

**CITY OF LANCASTER  
BUREAU OF WATER  
CHEMISTRY & MICROBIOLOGY LABORATORIES**



**2015 DRINKING WATER ANALYSIS REPORT**

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## PA DEPARTMENT OF ENVIRONMENTAL PROTECTION - PRIMARY CONTAMINANT LIST

## INORGANIC

<u>ANALYSIS</u>	<u>CONESTOGA PLANT</u>		<u>SUSQUEHANNA PLANT</u>		<u>PA DEP MCL</u>	
ANTIMONY	ND	mg/L	ND	mg/L	0.006	mg/L
ARSENIC	ND	"	ND	"	0.01	"
ASBESTOS	ND	mf/L	ND	mf/L	7	mf/L
BARIUM	0.049	mg/L	0.021	mg/L	2	mg/L
BROMIDE *	NT	"	ND	"	NS	---
BERYLLIUM	ND	"	ND	"	0.004	mg/L
CADMIUM	ND	"	ND	"	0.005	"
CHROMIUM	ND	"	ND	"	0.1	"
COPPER	0.06	"	0.05	"	1.3	"
CYANIDE, Free	ND	"	ND	"	0.2	"
FLUORIDE	0.64	"	0.50	"	2.0	"
LEAD	0.005 ***	"	0.005 ***	"	0.015	"
MAGNESIUM, Total	17.8	"	8.6	"	NS	"
MERCURY	ND	"	ND	"	0.002	"
NICKEL	ND	"	ND	"	0.1	"
NITRATE	4.7	"	0.8	"	10	"
ORTHOPHOSPHATE	0.22	"	0.20	"	0.05	"
SELENIUM	ND	"	ND	"	0.05	"
THALLIUM	ND	"	ND	"	0.002	"

## MICROBIOLOGIC

TOTAL COLIFORM	0% Positive Tests	0% Positive Tests	5% Positive Tests
ESCHERICHIA COLI	0% Positive Tests	0% Positive Tests	5% Positive Tests
GIARDIA LAMBLIA	ND	ND	TT

\* Testing for presence of Marcellus shale "frack" water in Susquehanna Treatment Plant raw water.

\*\*\* Lead Action Level, High Risk Homes: 90th Percentile = 0.005 mg/L. Tested in 2013.

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## CHLORINE

<u>ANALYSIS</u>	<u>CONESTOGA PLANT</u>		<u>OYSTER POINT RESERVOIR</u>		<u>DEP MCL</u>	
CHLORINE, Free Residual	1.2	mg/L	1.3	mg/L	0.2	mg/L

## TRIHALOMETHANES

TRIHALOMETHANES, TOTAL *	70.8	µg/L	80	µg/L
(Highest 12 Month Locational Running Annual Average)				

\* Results are from the distribution system

## HALOACETIC ACIDS

HALOACETIC ACIDS, TOTAL *	59.6	µg/L	60	µg/L
(Highest 12 Month Locational Running Annual Average)				

\* Results are from the distribution system

## TURBIDITY

<u>ANALYSIS</u>	<u>CONESTOGA PLANT</u>		<u>SUSQUEHANNA PLANT</u>		<u>PA DEP MCL</u>	
TURBIDITY, Combined Effluent	0.02	NTU	0.02	NTU	0.3	NTU

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PA DEPARTMENT OF ENVIRONMENTAL PROTECTION - SECONDARY CONTAMINANT LIST

## SECONDARY

<u>ANALYSIS</u>	<u>CONESTOGA PLANT</u>		<u>SUSQUEHANNA PLANT</u>		<u>PA DEP SMCL</u>	
ALUMINUM, Total	0.04	mg/L	0.03	mg/L	0.05	mg/L
CHLORIDE	32.9	"	22.5	"	250	"
COLOR	1	CU	0.3	CU	15	CU
IRON, Total	0.01	mg/L	0.01	mg/L	0.3	mg/L
MANGANESE, Total	0.02	"	0.01	"	0.05	"
pH	7.5	"	7.5	"	6.5 - 8.5	"
SULFATE	52	"	35	"	250	"

## OTHER TESTS

ALKALINITY	152	"	68	"	NS	"
AMMONIA	----	"	----	"	NS	"
CALCIUM	60	"	29	"	NS	"
HARDNESS, milligrams/liter	223	"	108	"	NS	"
HARDNESS, grains/gallon	13		6		NS	
ORGANIC CARBON, Total	2.2	"	2.1	"	NS	"
PHOSPHATE, Ortho	0.22	"	0.20	"	0.13 - 0.33	"
SPECIFIC CONDUCTANCE	623	µS/cm	345	µS/cm	NS	µS/cm

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PA DEPARTMENT OF ENVIRONMENTAL PROTECTION - VOLATILE ORGANIC CHEMICAL LIST

