Consumer Confidence Report (CCR) Certification Form

Water System Name: Town of Bakersville

Water System No.: NC 01-61-0-1-5 **Report Year:** 2018 **Population Served:** 464

The Community Water System (CWS) named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory. In addition, if this report is being used to meet Tier 3 Public Notification requirements, as denoted by the checked box below, the CWS certifies that public notification has been provided to its consumers in accordance with the requirements of 40 CFR 141.204(d).

Certified by: **Name:** Charles E. Vines **Title:** Mayor

Signature: Charles E. Vines **Phone #:** 828-688-2113

Delivery Achieved Date: 07/16/2019 **Date Reported to State:** 07/16/2019

☐ **The CCR includes the mandated Public Notice for a monitoring violation (check box, if yes)**

Check **all** methods used for distribution (see instructions on back for delivery requirements and methods):

☒ Paper copy to all US Mail ☐ Hand Delivery ☐

☐ Notification of Availability of Paper Copy (other than in the CCR itself)
Notification Method _____ (i.e. US Mail, door hanger)

☐ Notification of CCR URL URL: _____
Notification Method _____(i.e. on bill, bill stuffer, separate mailing, email)

☐ Direct email delivery of CCR (attached? ___ or embedded? ____)
Notification Method _____ (i.e. on bill, bill stuffer, separate mailing)

☐ Newspaper (attach copy) What Paper? _____Date Published: _____
Notification Method _____ (i.e. US Mail, on bill, bill stuffer, door hanger, a postcard dedicated to the CCR, or email)

☒ **"Good faith" efforts** (in addition to the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. Extra efforts included the following methods:

- ☐ posting the CCR on the Internet at URL: _____
- ☐ mailing the CCR to postal patrons within the service area
- ☐ advertising the availability of the CCR in news media (attach copy of announcement)
- ☐ publication of the CCR in local newspaper (attach copy)
- ☐ posting the CCR in public places such as: (attach list if needed) _____
- ☐ delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers
- ☐ delivery to community organizations such as: (attach list if needed)

Note: Use of social media (e.g., Twitter or Facebook) or automated phone calls DO NOT meet existing CCR distribution methods under the Rule.

INSTRUCTIONS

Submittal of your CCR and Certification Form to the Public Water Supply Section

Beginning in 2018, the CCR for report year 2017 and future years must be submitted using our new ECERT Online Certification application. You must submit your CCR and Certification form using the links provided below. Follow the directions to ensure efficient tracking and receipt of your submittal, expedited review of report data by the Public Water Supply (PWS) Section, and your system's compliance with state and federal regulations.

- **CCR Template:** http://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Resources/files/pws/pnrule/CCR_Template_(with%20Certification%20&%20ECert%20Inst.)_lfr.doc

- **ECERT Online Certification and Submittal of CCR:** https://pws.ncwater.org/ECERT/pages/default.aspx
  For assistance with accessing ECERT please send email to: PWSS.CCR@ncdenr.gov (use 'Return Receipt Requested' to verify PWS Section's receipt.) **Note:** ECERT Access Instructions are located at the following link: https://files.nc.gov/ncdeq/Water%20Resources/files/pws/compliance/ECERT_Access%20Instructions_Revision_tam_lfr.pdf

If you do not have internet access, please submit using the following methods:

- **By Postal Mail:** Mail your CCR and Certification form to: Public Water Supply Section, 1634 Mail Service Center, Raleigh, NC 27699-1634, Attn: CCR Rule Manager. (Physical Location: Archdale Bldg. 13th floor, 512 N. Salisbury St., Raleigh, NC)

- **By FAX:** FAX your CCR and Certification form to (919) 715-6637, Attn: CCR Rule Manager

CCR Customer Direct Delivery Requirements (Based on Population)

- **Systems serving 100,000 or more persons must** post the CCR on a publicly-accessible Internet site using a direct URL.
- **Systems serving 10,000 or more persons must** distribute the CCR by mail or direct delivery.
- **Systems serving less than 10,000 persons but more than 500 persons must either**: (1) distribute the CCR by mail or direct delivery **OR** (2) notify their customers that the CCR is not being mailed, but it will be in what newspaper(s) and when (attach copy of notice). The complete CCR should be printed in the local newspaper, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)*
- **Systems serving 500 or fewer persons must either:** (1) distribute the CCR by mail or direct delivery OR (2) notify their customers that the CCR is not being mailed, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)*

