

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 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	27.0	37.0	32.0	34.0	57.0	44.4	N/A
ALUMINUM	mg/l	N/A	N/A	N/A	0.003	0.045	0.018	*0.05 - 0.2
CALCIUM HARDNESS	mg/l	25.0	32.0	26.7	23.0	32.0	27.0	N/A
CHLORINE	mg/l	N/A	N/A	N/A	1.10	1.37	1.26	4.0
CHLORITE	mg/l	N/A	N/A	N/A	0.35	0.86	0.52	1.0
CHLORINE DIOXIDE	mg/l	N/A	N/A	N/A	0.00	0.03	0.00	0.8
CONDUCTIVITY	µs/cm	72.8	87.2	82.5	99.6	135.9	116.9	N/A
DISSOLVED OXYGEN	mg/l	1.8	10.3	6.0	N/A	N/A	N/A	N/A
FLUORIDE	mg/l	0.17	0.21	0.19	0.19	0.73	0.59	4.0/*2.0
HARDNESS (TOTAL)	mg/l	27.0	40.0	35.0	34.0	40.0	34.9	N/A
IRON	mg/l	0.01	0.09	0.04	0.00	0.01	0.00	*0.3
LANGLIER INDEX	S.I.#	-1.3	-2.3	-1.9	-1.05	-1.33	-1.16	N/A
MANGANESE	mg/l	0.01	0.37	0.12	0.000	0.010	0.004	*0.05
pH	VALUE	6.90	7.89	7.30	7.82	8.04	7.95	N/A
TEMPERATURE	°C	3.9	9.6	7.4	4.0	9.9	7.7	N/A
TOTAL DISSOLVED SOLIDS	mg/l	38.8	43.6	41.2	49.7	68.0	58.7	*500
TRUE COLOR	APHA	4	27	10.8	0	3	1.3	*15.0
TURBIDITY	NTU	1.30	3.27	2.07	0.015	0.043	0.017	**<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		3.7	2.3	1.08	10/14/2015	RAA - ≥1.0
			3.7	2.2	1.16	11/3/2015	RAA - ≥1.0
			3.5	2.2	1.06	12/2/2015	RAA - ≥1.0
			INFLUENT			DATE	MCL
ALKALINITY - (PLANT INFLUENT ONLY)	mg/l		30.1			10/14/2015	N/A
			31.4			11/3/2015	N/A
			32.9			12.2/2015	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		0.51	0.60	0.57	10/27/2015	1.0

CHLORINE (Districts Measure)

		TOTAL SAMPLES	MIN	MAX	AVG	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.2	0.9	0.6	Oct-15	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.02	1.0	0.63	Nov-15	Low <trace High >4.0
EAST LARIMER COUNTY WATER DISTRICT	mg/L	20	0.3	1.0	0.7	Dec-15	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.40	1.10	0.73	Oct-15	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.15	0.95	0.48	Nov-15	Low <trace High >4.0
FORTCOLLINS/LOVELAND WATER DISTRICT	mg/L	42	0.10	1.00	0.57	Dec-15	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.30	0.97	0.67	Oct-15	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.34	0.98	0.69	Nov-15	Low <trace High >4.0
NORTH WELD COUNTY WATER DISTRICT	mg/L	10	0.42	1.03	0.75	Dec-15	Low <trace High >4.0

TOTAL COLIFORMS (SE/WCL)

		TOTAL SAMPLES	# POSITIVE	# NEGITIVE	DATE	MCL
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Oct-15	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Nov-15	>1 POSITIVE
EAST LARIMER COUNTY WATER DISTRICT		20	0	20	Dec-15	>1 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Oct-15	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Nov-15	>2 POSITIVE
FORTCOLLINS/LOVELAND WATER DISTRICT		42	0	42	Dec-15	>2 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Oct-15	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Nov-15	>1 POSITIVE
NORTH WELD COUNTY WATER DISTRICT		10	0	10	Dec-15	>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	34	80	31.5	60	4TH QTR
SAMPLE SITE - DBP002-ELCSM6	µg/L	50.5	80	33.6	60	4TH QTR
SAMPLE SITE - DBP003-ELCSM2	µg/L	35.5	80	32.2	60	4TH QTR
FORT COLLINS/LOVELAND WATER DISTRICT						
SAMPLE SITE - DBP001-FCLSM4	µg/L	29.1	80	27.6	60	4TH QTR
SAMPLE SITE - DBP002-FCLSM6	µg/L	32.4	80	24.2	60	4TH QTR
NORTH WELD COUNTY WATER DISTRICT						
SAMPLE SITE - DBP001-NWCMS1	µg/L	52.9	80	23.4	60	4TH QTR
SAMPLE SITE - DBP002-NWCMS4	µg/L	35.5	80	36.4	60	4TH QTR
SAMPLE SITE - DBP003-NWC MAX RES 1	µg/L	40.5	80	34	60	4TH 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	