SARDIS-LONE ELM
Water Supply Corporation

PWS ID# 0700034

6681 W. Highland Rd.
Midlothian, TX
Website: www.sardiswater.com

Annual Water Quality Report
(Consumer Confidence Report)
For the period of January 1 to December 31, 2016.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information about this report or for public involvement & comment opportunities, contact:
Paul Tischler at 972-775-8566 or 972-723-8569

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (972) 775-8566.

SPECIAL NOTICE: Required language for ALL community public water supplies:

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immune-compromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

SECONDARY CONSTITUENTS

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

DEFINITIONS

Maximum Contaminant Level Goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL) – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

ABBREVIATIONS

avg: Regulatory compliance with some MCLs are based on a running annual average of monthly samples.
ppm: milligrams per liter ***or*** parts per million (equals one ounce in 7,350 gallons of water)
ppb: micrograms per liter ***or*** parts per billion (equals one ounce in 7,350,000 gallons of water)
ppt: nanograms per liter ***or*** parts per trillion
ppq: parts per quadrillion ***or*** picograms per liter
pCi/L: picocuries per liter (a measure of radioactivity)

INFORMATION ON SOURCES OF WATER

Sardis-Lone Elm's sources of water include ***self supplied groundwater from the Trinity and Woodbine aquifers*** and ***purchased treated surface water from the Rockett Special Utility District & city of Midlothian.***

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.
Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water run-off, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water run-off, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

SOURCE WATER ASSESSMENTS

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Sardis-Lone Elm's General Manager, Paul Tischler, at 972-775-8566.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Source Water Name		Type of Water	Report Status	Location
1 - 6681 W HIGHLAND	66	GW	Y	
1A - 6681 W HIGHLAND		GW	_____	
2 - 4151 JOE WILSON RD	41	GW	Y	
2A - 4151 JOE WILSON RD	41	GW	Y	
3 - 2820 OAK TREE LN	28	GW	_____	
3A - 2820 OAK TREE LN	28	GW	_____	
4 - 3241 MOCKINGBIRD	32	GW	Y	
4A - 3241 MOCKINGBIRD LN	32	GW	Y	
5 - 8095 BOB WHITE	80	GW	Y	
6 - 4060 SKINNER RD	40	GW	Y	
6A - 4060 SKINNER RD	40	GW	_____	
7 TRINITY - 5181 TAR RD	51	GW	_____	
I / C WITH ROCKETT SUD TX0700033		SW	_____	
I / C WITH MidlothianTX0700005		SW	_____	

TYPE OF DISINFECTION USED IN 2016:

Free Chlorine

Average Level of Free Chlorine-	0.955 mg/l
Minimum Level of Free Chlorine-	0.2 mg/l
Maximum Level of Free Chlorine-	2.400 mg/l
Maximum Residual Disinfectant Level Allowed-	4.000 mg/l

2016 Regulated Contaminants Detected

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	2		0	N	Naturally present in the environment.

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	8.4	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MFL	million fibers per liter (a measure of asbestos)
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	16	0 - 44.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	28	0 - 60.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2016	1	0 - 1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2016	0.075	0.062 - 0.075	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2016	3.3	0 - 3.3	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2016	1.4	1.4 - 1.4	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2016	0.081	0 - 0.081	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2016	1.4	0 - 1.4	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	05/05/2011	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.

Violations Table

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	**Violation Begin**	**Violation End**	**Violation Explanation**
LEAD CONSUMER NOTICE (LCR)	12/30/2013	12/09/2016	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

2016 Consumer Confidence Report Data for Rockett SUD is located below. Rockett SUD is one of many sources of supply for Sardis-Lone Elm WSC.

Rockett's sources of supply include Purchased Surface Water from Robert W. Sokol WTP (Cedar Creek, Richland Chambers Reservoirs), City of Midlothian (Joe Pool, Richland Chambers Reservoir, Cedar Creek), City of Waxahachie (Lake Waxahachie, Lake Bardwell).

