

TRI DISTRICT/SOLDIER CANYON FILTER PLANT

(East Larimer County Water District; Fort Collins/Loveland Water District; North Weld County Water District)

WATER QUALITY REPORT

1ST QUARTER 2016

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	38.0	30.9	30.0	42.0	35.4	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0	0.003	0.001	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	24.0	30.0	27.0	23.0	31.0	26.7	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.20	1.35	1.27	4.0
CHLORITE	mg/l	N/A	N/A	N/A	0.37	0.65	0.51	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.10	0.01	0.8
CONDUCTIVITY	µs/cm	77.1	87.1	82.2	54.0	107.0	97.6	N/A
DISSOLVED OXYGEN	mg/l	8.3	11.5	10.6	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.11	0.24	0.19	0.09	0.77	0.57	4.0/*2.0
HARDNESS (TOTAL)	mg/l	29.0	37.0	32.0	28.0	35.0	31.7	N/A
IRON	mg/l	0.01	0.07	0.02	0.00	0.03	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.4	-1.8	-1.6	-1.2	-1.5	-1.3	N/A
MANGANESE	mg/l	0.01	0.04	0.02	0.001	0.009	0.005	*0.05
pH	VALUE	7.44	7.94	7.71	7.77	8.13	7.94	N/A
TEMPERATURE	°C	2.5	4.6	3.3	2.5	4.8	3.5	N/A
TOTAL DISSOLVED SOLIDS	mg/l	38.8	43.0	41.3	45.7	54.0	51.0	*500
TRUE COLOR	APHA	1.0	11.0	6.8	0	2	1.0	*15.0
TURBIDITY	NTU	1.17	4.18	1.94	0.012	0.027	0.014	**<0.3 TT

INORGANIC CONTAMINANTS ANALYSES (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
ANTIMONY	mg/l		BDL	9/9/2015	0.006
ARSENIC	mg/l		BDL	9/9/2015	0.010
BARIUM	mg/l		0.017	9/9/2015	2.000
BERYLLIUM	mg/l		BDL	9/9/2015	0.004
CADMIUM	mg/l		BDL	9/9/2015	0.005
CHROMIUM	mg/l		BDL	9/9/2015	0.1
CYANIDE	mg/l		NT	NT	0.2
FLUORIDE	mg/l		0.53	9/9/2015	4.0
MERCURY	mg/l		BDL	9/9/2015	0.002
NICKEL	mg/l		BDL	9/9/2015	*SMCL
SELENIUM	mg/l		BDL	9/9/2015	0.050
SODIUM	mg/l		13.1	9/9/2015	*SMCL
THALLIUM	mg/l		BDL	9/9/2015	0.002

NITRATE AND/OR NITRITE AS NITROGEN (AL) (UL) - (ENTRY INTO DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
NITRATE	mg/l		0.11	9/9/2015	10.000
NITRITE	mg/l		<0.01	2/12/2013	1.000

