20.2	80	18.5	60	7/8/2021

<u>NORTH WELD COUNTY WATER DISTRICT (WCL)</u>						
SAMPLE SITE - DBP001	µg/L	30.55	80	25.90	60	7/14/2021
SAMPLE SITE - DBP002	µg/L	23.96	80	28.70	60	7/14/2021
SAMPLE SITE - DBP003	µg/L	26.98	80	28.10	60	7/14/2021
SAMPLE SITE - DBP004	µg/L	20.38	80	24.90	60	7/14/2021

<u>CHLORITE</u>		1ST RES	AVG RES	MAX RES	DATE	MCL
FROM DISTRIBUTION SYSTEM(S)	mg/L	0.44	0.43	0.43	7/6/2021	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>		30 SAMPLES COLLECTED		
LEAD	mg/L	0.002	Jun-20	0.015
COPPER	mg/L	0.211	Jun-20	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	