

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 2020

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	26.0	44.0	30.7	36.0	50.0	40.1	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.020	0.055	0.043	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	21.0	33.0	26.1	23.0	31.0	26.7	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.01	1.45	1.20	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.33	0.67	0.49	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	<0.02	<0.02	<0.02	0.8
CONDUCTIVITY	µs/cm	68.3	89.6	73.0	95.6	123.4	104.8	N/A
DISSOLVED OXYGEN	mg/l	0.8	12.5	7.6	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.14	0.22	0.18	0.62	0.82	0.72	4.0/*2.0
HARDNESS (TOTAL)	mg/l	27.0	37.0	33.0	27.0	39.0	34.1	N/A
IRON	mg/l	0.03	0.18	0.07	0.01	0.01	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.30	-2.50	-1.70	-0.91	-1.32	-1.06	N/A
MANGANESE	mg/l	0.01	0.23	0.05	0.001	0.017	0.004	*0.05
pH	VALUE	6.79	7.98	7.54	7.77	8.36	8.15	*6.5-8.5
TEMPERATURE	°C	1.0	14.0	7.1	1.0	11.5	7.2	N/A
TOTAL DISSOLVED SOLIDS	mg/l	34.1	44.8	36.6	48.0	61.7	52.6	*500
TRUE COLOR	APHA	6.0	14.0	9.2	0.0	1.0	0.0	*15.0
TURBIDITY	NTU	0.16	4.12	1.63	0.011	0.065	0.013	**<0.3 TT

INORGANIC CONTAMINANTS ANALYSES (SGS) - (EFFLUENT ENTRY POINT AT SCFP)			RESULTS	DATE	MCL
ANTIMONY	mg/l		ND	5/6/2020	0.006
ARSENIC	mg/l		ND	5/6/2020	0.010
BARIUM	mg/l		0.013	5/6/2020	2.000
BERYLLIUM	mg/l		ND	5/6/2020	0.004
CADMIUM	mg/l		ND	5/6/2020	0.005
CHROMIUM	mg/l		ND	5/6/2020	0.1
FLUORIDE	mg/l		0.66	5/6/2020	4.0
MERCURY	mg/l		ND	5/6/2020	0.002
NICKEL	mg/l		ND	5/6/2020	N/A
SELENIUM	mg/l		ND	5/6/2020	0.050
SODIUM	mg/l		12.0	5/6/2020	N/A
THALLIUM	mg/l		ND	5/6/2020	0.002

NITRATE AND/OR NITRITE AS NITROGEN (SGS) - (EFFLUENT ENTRY POINT AT SCFP)			RESULTS	DATE	MCL
NITRATE	mg/l		<0.010	5/6/2020	10.000
NITRITE	mg/l		<0.0040	5/6/2020	1.000

TOTAL ORGANIC CARBON (SGS) - (SCFP INFLUENT AND CF EFFLUENT)			INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L		3.0	1.7	1.24	10/7/2020	RAA - ≥1.0
			2.0	0.97	1.47	11/4/2020	RAA - ≥1.0
			3.0	1.8	1.14	12/2/2020	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l		21.5			10/7/2020	N/A
			27.5			11/4/2020	N/A
			25.0			12/2/2020	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	5/6/2020	200
1,1,2-TRICHLOROETHANE	µg/L		ND	5/6/2020	5
1,1-DICHLOROETHYLENE	µg/L		ND	5/6/2020	7
1,2,4-TRICHLOROBENZENE	µg/L		ND	5/6/2020	70
1,2-DICHLOROETHANE	µg/L		ND	5/6/2020	5
1,2-DICHLOROPROPANE	µg/L		ND	5/6/2020	5
BENZENE	µg/L		ND	5/6/2020	5
CARBON TETRACHLORIDE	µg/L		ND	5/6/2020	5
CHLOROBENZENE	µg/L		ND	5/6/2020	100
cis-1,2-DICHLOROETHYLENE	µg/L		ND	5/6/2020	70
DICHLOROMETHANE	µg/L		ND	5/6/2020	5
ETHYLBENZENE	µg/L		ND	5/6/2020	700
o-DICHLOROBENZENE	µg/L		ND	5/6/2020	600
para-DICHLOROBENZENE	µg/L		ND	5/6/2020	75
STYRENE	µg/L		ND	5/6/2020	100
TETRACHLOROETHYLENE	µg/L		ND	5/6/2020	5
TOLUENE	µg/L		ND	5/6/2020	1000
trans-1,2-DICHLOROETHYLENE	µg/L		ND	5/6/2020	100
TRICHLOROETHYLENE	µg/L		ND	5/6/2020	5
VINYL CHLORIDE	µg/L		ND	5/6/2020	2
XYLENES (total)	µg/L		ND	5/6/2020	10000