TOTAL ORGANIC CARBON (AL) - (PLANT INFLUENT AND EFFLUENT)			INFLUENT	EFFLUENT	TT RATIO	DATE	MCL - **TT
TOTAL ORGANIC CARBON - TOC	mg/L		3.1	1.8	1.2	1/13/2016	RAA - ≥1.0
			3.8	2.3	1.1	2/10/2016	RAA - ≥1.0
			3.5	2.1	1.1	3/10/2016	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (PLANT INFLUENT ONLY)	mg/l		33.7			1/13/2016	N/A
			32.7			2/10/2016	N/A
			30.7			3/10/2016	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		BDL	9/9/2015	7
1,1,2-TRICHLOROETHANE	µg/L		BDL	9/9/2015	200
1,1-DICHLOROETHYLENE	µg/L		BDL	9/9/2015	5
1,2,4-TRICHLOROBENZENE	µg/L		BDL	9/9/2015	5
1,2-DICHLOROETHANE	µg/L		BDL	9/9/2015	5
1,2-DICHLOROPROPANE	µg/L		BDL	9/9/2015	70
BENZENE	µg/L		BDL	9/9/2015	5
CARBON TETRACHLORIDE	µg/L		BDL	9/9/2015	5
CHLOROBENZENE	µg/L		BDL	9/9/2015	70
cis-1,2-DICHLOROETHYLENE	µg/L		BDL	9/9/2015	5
DICHLOROMETHANE	µg/L		BDL	9/9/2015	700
ETHYLBENZENE	µg/L		BDL	9/9/2015	100
o-DICHLOROBENZENE	µg/L		BDL	9/9/2015	600
para-DICHLOROBENZENE	µg/L		BDL	9/9/2015	75
STYRENE	µg/L		BDL	9/9/2015	100
TETRACHLOROETHYLENE	µg/L		BDL	9/9/2015	5
TOLUENE	µg/L		BDL	9/9/2015	1000
trans-1,2-DICHLOROETHYLENE	µg/L		BDL	9/9/2015	100
TRICHLOROETHYLENE	µg/L		BDL	9/9/2015	5
VINYL CHLORIDE	µg/L		BDL	9/9/2015	2
XYLENES (total)	µg/L		BDL	9/9/2015	1000

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

			RESULTS	DATE	MCL	
1,2-DIBROMO-3-CHLOROPROPANE	µg/L	BDL	6/18/2014	BDL	9/10/2014	0.2
2,4-D	µg/L	BDL	6/18/2014	BDL	9/10/2014	70
2,4,5-TP	µg/L	BDL	6/18/2014	BDL	9/10/2014	50
ALACHLOR (LASSO)	µg/L	BDL	6/18/2014	BDL	9/10/2014	2
ALDICARB	µg/L	BDL	6/18/2014	BDL	9/10/2014	N/A
ALDICARB SULFONE	µg/L	BDL	6/18/2014	BDL	9/10/2014	N/A
ALDICARB SULFOXIDE	µg/L	BDL	6/18/2014	BDL	9/10/2014	N/A
ATRAZINE	µg/L	BDL	6/18/2014	BDL	9/10/2014	3
BENZO(a)PYRENE	µg/L	BDL	6/18/2014	BDL	9/10/2014	0.2
CARBOFURAN	µg/L	BDL	6/18/2014	BDL	9/10/2014	40
CHLORDANE	µg/L	BDL	6/18/2014	BDL	9/10/2014	2
DALAPON	µg/L	BDL	6/18/2014	BDL	9/10/2014	200
DINOSEB	µg/L	BDL	6/18/2014	BDL	9/10/2014	7
DIQUAT	µg/L	BDL	6/18/2014	BDL	9/10/2014	20
DI(2-ethylhexyl)ADIPATE	µg/L	BDL	6/18/2014	BDL	9/10/2014	400
DI(2-ethylhexyl)PHTHALATE	µg/L	BDL	6/18/2014	BDL	9/10/2014	6
ENDOTHALL	µg/L	BDL	6/18/2014	BDL	9/10/2014	100
ENDRIN	µg/L	BDL	6/18/2014	BDL	9/10/2014	2
ETHYLENE DIBROMIDE	µg/L	BDL	6/18/2014	BDL	9/10/2014	0.05
HEPTACHLOR	µg/L	BDL	6/18/2014	BDL	9/10/2014	0.4
HEPTACHLOR EPOXIDE	µg/L	BDL	6/18/2014	BDL	9/10/2014	0.2
HEXACHLOROBENZENE	µg/L	BDL	6/18/2014	BDL	9/10/2014	1

ORGANIC CHEMICAL ANALYSES - SOC's (AL) (con't) - (ENTRY INTO THE DISTRIBUTION SYSTEM)

