

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 2017

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	21.0	35.0	27.4	27.0	53.0	37.4	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.033	0.056	0.050	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	20.0	27.0	23.3	19.0	25.0	22.9	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.11	1.31	1.23	4.0 MRDL
CHLORITE	mg/l	N/A	N/A	N/A	0.34	0.66	0.47	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	<0.02	<0.02	<0.02	0.8
CONDUCTIVITY	µs/cm	65.6	74.2	70.7	96.5	124.9	106.5	N/A
DISSOLVED OXYGEN	mg/l	0.9	10.8	8.0	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.16	0.21	0.18	0.58	0.79	0.72	4.0/*2.0
HARDNESS (TOTAL)	mg/l	28.0	33.0	31.1	27.0	33.0	30.3	N/A
IRON	mg/l	0.04	0.12	0.07	0.00	0.02	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.43	-2.47	-1.84	-1.21	-1.47	-1.33	N/A
MANGANESE	mg/l	0.00	0.34	0.08	0.001	0.010	0.004	*0.05
pH	VALUE	7.53	7.92	7.54	7.86	8.17	7.99	N/A
TEMPERATURE	°C	3.9	11.1	7.6	3.6	10.9	7.5	N/A
TOTAL DISSOLVED SOLIDS	mg/l	32.9	43.4	35.3	48.5	62.4	53.1	*500
TRUE COLOR	APHA	3.0	18.0	9.2	0.0	5.0	0.9	*15.0
TURBIDITY	NTU	0.50	16.80	2.18	0.017	0.042	0.020	**<0.3 TT

INORGANIC CONTAMINANTS ANALYSES (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
ANTIMONY	mg/l		BDL	3/8/2017	0.006
ARSENIC	mg/l		BDL	3/8/2017	0.010
BARIUM	mg/l		0.017	3/8/2017	2.000
BERYLLIUM	mg/l		BDL	3/8/2017	0.004
CADMIUM	mg/l		BDL	3/8/2017	0.005
CHROMIUM	mg/l		BDL	3/8/2017	0.1
FLUORIDE	mg/l		0.74	3/8/2017	4.0
MERCURY	mg/l		BDL	3/8/2017	0.002
NICKEL	mg/l		BDL	3/8/2017	N/A
SELENIUM	mg/l		BDL	3/8/2017	0.050
SODIUM	mg/l		8.6	3/8/2017	N/A
THALLIUM	mg/l		BDL	3/8/2017	0.002

NITRATE AND/OR NITRITE AS NITROGEN (AL) - (ENTRY INTO DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
NITRATE	mg/l		BDL	3/8/2017	10.000
NITRITE	mg/l		<0.01	2/12/2013	1.000

TOTAL ORGANIC CARBON (AL) - (SCFP INFLUENT AND EFFLUENT)		INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L	2.9	1.5	1.38	10/11/2017	RAA - ≥1.0
		3.3	2.0	1.13	11/8/2017	RAA - ≥1.0
		3.4	2.0	1.18	12/5/2017	RAA - ≥1.0
		INFLUENT			DATE	MCL
ALKALINITY - (SCFP INFLUENT ONLY)	mg/l	28.5			10/11/2017	N/A
		27.6			11/8/2017	N/A
		27.3			12/5/2017	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 (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)

			RESULTS	DATE	MCL
1,1,1-TRICHLOROETHANE	µg/L		ND	3/8/2017	200
1,1,2-TRICHLOROETHANE	µg/L		ND	3/8/2017	5
1,1-DICHLOROETHYLENE	µg/L		ND	3/8/2017	7
1,2,4-TRICHLOROBENZENE	µg/L		ND	3/8/2017	70
1,2-DICHLOROETHANE	µg/L		ND	3/8/2017	5
1,2-DICHLOROPROPANE	µg/L		ND	3/8/2017	5
BENZENE	µg/L		ND	3/8/2017	5
CARBON TETRACHLORIDE	µg/L		ND	3/8/2017	5
CHLOROBENZENE	µg/L		ND	3/8/2017	100
cis-1,2-DICHLOROETHYLENE	µg/L		ND	3/8/2017	70
DICHLOROMETHANE	µg/L		ND	3/8/2017	5
ETHYLBENZENE	µg/L		ND	3/8/2017	700
o-DICHLOROBENZENE	µg/L		ND	3/8/2017	600
para-DICHLOROBENZENE	µg/L		ND	3/8/2017	75
STYRENE	µg/L		ND	3/8/2017	100
TETRACHLOROETHYLENE	µg/L		ND	3/8/2017	5
TOLUENE	µg/L		ND	3/8/2017	1000
trans-1,2-DICHLOROETHYLENE	µg/L		ND	3/8/2017	100
TRICHLOROETHYLENE	µg/L		ND	3/8/2017	5
VINYL CHLORIDE	µg/L		ND	3/8/2017	2
XYLENES (total)	µg/L		ND	3/8/2017	10000