2016 Regulated Contaminants Detected Coliform Bacteria

Year	Highest No. of Positive	Total Coliform Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Violation	Likely Source of Contamination
2016	0	*	0	N	Naturally present in the environment
***Two or more coliform found samples in any single month.**					

Fecal Coliform MONTHLY TESTS REPORTED FOUND NO FECAL COLIFORM BACTERIA

Maximum Residual Disinfectant Level

Disinfectant Type	Average Level	Min Level	Max Level	MRDL	MRDLG	Unit	Source
2016 Chloramines	3.0	0.5	4.0	4.0	<4.0	ppm	Disinfectant used to control microbes
2016 Free Chlorine	2.2	0.2	4.0	4.0	<4.0	ppm	Disinfectant used to control microbes

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.06	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2016	29	9.2-61.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	53	31.5-89.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Substance	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	04/27/2011	0.747	0.61-0.747	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	04/27/2011	0.0599	0.059-0.0599	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	04/27/2011	0.403	0.341-0.403	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	04/27/2011	0.6	0.55-0.6	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Nitrate (measured as Nitrogen)	2016	0.16	0.102-0.16	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	04/27/2011	0.781	0.547-0.781	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Thallium	04/27/2011	0.006	0.005-0.006	0.5	2	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photo n emitters	04/27/2011	4.7	4.1-4.7	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	04/27/2011	1	1-1	0	5	pCi/L*	N	Erosion of natural deposits

Violations Table

Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion or lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2010	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality or our drinking water during the period indicated.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chorite	2016	.82	0.24-0.82	.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2016	40	23.5-36.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	57	28.9-49.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2016	1	0-0.94	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2016	0.049	0.037-0.049	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2016	0.99	0.65-0.99	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide	2016	81.9	8.96-81.9	200	200	ppb	N	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	2016	0.2	0.151-0.206	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Nitrate (measured as Nitrogen)	2016	1	0.898-1.46	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (measured as Nitrogen)	2013	0.0515	0.0515-0.0515	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2016	1.6	1.4-1.6	50	50	ppb	N	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines.

Definitions:
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Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.18	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	09/16/2013	4.4	4.4 - 4.4	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	01/25/2011	1	1-1	0	5	pCi/L	N	Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2016	1	0.3-0.79	3	3	Ppb	N	Runoff from herbicide used on row crops
Di (2-ethylhexyl) phthalate	2016	0.0005	0.0005	0.006	0	Mg/L	N	Discharge from rubber and chemical factories.
Simazine	2016	0.25	0-0.25	4	4	ppb	N	Herbicide runoff.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.99 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	98%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

2016 Consumer Confidence Report Data for the city of Midlothian is located below.
Midlothian is also one of many sources of supply for Sardis-Lone Elm WSC.

Midlothian's sources of supply include Cedar Creek & Richland Chambers Reservoirs via the Tarrant Regional Water District pipeline along with Joe Pool Lake.

Midlothian had no contaminant violations in 2016, however, the following were detected:

	Date Sampled	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violation	Likely Source of Contamination
Arsenic	5/18/16	0.00094	ND-0.00094	0.01	0	mg/L	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine	5/18/16	0.00079	0.00045-0.00079	0.003	0.003	mg/L	No	Runoff from herbicide used on row crops
Barium	5/18/16	0.049	0.037-0.049	2	2	mg/L	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	3/23/16	0.00099	0.00065-0.00099	0.1	0.1	mg/L	No	Discharge from steel and pulp mills; erosion of natural deposits

Cyanide (as free cyanide)	3/23/16	0.0819	0.00896-0.0819	0.2	0.2	mg/L	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Di (2-ethylhexyl) phthalate	9/2/16	0.0005	0.0005	0.006	0	mg/L	No	Discharge from rubber and chemical factories

Fluoride	5/18/16	0.151	0.151	4	4	mg/L	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	5/18/16	1.46	1.46	10	10	mg/L	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	5/18/16	0.0014-0.0016	0.0032	0.05	0.05	mg/L	No	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines