

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 2019

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	36.0	24.7	25.0	63.0	34.8	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.029	0.065	0.042	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	18.0	27.0	22.9	15.0	30.0	21.3	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.12	1.37	1.25	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.30	0.64	0.45	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	<0.02	<0.02	<0.02	0.8
CONDUCTIVITY	µs/cm	58.9	71.2	64.4	76.2	108.3	90.9	N/A
DISSOLVED OXYGEN	mg/l	2.1	10.7	7.8	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.16	0.21	0.18	0.58	0.88	0.71	4.0/*2.0
HARDNESS (TOTAL)	mg/l	19.0	35.0	27.5	24.0	34.0	28.7	N/A
IRON	mg/l	0.03	0.24	0.09	0.01	0.02	0.02	*0.3
LANGLIER INDEX	S.I.#	-1.60	-2.40	-1.98	-0.97	-1.36	-1.19	N/A
MANGANESE	mg/l	0.00	0.26	0.07	0.002	0.006	0.004	*0.05
pH	VALUE	6.87	8.08	7.48	8.02	8.40	8.19	*6.5-8.5
TEMPERATURE	°C	3.1	13.1	7.7	4.6	11.1	7.8	N/A
TOTAL DISSOLVED SOLIDS	mg/l	28.7	35.4	32.1	38.3	54.6	45.7	*500
TRUE COLOR	APHA	5.0	23.0	10.7	0.0	2.0	0.5	*15.0
TURBIDITY	NTU	0.21	2.03	1.43	0.011	0.085	0.015	**<0.3 TT

INORGANIC CONTAMINANTS ANALYSES (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
ANTIMONY	mg/l		ND	8/14/2019	0.006
ARSENIC	mg/l		ND	8/14/2019	0.010
BARIUM	mg/l		0.0122	8/14/2019	2.000
BERYLLIUM	mg/l		ND	8/14/2019	0.004
CADMIUM	mg/l		ND	8/14/2019	0.005
CHROMIUM	mg/l		ND	8/14/2019	0.1
FLUORIDE	mg/l		0.62	8/14/2019	4.0
MERCURY	mg/l		ND	8/14/2019	0.002
NICKEL	mg/l		ND	8/14/2019	N/A
SELENIUM	mg/l		ND	8/14/2019	0.050
SODIUM	mg/l		11.4	8/14/2019	N/A
THALLIUM	mg/l		ND	8/14/2019	0.002

NITRATE AND/OR NITRITE AS NITROGEN (AL) - (ENTRY INTO DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
NITRATE	mg/l		0.068	8/14/2019	10.000
NITRITE	mg/l		<0.04	8/14/2019	1.000

TOTAL ORGANIC CARBON (AL/FCL) - (SCFP INFLUENT AND EFFLUENT)			INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L		2.33	1.37	1.18	10/9/2019	RAA - ≥1.0
			3.30	2.05	1.08	11/6/2019	RAA - ≥1.0
			3.2	1.9	1.16	12/18/2019	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l		26.6			10/9/2019	N/A
			24.0			11/6/2019	N/A
			23.6			12/18/2019	N/A

RADIONUCLIDE ANALYSES (UL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)

			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 (FCL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)

			RESULTS	DATE	MCL
1,1,1-TRICHLOROETHANE	µg/L		<0.5	8/14/2019	200
1,1,2-TRICHLOROETHANE	µg/L		<0.5	8/14/2019	5
1,1-DICHLOROETHYLENE	µg/L		<0.5	8/14/2019	7
1,2,4-TRICHLOROBENZENE	µg/L		<0.5	8/14/2019	70
1,2-DICHLOROETHANE	µg/L		<0.5	8/14/2019	5
1,2-DICHLOROPROPANE	µg/L		<0.5	8/14/2019	5
BENZENE	µg/L		<0.5	8/14/2019	5
CARBON TETRACHLORIDE	µg/L		<0.5	8/14/2019	5
CHLOROBENZENE	µg/L		<0.5	8/14/2019	100
cis-1,2-DICHLOROETHYLENE	µg/L		<0.5	8/14/2019	70
DICHLOROMETHANE	µg/L		<0.5	8/14/2019	5
ETHYLBENZENE	µg/L		<0.5	8/14/2019	700
o-DICHLOROBENZENE	µg/L		<0.5	8/14/2019	600
para-DICHLOROBENZENE	µg/L		<0.5	8/14/2019	75
STYRENE	µg/L		<0.5	8/14/2019	100
TETRACHLOROETHYLENE	µg/L		<0.5	8/14/2019	5
TOLUENE	µg/L		<0.5	8/14/2019	1000
trans-1,2-DICHLOROETHYLENE	µg/L		<0.5	8/14/2019	100
TRICHLOROETHYLENE	µg/L		<0.5	8/14/2019	5
VINYL CHLORIDE	µg/L		<0.5	8/14/2019	2
XYLENES (total)	µg/L		<0.5	8/14/2019	10000

ORGANIC CHEMICAL ANALYSES - SOC's (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)

