**Consumer Confidence Report**

***2017 Annual Drinking Water Quality Report***

Kane County Water Conservancy District

Duck Cr. Wells#1, #2, #3 – System #13057

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. 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. Our water source is the Claron Formation of reddish limestone and conglomerate rocks overlain by several clay layers. The Claron Formation is thick and without significant folding and faulting. The wells tap water from 500 feet to 1000 feet deep. Other wells in the area tap shallower aquifers, which yield much less water. According to R309-600-6 (1) (v), the producing aquifer of the well can be classified as a protected aquifer. The Duck Creek wells are located on Cedar Mountain in the Duck Creek Village and Swains Creek areas. The wells were drilled in the following areas: Movie Ranch for well#1 and well#2, Meadow View Heights for Well #3, Duck Creek Pines for well #4, Swains Creek for well#5 and Long Valley for well#6.

Kane County Water has a Drinking Water Source Protection Plan (DWSSP) that is available for your review. It provides more information such as potential sources of contamination and our source protection areas. It has been determined we have a low susceptible level of potential sources of contamination.

The Drinking Water Source Protection Plan for system #13057on Cedar Mountain is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our sources have been determined to have no potential contamination. The sources are in remote locations and because of well depths and a clay layer, the potential contamination is very low in zone 1. There are several county roads that run adjacent to the wells, which create potential 250-day zone 2 susceptibility. Potential hazards associated with the road are accidental spills and releases of petroleum/chemical products from vehicles traveling the road. There is potential contamination in zones 3 and 4 as a result of residential septic systems. Residential streets pose hazards associated with vehicle accidents/spills. We have developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you’d like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

**The Kane County Water Conservancy District is pleased to report that our drinking water meets federal and state requirements.** This report shows our water quality and what it means to you our customer. If you have any questions about this report or concerning your water utility, please contact **Kelly Brown at (435) 644-3997 or e-mail him at kellybrown.kcwcd@gmail.com.** 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 normally held on **the 2nd Thursday of each month in the KCWCD conference room at 7:00PM from April through October and at 6:00PM from November through March.**

**Kane County Water Conservancy District** routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, **2017.** All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

***Non-Detects (ND)*** - laboratory analysis indicates that the constituent is not present.

***ND/Low - High*** *-* For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

***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.

***Millirems per year (mrem/yr)*** - measure of radiation absorbed by the body.

***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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

***Maximum Contaminant Level (MCL)*** - The “Maximum Allowed” (MCL) is 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 “Goal”(MCLG) is 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 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.

