



EXAMPLE LETTER CONVEYING WATER QUALITY RESULTS AND NOTIFICATION OF EPA MAXIMUM CONTAMINANT LEVEL (MCL) EXCEEDANCES

This example letter is meant to aid in the communication of water quality results. It is meant to be used in conjunction with the DEP's *Trenchless Technology Technical Guidance Document* (310-2100-003).

For more information, please visit the Bureau of Waterways Engineering & Wetlands <https://www.dep.pa.gov/Business/Water/Waterways/Pages/default.aspx> or visit the Trenchless Technologies webpage at <https://www.dep.pa.gov/About/Regional/RPCO/Pages/Trenchless.aspx>.

DRAFT

Date

RE: Well Water Quality and Flow Rate Testing – <Property Owner(s)> Well

Introduction

On <DATE>, <ENTITY> collected a water quality sample from a residential water well owned by <PROPERTY OWNER (S)>. The residential water well was located on the property at an approximate address of 123 Main Street, Harrisburg PA 17112 (approximate *Latitude: 39.1234^o, Longitude: -76.1234^o*). The sections below provide details specific to the water well water quality sampling and/or testing performed on the aforementioned water well.

Water Well Water Quality Sampling and Testing

<ENTITY> collected the water well water quality sample from the <PROPERTY OWNER(S)> water well on <DATE>, around 09:30 AM EST. The water sample was collected from the following location on the property (Picture shown in Attachment B): Spigot on rear side of house next to garage door. The collected water sample was stored in sample bottles, which were further stored in a cooler with loose ice. The sample bottles and cooler were provided to <ENTITY> by <LABORATORY>. <LABORATORY>, the third-party testing laboratory used by <ENTITY> to complete the water well water quality testing. Once collected, the water well water quality samples were transported by <ENTITY> personnel to <LABORATORY> located at <ADDRESS>.

As requested by <ENTITY>, the following water quality tests were performed by <LABORATORY>:

| | | | |
|-----------------------------|-----------|-----------------|------------------------|
| Total Coliforms | Calcium | Benzene | Potassium |
| E. Coli | Magnesium | Ethylbenzene | Boron |
| Nitrate | Sodium | Toluene | Chloride |
| Nitrite | Zinc | Total Xylenes | Sulfate |
| Fluoride | Arsenic | Ethane | Total Hardness |
| Iron | Barium | Ethylene Glycol | Turbidity |
| Manganese | Chromium | Methane | Specific Conductance |
| Total Dissolved Solids | Lithium | Propane | Total Suspended Solids |
| pH | Selenium | Alkalinity | |
| Total Petroleum Hydrocarbon | Vanadium | Copper | |
| Aluminum | Bromide | Strontium | |

The results of the water quality tests are provided in Attachment A.

These water quality test results have been compared to the Environmental Protection Agency's (EPA's) Primary Drinking Water Regulations and Secondary Drinking Water Standards (<https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>). The EPA's Primary Drinking Water Standards establish maximum contaminant levels to protect public health against the consumption of drinking water contaminants which may present a risk to human health. Secondary Drinking Water Standards are water quality guidelines for aesthetic considerations such as taste, color, and odor that do not present a risk to human health.

A complete list of results and the corresponding EPA primary and secondary standards is included in the attached table for reference (see Attachment A). Additionally, in Attachment A, we have provided a comparison which shows the test results meet EPA's standards with the following exceptions:

- **Well 1**
 - pH
 - Total Hardness
 - Specific Conductance

Please note the samples were not tested for the entire list of EPA primary and secondary drinking water standards but were tested for the constituents as required by the Federal Energy Regulatory Commission's (FERC) permit to <ENTITY>.

Water Well Flow Testing

The water well flow test consisted of measuring the flow of water at the water well over a 10-minute period by pumping the water (with the existing pump within the water well) through a Pulsafeeder In-Line Water Flow Meter. The Pulsafeeder In-Line Water Flow Meter conforms with American Water Works Association (AWWA) Standard C-708 and is rated for a maximum flow of 30 gallons per minute. For the test procedure, water was pumped through the flow meter for a period of 10 minutes and water flow readings were collected at 1-minute increments. In total, the average flow rate measured for the water well was as follows:

- Well 1: 2.5 gallons per minute

If you have any questions or need additional information, please don't hesitate to contact us at [<CONTACT INFO>](#).

