

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 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	15.0	30.0	22.6	34.0	50.0	39.9	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.041	0.057	0.049	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	12.0	27.0	19.3	19.0	23.0	21.4	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.04	1.33	1.15	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.35	0.65	0.46	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	<0.02	<0.02	<0.02	0.8
CONDUCTIVITY	µs/cm	34.4	67.9	57.6	93.7	122.7	104.1	N/A
DISSOLVED OXYGEN	mg/l	2.1	10.1	6.7	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.11	0.18	0.16	0.63	0.80	0.73	4.0/*2.0
HARDNESS (TOTAL)	mg/l	15.0	35.0	25.2	25.0	31.0	26.9	N/A
IRON	mg/l	0.05	0.15	0.09	0.01	0.02	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.60	-2.50	-2.10	-1.00	-1.28	-1.07	N/A
MANGANESE	mg/l	0.00	0.21	0.06	0.002	0.010	0.005	*0.05
pH	VALUE	6.84	7.86	7.33	7.88	8.35	8.14	*6.5-8.5
TEMPERATURE	°C	6.9	19.8	12.3	7.9	12.3	10.6	N/A
TOTAL DISSOLVED SOLIDS	mg/l	17.2	34.0	28.8	46.8	61.3	52.1	*500
TRUE COLOR	APHA	7.0	22.0	13.3	0.0	4.0	1.0	*15.0
TURBIDITY	NTU	0.32	3.44	1.64	0.011	0.052	0.015	**<0.3 TT

INORGANIC CONTAMINANTS ANALYSES (AL) - (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 (AL) - (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 (AL) - (SCFP INFLUENT AND CF EFFLUENT)

		INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L	3.1	1.6	1.38	7/1/2020	RAA - ≥1.0
		2.8	1.5	1.33	8/5/2020	RAA - ≥1.0
		2.8	1.4	1.43	9/2/2020	RAA - ≥1.0
		INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l	21.3			7/1/2020	N/A
		21.8			8/5/2020	N/A
		25.0			9/2/2020	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 (AL) - (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 (AL) - (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 (AL) (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 (AL) - (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	0.65	1.08	0.86	Jul-20	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.57	1.16	0.86	Aug-20	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.48	0.97	0.76	Sep-20	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT							
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.40	1.25	0.81	Jul-20	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.45	1.15	0.77	Aug-20	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.35	1.25	0.79	Sep-20	4.0
NORTH WELD COUNTY WATER DISTRICT							
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.68	1.01	0.85	Jul-20	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.51	0.93	0.81	Aug-20	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.30	0.94	0.74	Sep-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	Jul-20	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Aug-20	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Sep-20	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT						
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Jul-20	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Aug-20	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Sep-20	NO/NO
NORTH WELD COUNTY WATER DISTRICT						
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Jul-20	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Aug-20	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Sep-20	NO/NO

TOTAL TRIHALOMETHANES AND HALOACETIC ACIDS

		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
EAST LARIMER COUNTY WATER DISTRICT (AL)						
SAMPLE SITE - DBP001	µg/L	21.7	80	21.3	60	7/28/2020
SAMPLE SITE - DBP002	µg/L	37.1	80	30.4	60	7/28/2020
SAMPLE SITE - DBP003	µg/L	18.6	80	19.2	60	7/28/2020
SAMPLE SITE - DBP004	µg/L	37.7	80	30.0	60	7/28/2020
FORT COLLINS/LOVELAND WATER DISTRICT (CA)						
SAMPLE SITE - DBP001	µg/L	16.6	80	15.8	60	7/8/2020
SAMPLE SITE - DBP002	µg/L	23.3	80	19.6	60	7/8/2020
SAMPLE SITE - DBP003	µg/L	20.9	80	17.0	60	7/8/2020
SAMPLE SITE - DBP004	µg/L	25.1	80	19.5	60	7/8/2020

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	34.3	80	20.4	60	7/13/2020
SAMPLE SITE - DBP002	µg/L	28.1	80	24.4	60	7/13/2020
SAMPLE SITE - DBP003	µg/L	30.0	80	18.5	60	7/13/2020
SAMPLE SITE - DBP004	µg/L	12.4	80	17.9	60	7/13/2020

CHLORITE

		1ST RES	AVG RES	MAX RES	DATE	MCL
EAST LARIMER COUNTY WD (FCL)	mg/L	0.40	0.40	0.39	7/9/2020	1.0
FORT COLLINS/LOVELAND WD (EA)	mg/L	0.41	0.41	0.34	7/8/2020	1.0
NORTH WELD COUNTY WD (WCL)	mg/L	0.57	0.57	0.54	8/11/2020	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 (AL) = Accutest 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