***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.

***Date***- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem out-dated.

***Waivers (W)***- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

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| **TEST RESULTS** | | | | | | | | |
| Contaminant | Violation  Y/N | Level  Detected  ND/Low-High | | Unit  Measurement | MCLG | MCL | Date Sampled | Likely Source of Contamination |
| **Microbiological Contaminants** | | | | | | | | |
| Total Coliform Bacteria | N | 0 | | N/A | 0 | Presence of coliform bacteria in 5% of monthly samples | 2014 | Naturally present in the environment |
| Fecal coliform and *E.coli* | N | 0 | | N/A | 0 | If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive | 2014 | Human and animal fecal waste |
| Turbidity  for Ground Water | N | 1.4 | | NTU | N/A | 5 | 2016 | Soil runoff |
| Turbidity for Surface Water | N | NA | | NTU | N/A | 0.5 in at least 95% of the samples and must never exceed 5.0 | 2011 | Soil Runoff  (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits) |
| **Radioactive Contaminants** | | | | | | | | |
| Alpha emitters | N | 7.4 | | pCi/1 | 0 | 15 | 2016 | Erosion of natural deposits |
| Combined radium | N | 1.0 | | pCi/1 | 0 | 5 | 2013 | Erosion of natural deposits |
| Radium 228 | N | 2.5 | | pCi/1 | 0 | 5 | 2016 | Erosion of natural deposits |
| **Inorganic Contaminants** | | | | | | | | |
| Antimony | N | ND | | ppb | 6 | 6 | 2016 | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder |
| Arsenic | N | .0012 | | ppb | 0 | 10 | 2016 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes |
| Asbestos | N | W | | MFL | 7 | 7 | 2011 | Decay of asbestos cement water mains; erosion of natural deposits |
| Barium | N | .709 | | ppb | 2000 | 2000 | 2016 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Beryllium | N | ND | | ppb | 4 | 4 | 2016 | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries |
| Cadmium | N | ND | | ppb | 5 | 5 | 2016 | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints |
| Carbon, Total Organic (TOC) | N | <.5 | | ppm | NA | TT | 2011 | Naturally present in the environment |
| Chromium | N | ND | | ppb | 100 | 100 | 2016 | Discharge from steel and pulp mills; erosion of natural deposits |
| Copper   1. 90% results 2. # of sites that exceed the **AL** | N | A .0502 ave  B 0 | | ppm | 1.3 | 1.3 | 2016 | Corrosion of household plumbing systems; erosion of natural deposits |
| Cyanide | N | ND | | ppb | 200 | 200 | 2016 | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| Fluoride | N | .3 | | ppb | 4000 | 4000 | 2016 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Lead   1. 90% results 2. # of sites that exceed the **AL** | N | A .0011 ave  B 0 | | ppm | 0 | .015 | 2016 | Corrosion of household plumbing systems, erosion of natural deposits |
| Mercury (inorganic) | N | ND | | ppb | 2 | 2 | 2016 | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland |
| \*Nitrate (as Nitrogen) | N | .1 | | ppm | .1 | 10 | 2017 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite (as Nitrogen) | N | <120 | | Ppb | 1000 | 1000 | 2011 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Selenium | N | .002 | | ppb | 50 | 50 | 2016 | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Sodium | N | 1.4 | | ppm | None set by EPA | None set by EPA | 2016 | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills. |
| Sulfate | N | 2 | | ppm | 250\* | 250\* | 2016 | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland. |
| Thallium | N | ND | | ppb | 1 | 2 | 2016 | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories |
| TDS (Total Dissolved solids) | N | 216 | | ppm | 1000\*\* | 1000\*\* | 2016 | Erosion of natural deposits |
| \*If the sulfate level of a public water system is greater than 500 ppm, the supplier must satisfactorily demonstrate that: a) no better water is available, and b) the water shall not be available for human consumption from commercial establishments. In no case shall water having a level above 1000 ppm be used.  \*\*If TDS is greater than 1000 ppm the supplier shall deomonstrate to the Utah Drinking Water Board that no better water is available. The Board shall not allow the use of an inferior source of water if a better source is available. | | | | | | | | |
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| **Volatile Organic Contaminants** | | | | | | | | |
| Benzene | N | ND | ppb | | 0 | 5 | 2016 | Discharge from factories; leaching from gas storage tanks and landfills |
| Carbon tetrachloride | N | ND | ppb | | 0 | 5 | 2016 | Discharge from chemical plants and other industrial activities |
| Chlorobenzene | N | ND | ppb | | 100 | 100 | 2016 | Discharge from chemical and agricultural chemical factories |
| o-Dichlorobenzene | N | ND | ppb | | 600 | 600 | 2016 | Discharge from industrial chemical factories |
| p-Dichlorobenzene | N | ND | ppb | | 75 | 75 | 2016 | Discharge from industrial chemical factories |
| 1,2 - Dichloroethane | N | ND | ppb | | 0 | 5 | 2016 | Discharge from industrial chemical factories |
| 1,1 - Dichloroethylene | N | ND | ppb | | 7 | 7 | 2016 | Discharge from industrial chemical factories |
| cis-1,2-trichloroethylene | N | ND | ppb | | 70 | 70 | 2016 | Discharge from industrial chemical  Factories |
| trans - 1,2 -Dichloroethylene | N | ND | ppb | | 100 | 100 | 2016 | Discharge from industrial chemical factories |
| Dichloromethane | N | ND | ppb | | 0 | 5 | 2016 | Discharge from pharmaceutical and chemical factories |
| 1,2-Dichloropropane | N | ND | ppb | | 0 | 5 | 2016 | Discharge from industrial chemical factories |
| Ethylbenzene | N | ND | ppb | | 700 | 700 | 2016 | Discharge from petroleum refineries |
| Styrene | N | ND | ppb | | 100 | 100 | 2016 | Discharge from rubber and plastic factories; leaching from landfills |
| Tetrachloroethylene | N | ND | ppb | | 0 | 5 | 2016 | Discharge from factories and dry cleaners. |
| 1,2,4 -Trichlorobenzene | N | ND | ppb | | 70 | 70 | 2016 | Discharge from textile-finishing factories |
| 1,1,1 - Trichloroethane | N | ND | ppb | | 200 | 200 | 2016 | Discharge from metal degreasing sites and other factories |
| 1,1,2 -Trichloroethane | N | ND | ppb | | 3 | 5 | 2016 | Discharge from industrial chemical factories |
| Trichloroethylene | N | ND | ppb | | 0 | 5 | 2016 | Discharge from metal degreasing sites and other factories |
| Toluene | N | ND | ppb | | 1000 | 1000 | 2016 | Discharge from petroleum factories |
| Vinyl Chloride | N | ND | ppb | | 0 | 2 | 2016 | Leaching from PVC piping; discharge from plastics factories |
| Xylenes | N | ND | ppb | | 10000 | 10000 | 2016 | Discharge from petroleum factories; discharge from chemical factories |
| **Disinfection By-products** | | | | | | | | |
| TTHM [Total trihalomethanes] | N | ND | ppb | | 0 | 80 | 2016 | By-product of drinking water disinfection |
| Haloacetic Acids | N | ND | ppb | | 0 | 60 | 2016 | By-product of drinking water disinfection |
| Chlorine | N | <.5 | ppm | | 4 | 4 | 2016 | Water additive used to control microbes |