						RESULTS	DATE	MCL
HEXACHLOROCYCLOPENTADIENE	µg/L		BDL	6/18/2014		BDL	9/10/2014	50
LINDANE/BHC-GAMMA	µg/L		BDL	6/18/2014		BDL	9/10/2014	0.2
METHOXYCHLOR	µg/L		BDL	6/18/2014		BDL	9/10/2014	40
OXAMYL	µg/L		BDL	6/18/2014		BDL	9/10/2014	200
PENTACHLOROPHENOL	µg/L		BDL	6/18/2014		BDL	9/10/2014	1
PICLORAM	µg/L		BDL	6/18/2014		BDL	9/10/2014	500
POLYCHLORINATED BIPHENYLS	µg/L		BDL	6/18/2014		BDL	9/10/2014	0.5
SIMAZINE	µg/L		BDL	6/18/2014		BDL	9/10/2014	4
TOXAPHENE	µg/L		BDL	6/18/2014		BDL	9/10/2014	3

DISTRIBUTION SYSTEMS SAMPLES

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.4	1.0	0.80	Jan-16	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.60	0.90	0.79	Feb-16	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.50	1.0	0.77	Mar-16	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.20	1.05	0.69	Jan-16	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	38	0.35	1.05	0.73	Feb-16	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.25	1.00	0.70	Mar-16	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.59	1.11	0.84	Jan-16	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.66	1.10	0.86	Feb-16	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.66	0.98	0.83	Mar-16	Low <trace High >4.0

TOTAL COLIFORMS (SE/WCL)

		TOTAL SAMPLES	# POSITIVE	# NEGITIVE	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Jan-16	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Feb-16	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Mar-16	>1 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Jan-16	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		38	0	38	Feb-16	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Mar-16	>2 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Jan-16	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Feb-16	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Mar-16	>1 POSITIVE

DISTRIBUTION SYSTEMS SAMPLES

<u>Total Trihalomethanes and Haloacetic Acids (AL)</u>		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
EAST LARIMER COUNTY WATER DISTRICT						
SAMPLE SITE - DBP001-ELCSM4	µg/L	37.8	80	18.7	60	1/12/2016
SAMPLE SITE - DBP002-ELCSM6	µg/L	34.8	80	24.1	60	1/12/2016
SAMPLE SITE - DBP003-ELCSM2	µg/L	32.8	80	24.5	60	1/12/2016
FORT COLLINS/LOVELAND WATER DISTRICT						
SAMPLE SITE - DBP001-FCLSM4	µg/L	27.5	80	21.3	60	1/19/2016
SAMPLE SITE - DBP002-FCLSM6	µg/L	30.5	80	18.3	60	1/12/2016
NORTH WELD COUNTY WATER DISTRICT						
SAMPLE SITE - DBP001-NWCMSM1	µg/L	53.4	80	27.0	60	1/12/2016
SAMPLE SITE - DBP002-NWCMSM4	µg/L	54.1	80	26.4	60	1/12/2016
SAMPLE SITE - DBP003-NWCMA RES 1	µg/L	38.3	80	26.1	60	1/12/2016

<u>CHLORITE (AL)</u>			MIN	MAX	AVG	DATE	MCL
CHLORITE	mg/L		0.43	0.46	0.44	1/18/2016	1.0

<u>LEAD AND COPPER (AL)</u>			90TH PERCENTILE mg/L	DATE	90th% ACTION LEVEL mg/L
LEAD	mg/L		0.0085	Jun-15	0.015
COPPER	mg/L		0.34	Jun-15	1.3

MCL = Maximum Contaminate Level - Enforcable	BDL = Below Detectable Limit
*SMCL = Secondary Maximum Contaminate Level - Reccomended	ND = Not Detected
**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	
< = Less Than	> = Greater Than
(FCL) = Fort Collins Lab (UL) = United Lab (AL) = Accutest Lab (SE) = Stewart Environmental Lab (WCL) = Weld County Lab	