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

1ST AND 2ND QUARTER RESULTS		RESULTS	DATE	RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L	ND	3/8/2017	ND	6/6/2017	0.2
2,4-D	µg/L	ND	3/8/2017	ND	6/6/2017	70
2,4,5-TP	µg/L	ND	3/8/2017	ND	6/6/2017	50
ALACHLOR (LASSO)	µg/L	ND	3/8/2017	ND	6/6/2017	2
ALDICARB	µg/L	ND	3/8/2017	ND	6/6/2017	N/A
ALDICARB SULFONE	µg/L	ND	3/8/2017	ND	6/6/2017	N/A
ALDICARB SULFOXIDE	µg/L	ND	3/8/2017	ND	6/6/2017	N/A
ATRAZINE	µg/L	ND	3/8/2017	ND	6/6/2017	3
BENZO(a)PYRENE	µg/L	ND	3/8/2017	ND	6/6/2017	0.2
CARBOFURAN	µg/L	ND	3/8/2017	ND	6/6/2017	40
CHLORDANE	µg/L	ND	3/8/2017	ND	6/6/2017	2
DALAPON	µg/L	1.9	3/8/2017	1.7	6/6/2017	200
DINOSEB	µg/L	ND	3/8/2017	ND	6/6/2017	7
DIQUAT	µg/L	ND	3/8/2017	ND	6/6/2017	20
DI(2-ethylhexyl)ADIPATE	µg/L	ND	3/8/2017	ND	6/6/2017	400
DI(2-ethylhexyl)PHTHALATE	µg/L	ND	3/8/2017	0.96	6/6/2017	6
ENDOTHALL	µg/L	ND	3/8/2017	ND	6/6/2017	100
ENDRIN	µg/L	ND	3/8/2017	ND	6/6/2017	2
ETHYLENE DIBROMIDE	µg/L	ND	3/8/2017	ND	6/6/2017	0.05
HEPTACHLOR	µg/L	ND	3/8/2017	ND	6/6/2017	0.4
HEPTACHLOR EPOXIDE	µg/L	ND	3/8/2017	ND	6/6/2017	0.2

ORGANIC CHEMICAL ANALYSES - SOC's (AL) (con't)			RESULTS	DATE	RESULTS	DATE	MCL
HEXACHLOROBENZENE	µg/L		ND	3/8/2017	ND	6/6/2017	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	3/8/2017	ND	6/6/2017	50
LINDANE/BHC-GAMMA	µg/L		ND	3/8/2017	0.034	6/6/2017	0.2
METHOXYCHLOR	µg/L		ND	3/8/2017	ND	6/6/2017	40
OXAMYL	µg/L		ND	3/8/2017	ND	6/6/2017	200
PENTACHLOROPHENOL	µg/L		ND	3/8/2017	ND	6/6/2017	1
PICLORAM	µg/L		ND	3/8/2017	ND	6/6/2017	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	3/8/2017	ND	6/6/2017	0.5
SIMAZINE	µg/L		ND	3/8/2017	ND	6/6/2017	4
TOXAPHENE	µg/L		ND	3/8/2017	ND	6/6/2017	3

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

3RD AND 4TH QUARTER RESULTS			RESULTS	DATE	RESULTS	DATE	MCL
1,2-DIBROMO-3-CHLOROPROPANE	µg/L		ND	9/7/2017	ND	12/5/2017	0.2
2,4-D	µg/L		ND	9/7/2017	ND	12/5/2017	70
2,4,5-TP	µg/L		ND	9/7/2017	ND	12/5/2017	50
ALACHLOR (LASSO)	µg/L		ND	9/7/2017	ND	12/5/2017	2
ALDICARB	µg/L		ND	9/7/2017	ND	12/5/2017	N/A
ALDICARB SULFONE	µg/L		ND	9/7/2017	ND	12/5/2017	N/A
ALDICARB SULFOXIDE	µg/L		ND	9/7/2017	ND	12/5/2017	N/A
ATRAZINE	µg/L		ND	9/7/2017	ND	12/5/2017	3
BENZO(a)PYRENE	µg/L		ND	9/7/2017	ND	12/5/2017	0.2
CARBOFURAN	µg/L		ND	9/7/2017	ND	12/5/2017	40
CHLORDANE	µg/L		ND	9/7/2017	ND	12/5/2017	2
DALAPON	µg/L		ND	9/7/2017	ND	12/5/2017	200
DINOSEB	µg/L		ND	9/7/2017	ND	12/5/2017	7
DIQUAT	µg/L		ND	9/7/2017	ND	12/5/2017	20
DI(2-ethylhexyl)ADIPATE	µg/L		ND	9/7/2017	ND	12/5/2017	400
DI(2-ethylhexyl)PHTHALATE	µg/L		ND	9/7/2017	ND	12/5/2017	6
ENDOTHALL	µg/L		ND	9/7/2017	ND	12/5/2017	100
ENDRIN	µg/L		ND	9/7/2017	ND	12/5/2017	2
ETHYLENE DIBROMIDE	µg/L		ND	9/7/2017	ND	12/5/2017	0.05
HEPTACHLOR	µg/L		ND	9/7/2017	ND	12/5/2017	0.4
HEPTACHLOR EPOXIDE	µg/L		ND	9/7/2017	ND	12/5/2017	0.2
HEXACHLOROBENZENE	µg/L		ND	9/7/2017	ND	12/5/2017	1
HEXACHLOROCYCLOPENTADIENE	µg/L		ND	9/7/2017	ND	12/5/2017	50
LINDANE/BHC-GAMMA	µg/L		ND	9/7/2017	ND	12/5/2017	0.2
METHOXYCHLOR	µg/L		ND	9/7/2017	ND	12/5/2017	40
OXAMYL	µg/L		ND	9/7/2017	ND	12/5/2017	200
PENTACHLOROPHENOL	µg/L		ND	9/7/2017	ND	12/5/2017	1
PICLORAM	µg/L		ND	9/7/2017	ND	12/5/2017	500
POLYCHLORINATED BIPHENYLS	µg/L		ND	9/7/2017	ND	12/5/2017	0.5
SIMAZINE	µg/L		ND	9/7/2017	ND	12/5/2017	4
TOXAPHENE	µg/L		ND	9/7/2017	ND	12/5/2017	3