\*Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

The following constituents are regulated more closely, Arsenic, Lead, Nitrate, Radon and Cryptosporidium. Notice of any detection is required.

***Microbiological Contaminants:***

**Total Coliform**. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

**Fecal coliform/E.Coli**. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

**Turbidity.** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

**Radioactive Contaminants:**

**Alpha emitters**. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Beta emitters**. Certain minerals are radioactive and may emit a form of radiation known as beta radiation. Some people who drink water containing beta emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Combined Radiu**m 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

**Inorganic Contaminants:**

**Antimony.** Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

**Arsenic.** Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

**Asbestos**. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

**Barium**. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

**Beryllium**. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

**Cadmium**. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

**Carbon, Total Organic (TOC).** Carbon, Total Organic (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

**Chromium**. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

**Copper**. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

**Cyanide.** Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

**Fluoride**. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

**Lead**. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

**Mercury** (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

**Nitrate.** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

**Nitrite**. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

**Selenium**. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

**Sodium**. Sodium is an essential nutrient. However, some people who drink water containing sodium in excess of the MCL may experience health promlems.

**Sulfate**. High levels of sulfates in the drinking water may cause some people to have stomach problems.

**Thallium.** Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

**TDS** (Total Dissolved Solids). TDS is an aesthetic water quality problem, however high levels may cause some people to experience health problems.

**Synthetic organic contaminants including pesticides and herbicides:**

**2,4-D**. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

**2,4,5-TP** (Silvex). Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

**Acrylamide**. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

**Alachlor**. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

**Atrazine.** Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

**Benzo(a)pyrene** [PAH]. Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

**Carbofuran**. Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

**Chlordane.** Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.

**Dalapon.** Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

**Di** (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects such as weight loss, liver enlargement or possible reproductive difficulties.

**Di (2-ethylhexyl) phthalate**. Some people who drink water containing di (2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