Sincerely,

Attachments: Attachment A – Water Quality Test
Results Attachment B – Well Photo

Attachment A

Water Quality Test Results from <LABORATORY>

| Sampling Parameter | Measurement Unit | Test Results for Well 1 | Recommended Threshold | EPA Standard |
|-----------------------------|------------------|-------------------------|-----------------------|--------------------|
| Total Coliforms | Present/Absent | Absent | Absent | Primary |
| E. Coli | Present/Absent | Absent | Absent | Primary |
| Nitrate | mg/L | 5.86 | 10 | Primary |
| Nitrite | mg/L | BDL ¹ | 1 | Primary |
| Fluoride | mg/L | BDL ¹ | 4 | Primary |
| Iron | mg/L | BDL ¹ | 0.3 | Secondary |
| Manganese | mg/L | BDL ¹ | 0.05 | Secondary |
| Total Dissolved Solids | mg/L | 299 | 500 | Secondary |
| pH | N/A | 6.14 | 6.5 - 8.5 | Secondary |
| Total Petroleum Hydrocarbon | mg/L | BDL ¹ | 2.5 | Other ² |
| Aluminum | mg/L | BDL ¹ | 0.2 | Secondary |
| Calcium | mg/L | 27.5 | --- | N/A ³ |
| Magnesium | mg/L | 13 | --- | N/A ³ |
| Sodium | mg/L | 49.5 | --- | N/A ³ |
| Zinc | mg/L | 0.029 | 5 | Secondary |
| Arsenic | mg/L | BDL ¹ | 0.01 | Primary |
| Barium | mg/L | 0.0308 | 2 | Primary |
| Chromium | mg/L | BDL ¹ | 0.1 | Primary |
| Lithium | mg/L | 0.0018 | 1 | Other ² |
| Selenium | mg/L | BDL ¹ | 0.05 | Primary |
| Vanadium | mg/L | BDL ¹ | 0.0029 | Other ² |
| Bromide | mg/L | BDL ¹ | 1 | Other ² |
| Benzene | mg/L | BDL ¹ | 0.005 | Primary |
| Ethylbenzene | mg/L | BDL ¹ | 0.7 | Primary |
| Toluene | mg/L | BDL ¹ | 1 | Primary |
| Total Xylenes | mg/L | BDL ¹ | 10 | Primary |
| Ethane | mg/L | BDL ¹ | --- | N/A ³ |
| Ethylene Glycol | mg/L | 1.51 | --- | N/A ³ |
| Methane | mg/L | BDL ¹ | --- | N/A ³ |
| Propane | mg/L | BDL ¹ | --- | N/A ³ |

| Sampling Parameter | Measurement Unit | Test Results for Well 1 | Recommended Threshold | EPA Standard |
|------------------------|------------------|-------------------------|-----------------------|--------------------|
| Alkalinity | mg/L | 48.7 | --- | N/A ³ |
| Copper | mg/L | 0.0502 | 1 | Primary |
| Strontium | mg/L | 0.29 | 4 | Other ² |
| Potassium | mg/L | 3.37 | --- | N/A ³ |
| Boron | mg/L | BDL ¹ | 0.006 | Other ² |
| Chloride | mg/L | 113 | 250 | Secondary |
| Sulfate | mg/L | 19.1 | 250 | Secondary |
| Total Hardness | mg/L | 122 | 10 | Other ² |
| Turbidity | NTU | BDL ¹ | 1 | Other ² |
| Specific Conductance | umhos/cm | 558 | 5 | Other ² |
| Total Suspended Solids | mg/L | BDL ¹ | 3 | Other ² |

¹ BDL - Below Detectable Limit

² No Primary or Secondary EPA Drinking Water Standard

³ No Primary or Secondary EPA nor PADEP Drinking Water Standard

**Attachment B
Well Picture**

