

# TRI DISTRICT/SOLDIER CANYON FILTER PLANT

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

## WATER QUALITY REPORT

**4TH QUARTER 2014**

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	24.0	36.0	29.3	30.0	48.0	39.7	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.027	0.043	0.033	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	24.0	30.0	27.0	22.0	31.0	25.0	N/A
CHLORINE	mg/l	N/A	N/A	N/A	0.4	1.1	0.9	4.0
CHLORITE	mg/l	N/A	N/A	N/A	0.17	0.48	0.32	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.0	0.02	0.0	0.8
CONDUCTIVITY	µs/cm	67.8	82.2	77.9	83.9	122.5	103.1	N/A
DISSOLVED OXYGEN	mg/l	3.8	12.8	7.1	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.12	0.23	0.18	0.51	0.76	0.63	4.0/*2.0
HARDNESS (TOTAL)	mg/l	29.0	38.0	31.7	26.0	33.0	29.3	N/A
IRON	mg/l	0.01	0.10	0.05	0.0	0.01	0.01	*0.3
LANGLIER INDEX	S.I.#	-1.51	-2.30	-2.00	-1.18	-1.57	-1.33	N/A
MANGANESE	mg/l	0.003	0.165	0.056	0.0	0.009	0.005	*0.05
pH	VALUE	6.90	7.90	7.31	7.77	8.04	7.90	N/A
TEMPERATURE	°C	4.1	8.1	7.1	4.3	9.7	7.5	N/A
TOTAL DISSOLVED SOLIDS	mg/l	34.0	41.1	39.1	42.2	61.3	51.7	*500
TRUE COLOR	APHA	5.0	16.0	9.0	0.0	3.0	0.3	*15.0
TURBIDITY	NTU	1.03	2.5	1.62	0.028	0.041	0.032	**<0.3 TT

INORGANIC CONTAMINANTS ANALYSES (AL) - (ENTRY INTO THE DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
ANTIMONY	mg/l		BDL	6/18/2014	0.006
ARSENIC	mg/l		BDL	6/18/2014	0.010
BARIUM	mg/l		0.016	6/18/2014	2.000
BERYLLIUM	mg/l		BDL	6/18/2014	0.004
CADMIUM	mg/l		BDL	6/18/2014	0.005
CHROMIUM	mg/l		BDL	6/18/2014	0.1
CYANIDE	mg/l		NT	6/18/2014	0.2
FLUORIDE	mg/l		0.66	6/18/2014	4.0
MERCURY	mg/l		BDL	6/18/2014	0.002
NICKEL	mg/l		BDL	6/18/2014	*SMCL
SELENIUM	mg/l		BDL	6/18/2014	0.050
SODIUM	mg/l		10.6	6/18/2014	*SMCL
THALLIUM	mg/l		BDL	6/18/2014	0.002

NITRATE AND/OR NITRITE AS NITROGEN (AL) (UL) - (ENTRY INTO DISTRIBUTION SYSTEM)			RESULTS	DATE	MCL
NITRATE	mg/l		0.079	6/18/2014	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		3.5	1.9	1.31	10/14/2014	RAA - ≥1.0
			3.6	2.2	1.11	11/6/2014	RAA - ≥1.0
			3.6	2.2	1.11	12/9/2014	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (PLANT INFLUENT ONLY)	mg/l		28.9			10/14/2014	N/A
			29.9			11/6/2014	N/A
			30.2			12/9/2014	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-DICHLOROETHYLENE	µg/L		BDL	6/18/2014	7
1,1,1-TRICHLOROETHANE	µg/L		BDL	6/18/2014	200
1,1,2-TRICHLOROETHANE	µg/L		BDL	6/18/2014	5
1,2-DICHLOROETHANE	µg/L		BDL	6/18/2014	5
1,2-DICHLOROPROPANE	µg/L		BDL	6/18/2014	5
1,2,4-TRICHLOROBENZENE	µg/L		BDL	6/18/2014	70
BENZENE	µg/L		BDL	6/18/2014	5
CARBON TETRACHLORIDE	µg/L		BDL	6/18/2014	5
cis-1,2-DICHLOROETHYLENE	µg/L		BDL	6/18/2014	70
DICHLOROMETHANE	µg/L		BDL	6/18/2014	5
ETHYLBENZENE	µg/L		BDL	6/18/2014	700
CHLOROBENZENE	µg/L		BDL	6/18/2014	100
o-DICHLOROBENZENE	µg/L		BDL	6/18/2014	600
para-DICHLOROBENZENE	µg/L		BDL	6/18/2014	75
STYRENE	µg/L		BDL	6/18/2014	100
TETRACHLOROETHYLENE	µg/L		BDL	6/18/2014	5
TOLUENE	µg/L		BDL	6/18/2014	1000
trans-1,2-DICHLOROETHYLENE	µg/L		BDL	6/18/2014	100
TRICHLOROETHYLENE	µg/L		BDL	6/18/2014	5
VINYL CHLORIDE	µg/L		BDL	6/18/2014	2
XYLENES (total)	µg/L		BDL	6/18/2014	1000