**Dibromochloropropane (DBCP).** Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

**Dinoseb.** Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

**Dioxin (2,3,7,8-TCDD**). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

**Diquat**. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

**Endothall.** Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

**Endrin.** Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

**Epichlorohydrin.** Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

**Ethylene dibromide**. Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

**Glyphosate.** Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.

**Heptachlor.** Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

**Heptachlor epoxide**. Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

**Hexachlorobenzene.** Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

**Hexachlorocyclopentadiene.** Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

**Lindane.** Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

**Methoxychlor.** Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

**Oxamyl [Vydate**]. Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

**PCBs** [Polychlorinated biphenyls]. Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

**Pentachlorophenol.** Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

**Picloram.** Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

**Simazine**. Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

**Toxaphene.** Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

**Volatile Organic Contaminants:**

**Benzene**. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

**Carbon Tetrachloride**. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

**Chlorobenzene.** Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

**o-Dichlorobenzene**. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

**p-Dichlorobenzene**. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

**1,2-Dichloroethane**. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

**1,1-Dichloroethylene**. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

**cis-1,2-Dichloroethylene**. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

**trans-1,2-Dicholoroethylene**. Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

**Dichloromethane**. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

**1,2-Dichloropropane**. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

**Ethylbenzene**. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

**Styrene.** Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

**Tetrachloroethylene.** Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

**1,2,4-Trichlorobenzene.** Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

**1,1,1,-Trichloroethane**. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

**1,1,2-Trichloroethane**. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

**Trichloroethylene**. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

**TTHMs** [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**Toluene**. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

**Vinyl Chloride**. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

**Xylenes**. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at the Kane County Water Conservancy District work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.

March 28, 2018

Patti Fauver

CCR Compliance

Division of Drinking Water

P.O. Box 144830

Salt Lake City, Utah 84114-4830

Dear Ms. Fauver:

Subject: Consumer Confidence Report for Kane County Water Conservancy District System#13057

Enclosed is a copy of the Cedar Mountain Consumer Confidence Report for the Kane County Water Conservancy District System#13057. It contains the water quality information for our water system for the calendar year 2017 or the most recent sample data.

Since this system is between 500-10,000 in population, the District will notify its customers by posting on its monthly billing statement that a copy of the CCR is available at the District office or can be mailed out upon request. The District will also publish the CCR in a report in the SUN newspaper on April 5th, 2018

***If you have any questions, please contact me at (435) 644-3997***

***Sincerely,***

***Kelly Brown, Office Assistant***

***Kane County Water Conservancy District***

***Enclosure:***

***Section 9. (This section is REQUIRED for detects of arsenic, nitrates, lead, cryptosporidium and radon. If these are detected, you are REQUIRED to provide a short informational statement about the impact of the contaminant as below. The language may be modified only in consultation with the State Primacy Agency.)***

*(A) Systems which* ***detect arsenic at levels above 5 ppb (ug/l) and up to and including 10 ppb (ug/l)***  *MUST include the following language:*

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(B) Also, A system which detects nitrate at levels above 5 mg/L, but below the MCL MUST include a short informational statement about the impacts of nitrate on

*children using language such as:*

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

*(C) Systems which* ***detect lead above the action level in more than 5%, but fewer then 10%,*** *of homes sampled, the following language is REQUIRED:*

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

*(D) Systems that have performed any monitoring for Cryptosporidium must*

*indicate that Cryptosporidium may be present in the source water or the finished*

*water and include the summary of the result and an explanation of the*

*significance.*

*We constantly monitor the water supply for various constituents. We have detected cryptosporidium in the \_\_\_\_\_\_\_\_\_\_ (****finished water or source water****). We detected this constituent in \_\_\_\_\_ out of \_\_\_\_\_ samples tested. We believe it is important for you to know that cryptosporidum may cause serious illness in 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. These people should seek advice from their health care providers.*

**Cryptosporidium if sampled:**

For systems with negative sample results:

*We are required to test our sources of drinking water, as well as our treated tap water, for the presence of Cryptosporidium. Cryptosporidium is a microbial parasite which is found in surface water throughout the United States. When ingested Crytosporiduim can cause gastrointestinal distress for otherwise healthy people and more serious illness or death for people with weak immune systems. We did not find any Cryptosporidium in our source (untreated) water or finished (treated) water. Therefore, we don’t believe that you need to worry about these results. We have a modern and effective filtration plant, and as far as anyone knows, filtration is the single best protection against Cryptosporidium*.