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MRDL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.30	1.00	0.69	Oct-17	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.24	1.05	0.76	Nov-17	4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.21	1.06	0.72	Dec-17	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	41	0.20	1.20	0.67	Oct-17	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.20	1.10	0.58	Nov-17	4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	40	0.20	1.20	0.65	Dec-18	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.30	2.20	0.93	Oct-17	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.55	1.12	0.87	Nov-17	4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.58	1.18	0.88	Dec-17	4.0

TOTAL COLIFORMS (SE/WCL)

		TOTAL SAMPLES	# POSITIVE	# NEGATIVE	DATE	MCL **TT LEVEL 1 or 2
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Oct-17	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Nov-17	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Dec-17	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		41	0	41	Oct-17	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Nov-18	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		40	0	40	Dec-18	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Oct-17	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Nov-17	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Dec-17	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	28.7	60	10/17/2017
SAMPLE SITE - DBP002	µg/L	51.4	80	23.8	60	10/17/2017
SAMPLE SITE - DBP003	µg/L	38.5	80	36.7	60	10/17/2017
SAMPLE SITE - DBP004	µg/L	50.4	80	23.6	60	10/17/2017
FORT COLLINS/LOVELAND WATER DISTRICT (CA)						
SAMPLE SITE - DBP001	µg/L	34.5	80	34.1	60	10/11/2017
SAMPLE SITE - DBP002	µg/L	50.2	80	22.5	60	10/11/2017
SAMPLE SITE - DBP003	µg/L	38.8	80	30.1	60	10/11/2017
SAMPLE SITE - DBP004	µg/L	46.4	80	29.0	60	10/11/2017

Total Trihalomethanes and Haloacetic Acids (cont)

		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
NORTH WELD COUNTY WATER DISTRICT (AL)						
SAMPLE SITE - DBP001	µg/L	49.6	80	26.5	60	10/17/2017
SAMPLE SITE - DBP002	µg/L	33.8	80	33.6	60	10/17/2017
SAMPLE SITE - DBP003	µg/L	39.8	80	31.2	60	10/17/2017
SAMPLE SITE - DBP004	µg/L	32.8	80	33.6	60	10/17/2017

CHLORITE

		1ST RES	AVG RES	MAX RES	DATE	MCL
EAST LARIMER COUNTY WD (FCL)	mg/L	0.58	0.57	0.47	10/16/2017	1.0
FORT COLLINS/LOVELAND WD (EA)	mg/L	0.49	0.51	0.36	10/11/2017	1.0
NORTH WELD COUNTY WD (AL)	mg/L	BDL	BDL	BDL	11/1/2017	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	0.0033	JUN/JUL 2017	0.015
COPPER	mg/L	0.28	JUN/JUL 2017	1.3

FORT COLLINS LOVELAND WATER DISTRICT (CA)

		30 SAMPLES COLLECTED		
LEAD	mg/L	0.003	Jun-17	0.015
COPPER	mg/L	0.24	Jun-17	1.3

NORTH WELD COUNTY WATER DISTRICT (AL)

		30 SAMPLES COLLECTED		
LEAD	mg/L	0.0039	Jul-17	0.015
COPPER	mg/L	0.27	Jul-17	1.3

MCL = Maximum Contaminate Level - Enforcable

*SMCL = Secondary Maximum Contaminate Level - Reccomended

**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 (SE) = Stewart Environmental Lab (WCL) = Weld County Lab

(CA) = Colorado Analytical Lab (EA) = Eurofins Eaton Analytical (SCFP) = Soldier Canyon Filter Plant

BDL = Below Detectable Limit

ND = Not Detected

N/A = Not applicable

VOC = Volatile Organic Chemicals

LRAA = Location Running Annual Average

MRDL = Maximum Residual Disinfectant Level

> = Greater Than