

# 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 2015**

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	16.0	38.0	26.8	31.0	52.0	40.7	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.032	0.051	0.041	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	13.0	32.0	23.3	19.0	29.0	23.0	N/A
CHLORINE	mg/l	N/A	N/A	N/A	0.91	1.36	1.08	4.0
CHLORITE	mg/l	N/A	N/A	N/A	0.27	0.57	0.41	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.0	0.09	0.0	0.8
CONDUCTIVITY	µs/cm	41.8	99.0	69.0	90	124.8	111.2	N/A
DISSOLVED OXYGEN	mg/l	4.0	9.2	7.0	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.20	0.26	0.24	0.22	0.76	0.61	4.0/*2.0
HARDNESS (TOTAL)	mg/l	17.0	36.0	27.8	24.0	35.0	30.0	N/A
IRON	mg/l	0.03	0.18	0.09	0.00	0.01	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.09	-2.27	-1.91	-1.09	-1.47	-1.24	N/A
MANGANESE	mg/l	0.006	0.099	0.031	0.000	0.007	0.004	*0.05
pH	VALUE	6.92	8.10	7.43	7.81	8.08	7.96	N/A
TEMPERATURE	°C	6.5	18.0	11.3	7.0	11.0	9.4	N/A
TOTAL DISSOLVED SOLIDS	mg/l	20.8	45.9	34.2	45.6	62.4	55.9	*500
TRUE COLOR	APHA	5.0	30.0	15.3	0.0	7.0	2.7	*15.0
TURBIDITY	NTU	0.39	11.50	1.98	0.016	0.033	0.018	**<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		3.9	2.0	1.39	7/7/2015	RAA - ≥1.0
			3.7	1.8	1.47	8/11/2015	RAA - ≥1.0
			3.7	2.0	1.31	9/9/2015	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (PLANT INFLUENT ONLY)	mg/l		26.9			7/7/2015	N/A
			26.5			8/11/2015	N/A
			29.6			9/9/2015	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**

**CHLORITE (AL)**

			MIN	MAX	AVG	DATE	MCL
CHLORITE	mg/L		0.45	0.47	0.46	7/21/2015	1.0

**CHLORINE (Districts Measure)**

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.2	0.8	0.61	Jul-15	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.3	0.8	0.62	Aug-15	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.4	1.0	0.87	Sep-15	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	41	0.40	0.95	0.65	Jul-15	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.35	1.15	0.70	Aug-15	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	45	0.65	1.2	0.84	Sep-15	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.23	0.84	0.65	Jul-15	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.39	0.90	0.68	Aug-15	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.51	0.91	0.75	Sep-15	Low <trace High >4.0

**TOTAL COLIFORMS (SE/WCL)**

		TOTAL SAMPLES	# POSITIVE	# NEGITIVE	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Jul-15	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Aug-15	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Sep-15	>1 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		41	0	41	Jul-15	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Aug-15	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		45	1	44	Sep-15	>2 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Jul-15	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Aug-15	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Sep-15	>1 POSITIVE

## DISTRIBUTION SYSTEMS SAMPLES

<b>Total Trihalomethanes and Haloacetic Acids (AL)</b>		<b>TTHM RESULTS</b>	<b>MCL (LRAA)</b>	<b>HAA RESULTS</b>	<b>MCL (LRAA)</b>	<b>DATE</b>
<b>EAST LARIMER COUNTY WATER DISTRICT</b>						
SAMPLE SITE - DBP001-ELCSM4	µg/L	27.4	80	31.7	60	3RD QTR
SAMPLE SITE - DBP002-ELCSM6	µg/L	41.8	80	32.4	60	3RD QTR
SAMPLE SITE - DBP003-ELCSM2	µg/L	18.4	80	23	60	3RD QTR
<b>FORT COLLINS/LOVELAND WATER DISTRICT</b>						
SAMPLE SITE - DBP001-FCLSM4	µg/L	36.1	80	25.8	60	3RD QTR
SAMPLE SITE - DBP002-FCLSM6	µg/L	24.6	80	29.7	60	3RD QTR
<b>NORTH WELD COUNTY WATER DISTRICT</b>						
SAMPLE SITE - DBP001-NWCMS1	µg/L	38.5	80	23.7	60	3RD QTR
SAMPLE SITE - DBP002-NWCMS4	µg/L	28.4	80	34.3	60	3RD QTR
SAMPLE SITE - DBP003-NWC MAX RES 1	µg/L	35.7	80	36.7	60	3RD QTR

MCL = Maximum Contaminate Level - Enforcable	BDL = Below Detectable Limit
*SMCL = Secondary Maximum Contaminate Level - Recommended	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
< = Less Than	> = Greater Than
(FCL) = Fort Collins Lab (UL) = United Lab (AL) = Accutest Lab (SE) = Stewart Environmental Lab (WCL) = Weld County Lab	