TRI DISTRICT/SOLDIER CANYON FILTER PLANT

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

WATER QUALITY REPORT — 3RD QUARTER 2016

ANALYSIS PARAMETER Monitored at SCFP (not a certified lab)	Report Values	PLANT INFLUENT			PLANT EFFLUENT			
		MIN	MAX	AVG	MIN	MAX	AVG	MCL *SMCL
ALKALINITY	mg/l	19.0	37.0	27.9	30.0	55.0	41.2	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.000	0.023	0.010	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	12.0	28.0	22.0	20.0	25.0	21.5	N/A
CHLORINE	mg/l	N/A	N/A	N/A	0.90	1.33	1.12	4.0
CHLORITE	mg/l	N/A	N/A	N/A	0.41	0.71	0.56	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.00	0.00	0.8
CONDUCTIVITY	µs/cm	44.4	83.1	69.0	99	121.8	112.7	N/A
DISSOLVED OXYGEN	mg/l	3.0	8.6	6.4	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.13	0.18	0.15	0.16	0.90	0.61	4.0/*2.0
HARDNESS (TOTAL)	mg/l	16.0	37.0	27.4	26.0	36.0	30.8	N/A
IRON	mg/l	0.01	0.14	0.07	0.00	0.02	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.4	-2.4	-2.0	-1.0	-1.4	-1.2	N/A
MANGANESE	mg/l	0.01	0.16	0.05	0.001	0.008	0.004	*0.05
pH	VALUE	6.90	7.91	7.35	7.80	8.19	7.99	N/A
TEMPERATURE	°C	6.8	18.8	11.5	8.4	12.1	9.8	N/A
TOTAL DISSOLVED SOLIDS	mg/l	22.1	41.4	34.5	50.0	61.0	56.3	*500
TRUE COLOR	APHA	15.0	26.0	11.0	0.0	4.0	1.0	*15.0
TURBIDITY	NTU	1.43	4.13	1.96	0.019	0.041	0.021	**<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		3.4	1.8	1.34/1.16	7/6/2016	RAA - ≥1.0
			3.3	1.7	1.39/1.16	8/10/2016	RAA - ≥1.0
			3.4	1.9	1.26/1.15	9/7/2016	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (PLANT INFLUENT ONLY)	mg/l		27.4			7/6/2016	N/A
			28.1			8/10/2016	N/A
			30.1			9/7/2016	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	23	0.5	1.0	0.76	Jul-16	Low <0.2 High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.4	0.8	0.66	Aug-16	Low <0.2 High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.5	1.0	0.8	Sep-16	Low <0.2 High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.60	1.10	0.83	Jul-16	Low <0.2 High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.55	1.00	0.77	Aug-16	Low <0.2 High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.50	1.15	0.79	Sep-16	Low <0.2 High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.60	0.97	0.82	Jul-16	Low <0.2 High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.18	0.85	0.63	Aug-16	Low <0.2 High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.19	0.99	0.76	Sep-16	Low <0.2 High >4.0

TOTAL COLIFORMS (SE/WCL)		TOTAL SAMPLES	# POSITIVE	# NEGITIVE	DATE	MCL **TT LEVEL 1 or 2
EAST LARIMER COUNTY WATER DISTRICT		23	1	22	Jul-16	YES/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Aug-16	NO/NO
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Sep-16	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		42	0	42	Jul-16	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		42	0	42	Aug-16	NO/NO
FT COLLINS/LOVELAND WATER DISTRICT		42	0	42	Sep-16	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Jul-16	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Aug-16	NO/NO
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Sep-16	NO/NO

DISTRIBUTION SYSTEMS SAMPLES

Total Trihalomethanes and Haloacetic Acids (AL)

		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
EAST LARIMER COUNTY WATER DISTRICT						
SAMPLE SITE - DBP001-ELCSM4	µg/L	18.0	80	21.7	60	7/12/2016
SAMPLE SITE - DBP002-ELCSM6	µg/L	35.5	80	35.0	60	7/12/2016
SAMPLE SITE - DBP003-ELCSM2	µg/L	16.7	80	20.1	60	7/12/2016
FORT COLLINS/LOVELAND WATER DISTRICT						
SAMPLE SITE - DBP001-FCLSM4	µg/L	16.7	80	20.9	60	7/12/2016
SAMPLE SITE - DBP002-FCLSM6	µg/L	29.0	80	26.2	60	7/12/2016
NORTH WELD COUNTY WATER DISTRICT						
SAMPLE SITE - DBP001-NWCSM1	µg/L	35.8	80	27.9	60	7/12/2016
SAMPLE SITE - DBP002-NWCSM4	µg/L	30.0	80	32.7	60	7/12/2016
SAMPLE SITE - DBP003-NWCMAX RES 1	µg/L	30.4	80	31.2	60	7/12/2016

CHLORITE (AL)

			1ST TD	AVG	MAX	DATE	MCL
CHLORITE	mg/L		0.51	0.50	0.50	7/19/2016	1.0

LEAD AND COPPER (AL)

			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