CCR Direct Delivery Methods for Bill-Paying Customers

CCR DELIVERY METHOD	METHOD DESCRIPTION (Click link: EPA-CCR Rule Delivery Options Memo January 3, 2013. for referenced Appendix Figures below.)
Mail – paper copy	CWS mails a paper copy of the CCR to each bill-paying customer.
Mail – notification that CCR is available on web site via a direct URL	CWS mails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the "directly deliver" requirement. The mail method for the notification may be, but is not limited to, a water bill insert, statement on the water bill or community newsletter. See Figure 1 in the Appendix.
Email – direct URL to CCR	CWS emails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the "directly deliver" requirement. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 2 in the Appendix.
Email – CCR sent as an attachment to email	CWS emails the CCR as an electronic file email attachment [e.g., portable document format (PDF)]. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 3 in the Appendix.
Email – CCR sent as an embedded image in an email	CWS emails the CCR text and tables inserted into the body of an email (not as an attachment.) This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 4 in the Appendix.
Additional electronic delivery that meets "otherwise directly deliver" requirement	CWS delivers CCR through a method that "otherwise directly delivers" to each bill-paying customer and in coordination with the primacy agency. This category is intended to encompass methods or technologies not included above. CWSs and primacy agencies considering new methods or technologies should consult with the EPA to ensure it meets the intent of "otherwise directly deliver."

Note: Use of social media or automated phone calls DO NOT meet existing CCR distribution methods under the Rule.

"2018" Annual Drinking Water Quality Report
"Town of Bakersville"
PWSID: 01-61-015
Date 07/16/2019

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact Charles Vines at (828) 688-2113. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 6:30pm in Bakersville Town Hall on the last Monday of each month.**

What EPA Wants You to Know

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants 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. [Name of Utility] is responsible for providing high quality drinking water, but 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.

The sources of drinking water (both tap water 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 pick up 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 stormwater runoff, 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 stormwater runoff, 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 stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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.

When You Turn on Your Tap, Consider the Source

The water that is used by this system is from gound water wells. We have 2 active wells – one at the Reservoir and one off of Linda Lane.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Bakersville was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Reservoir Well	Moderate	September 11th, 2017
Linda Lane Well	Lower	September 11th, 2017

The complete SWAP Assessment report for Bakersville may be viewed on the Web at: https://www.ncwater.org/?page=600 Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

Protection of drinking water is everyone's responsibility. We have implemented the following source water protection actions: …….. You can help protect your community's drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).

Violations that Your Water System Received for the Report Year

During 2018, or during any compliance period that ended in 2018, we received no violations.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, (2018).** The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Important Drinking Water Definitions:

Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular rule.

Non-Detects (ND) - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfection 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.

Maximum Residual Disinfection 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.

Locational Running Annual Average (LRAA) – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

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 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.

Tables of Detected Contaminants

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	02/02/2016	N	0.21	.13 – 1.70	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Nitrate/Nitrite Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low	Range High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)		N	ND	N/A		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)				N/A		1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Chemical Contaminants including pesticides and herbicides were tested for on 04/03/2018. None were detected.
Volatile Organic Chemical Contaminants were tested for on 07/10/2018. None were detected.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90^{th} percentile)	07/05/2016	0.051	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90^{th} percentile)	07/05/2016	0	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low	Range High	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	06/24/2015	N	ND			0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)	06/24/2015	N	6.8			0	50 *	Decay of natural and man-made deposits
Combined radium (pCi/L)	08/02/2016	N	ND			0	5	Erosion of natural deposits
Uranium (pCi/L)	06/24/2015	N	ND			0	20.1	Erosion of natural deposits

* Note: The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

Disinfectant Residuals Summary

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low	Range High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2018	N	.38	.04	.53	4	4.0	Water additive used to control microbes
Chloramines (ppm)						4	4.0	Water additive used to control microbes
Chlorine dioxide (ppb)						800	800	Water additive used to control microbes

Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range Low	Range High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb)	2018	N	ND			N/A	80	Byproduct of drinking water disinfection
Location (Ex. B01)								
HAA5 (ppb)	2018	N	ND			N/A	60	Byproduct of drinking water disinfection
Location (Ex. B01)								

Other Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Bromate (ppb)				0	10	By-product of drinking water disinfection
Chlorite (ppm)				0.8	1.0	By-product of drinking water chlorination

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Other Miscellaneous Water Characteristics Contaminants

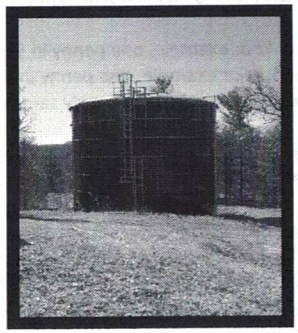
Contaminant (units)	Sample Date	Your Water	Range Low	Range High	SMCL
Iron (ppm)	02/02/2016	ND	N/A		0.3 mg/L
Manganese (ppm)	02/02/2016	ND	N/A		0.05 mg/L
Nickel (ppm)	02/02/2016	ND	N/A		N/A
Sodium (ppm)	02/02/2016	9.5	N/A		N/A
Sulfate (ppm)	02/02/2016	25.3	8	31	250 mg/L
pH	02/02/2016	6.9	6.9		6.5 to 8.5

Additional Monitoring of Other Contaminants

Bakersville's Drinking Water Source

The water that is used by this system is ground water from two wells: Linda Lane & The Reservoir well. The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate, or Lower. The relative susceptibility rating of the source for The Town of Bakersville was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the watershed and its delineated assessment area). The Town of Bakersville water sources were determined to have a susceptibility rating of **Moderate /Lower** according to the SWAP report released in September 2017.