For systems with positive sample results:

*We are required to test our sources of drinking water, as well as our treated tap water, for the presence of Cryptosporidium. We test for this contaminant quarterly in both source water and treated water. Although small amounts were found in the source water, we did not find any in the treated water that goes to your tap. Cryptosporidium is a microbial parasite which is found in surface water throughout the United States. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and/or finished water indicates the presence of these organisms. Unfortunately, current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of an infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks, However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. Cryptosporidium must be ingested for it to cause disease, and it may be spread through means other than drinking water*

*(E) Systems that have performed any monitoring for radon that indicates that*

*radon may be present in the finished water must include the results of the*

*monitoring and an explanation of the significance of the results.*

*We constantly monitor the water supply for various constituents. We have detected radon in the finished water supply in \_\_\_\_\_ out of \_\_\_\_\_ samples tested. There is no federal regulation for radon levels in drinking water. Exposure to air transmitted radon over a long period of time may cause adverse health effects.*

*Radon is a radioative gas which is naturally occurring in some ground water. It poses a lung cancer risk when the gas is released from your water into the air (as occurs during showering, bathing, or washing dishes or clothes), and a stomach cancer risk when you drink water containing radon. Radon gas released from drinking water is a relatively small part of the total radon in air. Other sources are radon gas from soil which enter homes through foundations, and radon inhaled directly while smoking cigarettes. Experts are not sure exactly what the cancer risk is from a given level of radon in your drinking water. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested contact Project Environment Radon Hotline 800-458-0145.*

***Section 10. (Select the appropriate explanation for the Test Results Chart. If you had a violation, you are REQUIRED to have an explanation of the violation including, duration of the violation, potential adverse health effects and actions taken to address the violation. This is not required for detects.)***

**If you had a detect but no violations:**

As you can see by the table, our system had no violations. We’re proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

**TCR QUALITY VIOLATIONS**

**Acute (Code 21)**

Water samples taken in (month) 2008 confirmed the presence of fecal coliforms or Escherichia coli. The presence of fecal coliforms and E. coli in drinking water is serious because it is associated with sewage or animal wastes and can cause disease. The presence of this bacteria in our system was a result of (reason for fecal contamination). Disease symptoms include diarrhea, cramps, nausea, and possible jaundice, and associated headaches and fatigue. When the (month) samples confirmed the presence of fecal coliforms and E. coli we (describe steps taken to identify and correct the problem.) Subsequent monthly sampling has confirmed the absence of fecal coliforms and E. coli in the water system.

**Non-Acute (Code 22)**

Water samples taken in (month) 2008 confirmed the presence of total coliform bacteria. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria is usually a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may have been contaminated with organisms that can cause disease. Symptoms may include diarrhea, cramps, nausea, and possible jaundice, and any associated headaches and fatigue. When the monthly samples confirmed the presence of total coliform bacteria we took steps to identify and correct the problem. Subsequent monthly sampling has confirmed the absence of total coliforms in the water system.

**TCR MONITORING AND REPORTING**

**Routine Major (Code 23)**

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. In (month) 2008 we failed to test for coliform bacteria. Water quality may change without any visible indication due to unanticipated environmental factors. For this reason, we are required to sample for coliform bacteria on a monthly basis. This violation does not necessarily pose a health risk. We have reviewed why we failed to take our routine coliform bacteria tests and have taken steps to ensure that it will not happen again.

**Routine Minor (Code 24)**

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. In (month) 2008 we failed to perform all the required tests for coliform bacteria. Water quality may change without any visible indication due to unanticipated environmental factors. For this reason, we are required to sample for coliform bacteria on a monthly basis. This violation does not necessarily pose a health risk. We have reviewed why we failed to take our routine coliform bacteria tests and have taken steps to ensure that it will not happen again.

**Repeat Major (Code 25)**

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. In (month) 2008 we failed to take repeat coliform bacteria tests. Repeat testing is used to ensure that the public is provided with safe drinking water after a routine sample tests positive for total coliforms. For this reason we were required to take repeat samples. This violation does not necessarily pose a health risk. We have reviewed why we failed to take our repeat coliform bacteria samples and have taken steps to ensure that it will not happen again.

**Repeat Major (Code 26)**

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. In (month) 2008 we failed to take all the required repeat coliform bacteria tests. Repeat testing is used to ensure that the public is provided with safe drinking water after a routine sample tests positive for total coliforms. For this reason we were required to take repeat samples. This violation does not necessarily pose a health risk. We have reviewed why we failed to take our repeat coliform bacteria samples and have taken steps to ensure that it will not happen again.