**ORGANIC CHEMICAL ANALYSES - SOC's (UL) (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 (UL) (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		0.46	0.55	0.51	10/14/2014	1.0

**CHLORINE (Districts Measure)**

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.1	0.7	0.4	Oct-14	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.02	0.6	0.3	Nov-14	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.2	1.0	0.5	Dec-14	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	44	0.1	0.7	0.5	Oct-14	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	45	0.1	0.8	0.4	Nov-14	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.1	0.8	0.5	Dec-14	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.2	0.9	0.6	Oct-14	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.3	0.9	0.5	Nov-14	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.4	1.0	0.7	Dec-14	Low <trace High >4.0

**TOTAL COLIFORMS (SE/WCL)**

		TOTAL SAMPLES	# POSITIVE	# NEGITIVE	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Oct-14	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Nov-14	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Dec-14	>1 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		44	0	44	Oct-14	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		45	0	45	Nov-14	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Dec-14	>2 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Oct-14	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Nov-14	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Dec-14	>1 POSITIVE

## DISTRIBUTION SYSTEMS SAMPLES

<u>Total Trihalomethanes and Haloacetic Acids (AL)</u>		TTHM RESULTS	MCL (LRAA)	HAA RESULTS	MCL (LRAA)	DATE
<b>EAST LARIMER COUNTY WATER DISTRICT</b>						
SAMPLE SITE - DBP001-ELCSM4	µg/L	36.9	80	19.5	60	4 QTR LRAA
SAMPLE SITE - DBP002-ELCSM6	µg/L	56.3	80	20.0	60	4 QTR LRAA
SAMPLE SITE - DBP003-ELCSM2	µg/L	42.4	80	28.4	60	4 QTR LRAA
<b>FORT COLLINS/LOVELAND WATER DISTRICT</b>						
SAMPLE SITE - DBP001-FCLSM4	µg/L	37.8	80	20.4	60	4 QTR LRAA
SAMPLE SITE - DBP002-FCLSM6	µg/L	54.9	80	18.0	60	4 QTR LRAA
<b>NORTH WELD COUNTY WATER DISTRICT</b>						
SAMPLE SITE - DBP001-NWCMS1	µg/L	57.2	80	23.2	60	4 QTR LRAA
SAMPLE SITE - DBP002-NWCMS4	µg/L	49.4	80	35.3	60	4 QTR LRAA
SAMPLE SITE - DBP003-NWC MAX RES 1	µg/L	45.4	80	28.9	60	4 QTR LRAA

<p>MCL = Maximum Contaminate Level - Enforcable</p> <p>*SMCL = Secondary Maximum Contaminate Level - Recommended</p> <p>**TT = Treatment Technique</p> <p>SOC = Synthetic Organic Chemicals</p> <p>RAA = Running Annual Average</p> <p>&lt; = Less Than</p> <p>(FCL) = Fort Collins Lab (UL) = United Lab (AL) = Accutest Lab (SE) = Stewart Environmental Lab (WCL) = Weld County Lab</p>	<p>BDL = Below Detectable Limit</p> <p>ND = Not Detected</p> <p>N/A = Not applicable</p> <p>VOC = Volatile Organic Chemicals</p> <p>LRAA = Location Running Annual Average</p> <p>&gt; = Greater Than</p>
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