		RESULTS	DATE	RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L	ND	5/10/2018	ND	8/8/2018	0.2
2,4-D	µg/L	ND	5/10/2018	ND	8/8/2018	70
2,4,5-TP	µg/L	ND	5/10/2018	ND	8/8/2018	50
ALACHLOR (LASSO)	µg/L	ND	5/10/2018	ND	8/8/2018	2
ALDICARB	µg/L	ND	5/10/2018	ND	8/8/2018	N/A
ALDICARB SULFONE	µg/L	ND	5/10/2018	ND	8/8/2018	N/A
ALDICARB SULFOXIDE	µg/L	ND	5/10/2018	ND	8/8/2018	N/A
ATRAZINE	µg/L	ND	5/10/2018	ND	8/8/2018	3
BENZO(a)PYRENE	µg/L	ND	5/10/2018	ND	8/8/2018	0.2
CARBOFURAN	µg/L	ND	5/10/2018	ND	8/8/2018	40
CHLORDANE	µg/L	ND	5/10/2018	ND	8/8/2018	2
DALAPON	µg/L	ND	5/10/2018	ND	8/8/2018	200
DINOSEB	µg/L	ND	5/10/2018	ND	8/8/2018	7
DIQUAT	µg/L	ND	5/10/2018	ND	8/8/2018	20
DI(2-ethylhexyl)ADIPATE	µg/L	ND	5/10/2018	ND	8/8/2018	400
DI(2-ethylhexyl)PHTHALATE	µg/L	ND	5/10/2018	ND	8/8/2018	6
ENDOTHALL	µg/L	ND	5/10/2018	ND	8/8/2018	100
ENDRIN	µg/L	ND	5/10/2018	ND	8/8/2018	2
ETHYLENE DIBROMIDE	µg/L	ND	5/10/2018	ND	8/8/2018	0.05
HEPTACHLOR	µg/L	ND	5/10/2018	ND	8/8/2018	0.4
HEPTACHLOR EPOXIDE	µg/L	ND	5/10/2018	ND	8/8/2018	0.2

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

		RESULTS	DATE	RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L	ND	5/10/2018	ND	8/8/2018	1
HEXACHLOROCYCLOPENTADIENE	µg/L	ND	5/10/2018	ND	8/8/2018	50
LINDANE/BHC-GAMMA	µg/L	ND	5/10/2018	ND	8/8/2018	0.2
METHOXYCHLOR	µg/L	ND	5/10/2018	ND	8/8/2018	40
OXAMYL	µg/L	ND	5/10/2018	ND	8/8/2018	200
PENTACHLOROPHENOL	µg/L	ND	5/10/2018	ND	8/8/2018	1
PICLORAM	µg/L	ND	5/10/2018	ND	8/8/2018	500
POLYCHLORINATED BIPHENYLS	µg/L	ND	5/10/2018	ND	8/8/2018	0.5
SIMAZINE	µg/L	ND	5/10/2018	ND	8/8/2018	4
TOXAPHENE	µg/L	ND	5/10/2018	ND	8/8/2018	3

ORGANIC CHEMICAL ANALYSES - SOC's (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)

		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
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

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.39	1.14	0.87	Oct-19	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.30	0.88	0.61	Nov-19	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.30	1.00	0.73	Dec-19	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT							
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.25	1.15	0.68	Oct-19	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.20	1.10	0.63	Nov-19	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.25	1.15	0.63	Dec-19	4.0
NORTH WELD COUNTY WATER DISTRICT							
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.42	1.06	0.82	Oct-19	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.31	1.10	0.75	Nov-19	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.33	0.98	0.73	Dec-19	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-19	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Nov-19	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Dec-19	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT						
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Oct-19	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Nov-19	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Dec-19	NO/NO
NORTH WELD COUNTY WATER DISTRICT						
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Oct-19	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Nov-19	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Dec-19	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	32.2	80	24.1	60	10/8/2019
SAMPLE SITE - DBP002	µg/L	46.4	80	30.6	60	10/8/2019
SAMPLE SITE - DBP003	µg/L	16.9	80	16.2	60	10/8/2019
SAMPLE SITE - DBP004	µg/L	43.2	80	23.4	60	10/8/2019
FORT COLLINS/LOVELAND WATER DISTRICT (CA)						
SAMPLE SITE - DBP001	µg/L	34.0	80	23.2	60	10/9/2019
SAMPLE SITE - DBP002	µg/L	28.2	80	16.6	60	10/9/2019
SAMPLE SITE - DBP003	µg/L	26.2	80	21.4	60	10/9/2019
SAMPLE SITE - DBP004	µg/L	30.0	80	20.7	60	10/9/2019

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	47.2	80	20.00	60	10/8/2019
SAMPLE SITE - DBP002	µg/L	31.4	80	26.10	60	10/8/2019
SAMPLE SITE - DBP003	µg/L	37.5	80	26.80	60	10/8/2019
SAMPLE SITE - DBP004	µg/L	31.8	80	22.50	60	10/8/2019

CHLORITE

		1ST RES	AVG RES	MAX RES	DATE	MCL
EAST LARIMER COUNTY WD (FCL)	mg/L	0.51	0.50	0.46	10/1/2019	1.0
FORT COLLINS/LOVELAND WD (EA)	mg/L	0.53	0.47	0.42	10/9/2019	1.0
NORTH WELD COUNTY WD (WCL)	mg/L	0.41	0.42	0.42	11/12/2019	1.0

LEAD AND COPPER

		90TH PERCENTILE mg/L	DATE	90th% ACTION LEVEL mg/L
EAST LARIMER COUNTY WATER DISTRICT (AL)		30 SAMPLES COLLECTED		
LEAD	mg/L	0.0035	JUN-SEP 2019	0.015
COPPER	mg/L	0.2	JUN-SEP 2019	1.3

FORT COLLINS LOVELAND WATER DISTRICT (CA)

		30 SAMPLES COLLECTED	DATE	90th% ACTION LEVEL mg/L
LEAD	mg/L	0.003	Jun-19	0.015
COPPER	mg/L	0.296	Jun-19	1.3

NORTH WELD COUNTY WATER DISTRICT (AL)

		30 SAMPLES COLLECTED	DATE	90th% ACTION LEVEL mg/L
LEAD	mg/L	0.0038	Jul-19	0.015
COPPER	mg/L	0.26	Jul-19	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