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

		RESULTS	DATE	RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L	ND	11/7/2018	NT	2/6/2019	0.2
2,4-D	µg/L	ND	11/7/2018	NT	2/6/2019	70
2,4,5-TP	µg/L	ND	11/7/2018	NT	2/6/2019	50
ALACHLOR (LASSO)	µg/L	ND	11/7/2018	NT	2/6/2019	2
ALDICARB	µg/L	ND	11/7/2018	NT	2/6/2019	N/A
ALDICARB SULFONE	µg/L	ND	11/7/2018	NT	2/6/2019	N/A
ALDICARB SULFOXIDE	µg/L	ND	11/7/2018	NT	2/6/2019	N/A
ATRAZINE	µg/L	ND	11/7/2018	NT	2/6/2019	3
BENZO(a)PYRENE	µg/L	NT	11/7/2018	NT	2/6/2019	0.2
CARBOFURAN	µg/L	ND	11/7/2018	NT	2/6/2019	40
CHLORDANE	µg/L	ND	11/7/2018	NT	2/6/2019	2
DALAPON	µg/L	ND	11/7/2018	ND	2/6/2019	200
DINOSEB	µg/L	ND	11/7/2018	NT	2/6/2019	7
DIQUAT	µg/L	ND	11/7/2018	NT	2/6/2019	20
DI(2-ethylhexyl)ADIPATE	µg/L	ND	11/7/2018	NT	2/6/2019	400
DI(2-ethylhexyl)PHTHALATE	µg/L	ND	11/7/2018	ND	5/8/2019	6
ENDOTHALL	µg/L	ND	11/7/2018	NT	2/6/2019	100
ENDRIN	µg/L	ND	11/7/2018	NT	2/6/2019	2
ETHYLENE DIBROMIDE	µg/L	ND	11/7/2018	NT	2/6/2019	0.05
HEPTACHLOR	µg/L	ND	11/7/2018	NT	2/6/2019	0.4
HEPTACHLOR EPOXIDE	µg/L	ND	11/7/2018	NT	2/6/2019	0.2

ORGANIC CHEMICAL ANALYSES - SOC's (SGS) (con't)			RESULTS	DATE	RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	11/7/2018	NT	2/6/2019	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	11/7/2018	NT	2/6/2019	50
LINDANE/BHC-GAMMA	µg/L		ND	11/7/2018	ND	5/8/2019	0.2
METHOXYCHLOR	µg/L		ND	11/7/2018	NT	2/6/2019	40
OXAMYL	µg/L		ND	11/7/2018	NT	2/6/2019	200
PENTACHLOROPHENOL	µg/L		ND	11/7/2018	NT	2/6/2019	1
PICLORAM	µg/L		ND	11/7/2018	NT	2/6/2019	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	11/7/2018	NT	2/6/2019	0.5
SIMAZINE	µg/L		ND	11/7/2018	NT	2/6/2019	4
TOXAPHENE	µg/L		ND	11/7/2018	NT	2/6/2019	3

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

		RESULTS	DATE	RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L	ND	2/12/2020	ND	5/6/2020	0.2
2,4-D	µg/L	ND	2/12/2020	ND	5/6/2020	70
2,4,5-TP	µg/L	ND	2/12/2020	ND	5/6/2020	50
ALACHLOR (LASSO)	µg/L	ND	2/12/2020	ND	5/6/2020	2
ALDICARB	µg/L	ND	2/12/2020	ND	5/6/2020	N/A
ALDICARB SULFONE	µg/L	ND	2/12/2020	ND	5/6/2020	N/A
ALDICARB SULFOXIDE	µg/L	ND	2/12/2020	ND	5/6/2020	N/A
ATRAZINE	µg/L	ND	2/12/2020	ND	5/6/2020	3
BENZO(a)PYRENE	µg/L	ND	2/12/2020	ND	5/6/2020	0.2
CARBOFURAN	µg/L	ND	2/12/2020	ND	5/6/2020	40
CHLORDANE	µg/L	ND	2/12/2020	ND	5/6/2020	2
DALAPON	µg/L	ND	2/12/2020	ND	5/6/2020	200
DINOSEB	µg/L	ND	2/12/2020	ND	5/6/2020	7
DIQUAT	µg/L	ND	2/12/2020	ND	5/6/2020	20
DI(2-ethylhexyl)ADIPATE	µg/L	ND	2/12/2020	ND	5/6/2020	400
DI(2-ethylhexyl)PHTHALATE	µg/L	ND	2/12/2020	ND	5/6/2020	6
ENDOTHALL	µg/L	ND	2/12/2020	ND	5/6/2020	100
ENDRIN	µg/L	ND	2/12/2020	ND	5/6/2020	2
ETHYLENE DIBROMIDE	µg/L	ND	2/12/2020	ND	5/6/2020	0.05
HEPTACHLOR	µg/L	ND	2/12/2020	ND	5/6/2020	0.4
HEPTACHLOR EPOXIDE	µg/L	ND	2/12/2020	ND	5/6/2020	0.2
HEXACHLOROBENZENE	µg/L	ND	2/12/2020	ND	5/6/2020	1
HEXACHLOROCYCLOPENTADIENE	µg/L	ND	2/12/2020	ND	5/6/2020	50
LINDANE/BHC-GAMMA	µg/L	ND	2/12/2020	ND	5/6/2020	0.2
METHOXYCHLOR	µg/L	ND	2/12/2020	ND	5/6/2020	40
OXAMYL	µg/L	ND	2/12/2020	ND	5/6/2020	200
PENTACHLOROPHENOL	µg/L	ND	2/12/2020	ND	5/6/2020	1
PICLORAM	µg/L	ND	2/12/2020	ND	5/6/2020	500
POLYCHLORINATED BIPHENYLS	µg/L	ND	2/12/2020	ND	5/6/2020	0.5
SIMAZINE	µg/L	ND	2/12/2020	ND	5/6/2020	4
TOXAPHENE	µg/L	ND	2/12/2020	ND	5/6/2020	3