## VOLATILE ORGANIC CHEMICALS

<u>ANALYSIS</u>	<u>CONESTOGA PLANT</u>		<u>SUSQUEHANNA PLANT</u>		<u>PA DEP PMCL</u>	
	ND	mg/L	ND	mg/L	0.005	mg/L
BENZENE	ND	mg/L	ND	mg/L	0.005	mg/L
CARBON TETRACHLORIDE	ND	"	ND	"	0.005	"
CHLOROBENZENE	ND	"	ND	"	0.1	"
1,2-DICHLOROBENZENE	ND	"	ND	"	0.6	"
1,4 - DICHLOROBENZENE	ND	"	ND	"	0.075	"
1,2-DICHLOROETHANE	ND	"	ND	"	0.005	"
1,1-DICHLOROETHENE	ND	"	ND	"	0.007	"
cis-1,2,-DICHLOROETHYLENE	ND	"	ND	"	0.07	"
trans-1,2,-DICHLOROETHENE	ND	"	ND	"	0.1	"
1,2-DICHLOROPROPANE	ND	"	ND	"	0.005	"
ETHYLBENZENE	ND	"	ND	"	0.7	"
METHYLENE CHLORIDE	ND	"	ND	"	0.005	"
STYRENE	ND	"	ND	"	0.1	"
TETRACHLOROETHENE	ND	"	ND	"	0.005	"
TOLUENE	ND	"	ND	"	1	"
1,2,4-TRICHLOROBENZENE	ND	"	ND	"	0.07	"
1,1,1-TRICHLOROETHANE	ND	"	ND	"	0.2	"
1,1,2-TRICHLOROETHANE	ND	"	ND	"	0.005	"
TRICHLOROETHENE	ND	"	ND	"	0.005	"
VINYL CHLORIDE	ND	"	ND	"	0.002	"
XYLENES (total)	ND	"	ND	"	10	"

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PA DEPARTMENT OF ENVIRONMENTAL PROTECTION - SYNTHETIC ORGANIC CHEMICAL LIST

## SYNTHETIC ORGANIC CHEMICALS

<u>ANALYSIS</u>	<u>CONESTOGA PLANT</u>		<u>SUSQUEHANNA PLANT</u>		<u>DEP PMCL</u>	
ALACHLOR	ND	mg/L	ND	mg/L	0.002	mg/L
ALDICARB	ND	"	ND	"	0.003	"
ALDICARB SULFOXIDE	ND	"	ND	"	0.004	"
ALDICARB SULFONE	ND	"	ND	"	0.002	"
ATRAZINE	ND	"	ND	"	0.003	"
BENZO(a)PYRENE	ND	"	ND	"	0.0002	"
CARBARYL	ND	"	ND	"	NS	"
CARBOFURAN	ND	"	ND	"	0.04	"
CHLORDANE	ND	"	ND	"	0.002	"
DALAPON	ND	"	ND	"	0.2	"
DIBROMOCHLOROPROPANE	ND	"	ND	"	0.0002	"
BIS(2-ETHYLHEXYL)ADIPHATE	ND	"	ND	"	0.4	"
BIS(2-ETHYLHEXYL)PHTHALATE	ND	"	ND	"	0.006	"
DICAMBA	ND	"	ND	"	0.2	"
DINOSEB	ND	"	ND	"	0.007	"
DIQUAT	ND	"	ND	"	0.02	"
ENDOTHALL	ND	"	ND	"	0.1	"
ENDRIN	ND	"	ND	"	0.0002	"
ETHYLENE DIBROMIDE (EDB)	ND	"	ND	"	0.00005	"
GLYCOPHOSPHATE	ND	"	ND	"	0.7	"
HEPTACHLOR	ND	"	ND	"	0.0004	"
HEPTACHLOR EPOXIDE	ND	"	ND	"	0.0002	"
HEXACHLOROCYCLOPENTADIENE	ND	"	ND	"	0.05	"
3-HYDROXYCARBOFURAN	ND	"	ND	"	NS	"
LINDANE	ND	"	ND	"	0.0002	"
METHOMYL	ND	"	ND	"	NS	"
METHOXYCHLOR	ND	"	ND	"	0.04	"
METOLACHLOR	ND	"	ND	"	0.2	"
METRIBUXIN	ND	"	ND	"	0.2	"
OXAMYL (Vydate)	ND	"	ND	"	0.2	"
PENTACHLOROPHENOL	ND	"	ND	"	0.001	"
PICLORAM	ND	"	ND	"	0.5	"
PROPACHLOR	ND	"	ND	"	NS	"
SIMAZINE	ND	"	ND	"	0.004	"
2,4-D	ND	"	ND	"	0.07	"
2,4,5-TP (SILVEX)	ND	"	ND	"	0.05	"
2,3,7,8-TCDD (DIOXIN)	ND	"	ND	"	0.00000003	"

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**ABBREVIATIONS**

<b>°C - DEGREES CENTIGRADE</b>	<b>ND - NOT DETECTED</b>
<b>cm - CENTIMETER</b>	<b>NS - NO STANDARD</b>
<b>CU - COLOR UNIT</b>	<b>NT - NO TEST</b>
<b>HPC - HETEROTROPHIC PLATE COUNT</b>	<b>NTU - NEPHELOMETRIC TURBIDITY UNIT</b>
<b>Mg/L - MILLIGRAMS/LITER</b>	<b>TT - TREATMENT TECHNIQUE</b>
<b>mL - MILLILITER</b>	<b>WL - WORKING LEVEL</b>
<b>pCi/L - PICOCURIES/LITER</b>	<b>&lt; - LESS THAN</b>
 <b>MF/L - MILLION FIBERS PER LITER, LESS THAN 10 MICROMETERS LONG (ASBESTOS)</b>	
 <b>µS/cm - MICRO SEIMENS PER CENTIMETER</b>	
 <b>95% NEGATIVE - TOTAL COLIFORM ABSENT IN 95% OF SAMPLES</b>	
 <b>PA DEP - PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION</b>	
 <b>MCL - MAXIMUM CONTAMINANT LEVEL</b>	
 <b>SMCL - SECONDARY MAXIMUM CONTAMINANT LEVEL, Not Legally Enforceable</b>	