The complete SWAP Assessment report for the Town of Bakersville may be viewed on the web at: www.ncwater.org/pws/swap. Please note that results available on the web site may differ from the results that were available at the time this water quality report was prepared. You may mail a request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh N.C. 27699-1634 or email requests to swap@ncdenr.gov. Please indicate system name (Town of Bakersville), PWSID(01-61-015), and provide your name, mailing address and phone number. If you have questions about the SWAP report please contact the Source Water Assessment staff by phone at (919)-707-9098. It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.



Town of Bakersville
2018 Water Quality Report

Bakersville "Gateway to Roan Mountain"

Town of Bakersville Public Water Utility meets or exceeds all Drinking Water Quality Standards

The Town of Bakersville utilizes a groundwater system treated with chlorine. An average of 2 million gallons of water is pumped monthly. The Town has met or exceeded all state and federal standards for drinking water quality for year 2018. This brochure includes details about where your drinking water comes from, how it is treated, what it contains, and exactly how it compares to state and federal standards. This report is updated on a regular basis and made available to our customers.

Town of Bakersville
Mayor: Charles Vines
Town Council: Charles Nash, Jordon Baker, & James Thomas
Water Operator: Gary Hyatt

Town of Bakersville
26 S. Mitchell Ave
P.O. Box 53
Bakersville, NC 28705
info@bakersvillenc.com
(828)-688-2113

Sources of Drinking Water

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 pick up 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 runoff, 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 stormwater runoff, and residential uses.

Organic Chemical Contaminants including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm runoff, and septic systems.

Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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.

Drinking water, including bottled, 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 Environmental Protection Agency's Safe Drinking Water Hotline (800)-426-4791.

Treated Water Quality

The following substances were detected in the Town of Bakersville public water supply during the 2018 calendar year, or the results are from the most recently required testing period.

Nitrate/Nitrite Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	Range Low	Range High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	N	ND	N/A		10	10	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)			N/A		1	1	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits

Unregulated Inorganic Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low	Range High	Secondary MCL
Sulfate (ppm)	2/2/2016	25.3	8	31	250

Disinfectants and Disinfection Byproducts Contaminants

Disinfection Byproduct	MCL Violation Y/N	Your Water (highest RAA)	Range Low	Range High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb)	N	ND			N/A	80	Byproduct of drinking water disinfection
HAA5 (ppb)	N	ND			N/A	60	Byproduct of drinking water disinfection
Bromate (ppb)					0	10	Byproduct of drinking water disinfection
Chlorite (ppm)					0.8	1	Byproduct of drinking water disinfection
Chlorine dioxide (ppb)					MRDLG=800	MRDLG = 800	Water additive used to control microbes
Chloramines (ppm)					MRDLG=4	MRDL=4	Water additive used to control microbes
Chlorine (ppm)	N	0.38	0.04	0.53	MRDLG=4	MRDL=4	Water additive used to control microbes

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low	Range High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	02/02/2016	N	0.21	.13	1.70	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer.

Synthetic Organic Chemical Contaminants including pesticides and herbicides were tested for on 8/02/2016. None were detected.
Volatile Organic Chemical Contaminants were tested for on 7/05/2016. None were detected.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90th percentile)	07/05/2016	0.051	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb) (90th percentile)	07/05/2016	0	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCL	Likely Source of Contamination
Alpha emitters(pCi/l)	6/24/2015	N	ND	15	Erosion of natural deposits
Beta/photon emitters (pCi/l)	6/24/2015	N	6.8	50	Decay of natural and man-made deposits
Combined radium (pCi/l)	8/02/2016	N	ND	5	Erosion of natural deposits
Uranium	6/24/2015	N	ND	20.1	Erosion of natural deposits

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low High	SMCL
Iron (ppm)	02/02/2016	ND	N/A	0.3
Manganese (ppm)	02/02/2016	ND	N/A	0.05
Nickel (ppm)	02/02/2016	ND	N/A	N/A
Sodium (ppm)	02/02/2016	9.5	N/A	N/A
pH	02/02/2016	6.9	N/A	6.5 to 8.5

Lead Exposure From Water

If present, elevated levels of lead in drinking water 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. The Town of Bakersville is responsible for providing high quality drinking water, but 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.

Definitions:

ND – Not Detected

EPA – Environmental Protection Agency

(MCL) Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water.

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

ppb – One part per billion. (For example, one penny in $10,000,000.)

ppm – One part per million. (For example, one penny in $10,000.)

RAA, Running Annual Average – last four quarterly samples collected from the system.

pCi/L, Picocuries per liter – A measure of the radioactivity in water.

Action Level – The concentration of a contaminant that triggers treatment or other requirements that a water system must follow.

Extra Note: MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.