**PUBLIC NOTICE**

**Public Notice Violation (Code 75)**

Owners or operators of a public water system are required to provide public notice for violations of drinking water standards or monitoring requirements.  In (month) of (year) we failed to provide the public notice as required. We have reviewed why we failed to provide public notice as required and will take steps to ensure that it will not happen again.

**All other chemical monitoring violations are code 03**

**CHEMICAL MONITORING**

**Asbestos Chemical Monitoring (Code 03) (1094)**

We periodically monitor for Asbestos fibers in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Asbestos is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Inorganic Chemical Monitoring (Code 03) (CIOC)**

We periodically monitor for Inorganic chemical constituents in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Inorganic chemicals is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Nitrate Chemical Monitoring (Code 03) (1040)**

We periodically monitor for Nitrate in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Nitrate is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Nitrite Chemical Monitoring (Code 03) (Nitrite)**

We periodically monitor for Nitrite in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Nitrite is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Volatile Organic Chemical Monitoring (Code 03) (CVOC)**

We periodically monitor for Volatile Organic chemical constituents in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Volatile Organic chemicals is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Pesticide Chemical Monitoring (Code 03) (CPES)**

We periodically monitor for Pesticide chemical constituents in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Pesticide chemicals is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Radionuclide Chemical Monitoring (Code 03) (RRAD)**

We periodically monitor for Radionuclide chemical constituents (Radio-activity) in the water supply to meet all regulatory requirements. In 2008 we failed to take the required samples. Testing for Radionuclide chemicals is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

**Lead/Copper Chemical Monitoring (Code 03) (PBCU)**

We periodically monitor for Lead and Copper in the water supply to meet all monitoring requirements. In 2008 we failed to take the required samples. Testing for Lead and Copper is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

***Section 11. (Insert this REQUIRED Language.)***

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All 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 the 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 at 1-800-426-4791.

***Section 12. (It is recommended that this explanation be included.)***

MCLs 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.

***Section 13. (This tempered language is recommended in addition to the required language if you had a violation or detect of Total Coliform, Nitrates or Lead.)***

**Total Coliform**: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

**Nitrates**: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead**: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

***Section 16. (Include this REQUIRED Language.)***

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

***Section 17. (Recommended language to end your report on a positive note.)***

We at (name of system) work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.

***Section 18: (Required Division of Drinking Water --Letter of Certification. Pick the statement at the end of letter, that states how you posted your CCR and delete the remaining and send copy of report and letter to DDW. )***

(water system name)

(address)

(city, state, zip code)

(date)

Patti Fauver

CCR Compliance

Division of Drinking Water

P.O. Box 144830

Salt Lake City, Utah 84114-4830

Dear Ms. Fauver:

Subject: Consumer Confidence Report for (water system name and #)

Enclosed is a copy of (water system name) Consumer Confidence Report. It contains the water quality information for our water system for the calendar year (year) or the most recent sample data.

We have delivered this report to our customers by:

***For systems with***

***500 population or***

***smaller***:

* mailing it directly to each customer.
* publishing in the local newspaper the availability of the report and sending a copy to those that request a copy and allowing inspection of the report at the

water system office.

* post a notices of the availability of the report on our water bill and sending a copy to those that request a copy and allowing inspection of the report at the

water system office.

* publishing the entire report in the local newspaper.

***For systems***

***between 500 &***

***10,000 population:***

* mailing it directly to each customer.
* publishing the entire report in the local newspaper and sending a copy to those that request a copy and allowing inspection of the report at the water system office.

***For systems***

***between 10,000 &***

***100,000 population:***

We have made a good faith effort to notify consumers that

are not directly billed by:

* posting the CCR on the Internet at this web address.
* mailing the CCR to postal patrons in the water system service area.
* advertising the availability of the CCR in the news media.
* publishing the CCR in a local newspaper.
* posting the CCR in public places such as cafeterias or lunch rooms of public buildings.
* delivering multiple copies of the CCR for distribution by single-biller customers such as apartment buildings or large private employers.
* delivering the CCR to community organizations.
* posting the CCR in libraries or schools.

If you have any questions, please contact me at (water system phone #).

Sincerely,

(name of operator)

(name of water system)