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.26	1.04	0.57	Oct-20	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.33	1.02	0.70	Nov-20	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.29	1.03	0.70	Dec-20	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT							
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.35	1.30	0.74	Oct-20	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	50	0.29	1.30	0.69	Nov-20	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	50	0.26	1.21	0.70	Dec-20	4.0
NORTH WELD COUNTY WATER DISTRICT							
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.34	0.97	0.73	Oct-20	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.40	1.12	0.83	Nov-20	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.30	1.06	0.76	Dec-20	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	Oct-20	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Nov-20	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Dec-20	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT						
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Oct-20	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		50	0	50	Nov-20	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		50	0	50	Dec-20	NO/NO
NORTH WELD COUNTY WATER DISTRICT						
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Oct-20	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Nov-20	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Dec-20	NO/NO

TOTAL TRIHALOMETHANES AND HALOACETIC ACIDS

		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
EAST LARIMER COUNTY WATER DISTRICT (SGS)						
SAMPLE SITE - DBP001	µg/L	63.5	80	22.3	60	10/13/2020
SAMPLE SITE - DBP002	µg/L	68.8	80	19.1	60	10/13/2020
SAMPLE SITE - DBP003	µg/L	32.0	80	22.6	60	10/13/2020
SAMPLE SITE - DBP004	µg/L	70.4	80	17.8	60	10/13/2020
FORT COLLINS/LOVELAND WATER DISTRICT (CA)						
SAMPLE SITE - DBP001	µg/L	33.6	80	22.5	60	10/9/2020
SAMPLE SITE - DBP002	µg/L	30.3	80	18.6	60	10/9/2020
SAMPLE SITE - DBP003	µg/L	27.0	80	20.4	60	10/9/2020
SAMPLE SITE - DBP004	µg/L	27.6	80	17.3	60	10/9/2020

Total Trihalomethanes and Haloacetic Acids (cont)

		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
NORTH WELD COUNTY WATER DISTRICT (WCL)						
SAMPLE SITE - DBP001	µg/L	44.2	80	17.3	60	10/13/2020
SAMPLE SITE - DBP002	µg/L	32.3	80	23.7	60	10/13/2020
SAMPLE SITE - DBP003	µg/L	40.1	80	24.2	60	10/13/2020
SAMPLE SITE - DBP004	µg/L	31.9	80	23.2	60	10/13/2020

CHLORITE

		1ST RES	AVG RES	MAX RES	DATE	MCL
EAST LARIMER COUNTY WD (FCL)	mg/L	0.44	0.43	0.38	10/13/2020	1.0
FORT COLLINS/LOVELAND WD (CA)	mg/L	0.52	0.43	0.44	10/9/2020	1.0
NORTH WELD COUNTY WD (WCL)	mg/L	0.64	0.60	0.55	11/10/2020	1.0

LEAD AND COPPER

EAST LARIMER COUNTY WATER DISTRICT (AL)

		90TH PERCENTILE mg/L	DATE	90th% ACTION LEVEL mg/L
		30 SAMPLES COLLECTED		
LEAD	mg/L	0.0032	Jun-Jul-2020	0.015
COPPER	mg/L	0.22	Jun-Jul-2020	1.3

FORT COLLINS LOVELAND WATER DISTRICT (CA)

		30 SAMPLES COLLECTED	DATE	90th% ACTION LEVEL mg/L
LEAD	mg/L	0.002	Jun-20	0.015
COPPER	mg/L	0.211	Jun-20	1.3

NORTH WELD COUNTY WATER DISTRICT (WCL)

		30 SAMPLES COLLECTED	DATE	90th% ACTION LEVEL mg/L
LEAD	mg/L	0.0024	Jul-20	0.015
COPPER	mg/L	<0.2	Jul-20	1.3

MCL = Maximum Contaminate Level - Enforcable

*SMCL = Secondary Maximum Contaminate Level - Recomendend

**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