

JOHN DOE  
123 MAIN ST  
LINCOLN, NE 68502

ANALYTICAL RESULT QUALIFIERS

Workorder: Profile: WALKIN\_WALKIN

Lab ID: 590124 Date Received: 12/17/2018 Matrix: Water  
Sample ID: 590124 Date Collected: 12/17/2018 06:30  
Sample By: DOE, JOHN Date Reported: 12/18/2018  
Location: KITCHEN SINK

Parameters	Results	Units	Qual	Report Limit	MCL or AL	Analyzed	By
Analytical Method: EPA 353.2-Nitrate/Nitrite							
Nitrate + Nitrite (As N)	10.5	mg/L	1	0.05	10	12/17/2018	CW
Analytical Method: SM 3111B - Minerals by AA							
Sodium, Total	50.4	mg/L		0.25		12/17/2018	AMJ
Iron, Total	410	ug/L		50		12/18/2018	TMG
Calcium, Total	1.55	mg/L		0.2		12/18/2018	CW
Analytical Method: SM 4500 SO4-E - Sulfate							
Sulfate	11.0	mg/L		10		12/18/2018	CW
Analytical Method: SM 9223B - Colilert Quantitray							
Total Coliform	2	MPN/100mL		0		12/17/2018	CW
E.coli	2	MPN/100mL		0		12/17/2018	CW
Analytical Method: ALK, SM2320B							
Alkalinity (Total) As CaCO3	21.0	mg/L		20		12/17/2018	CW
Analytical Method: TDS, SM 2540C							
Total Dissolved Solids	11.0	mg/L		10.0		12/18/2018	CW
Analytical Method: EPA 200.8 - ICP-MS Metals							
Manganese, Total	0.505	ug/L		0.5		12/18/2018	CW
Analytical Method: SM 4500F-C, Fluoride							
Fluoride	4.15	mg/L		0.2	4	12/17/2018	KLM
Analytical Method: EPA 150.1, pH							
Ph, Laboratory	6.90	pH unit				12/18/2018	CW
Analytical Method: EPA 325.2 - Chloride							
Chloride	2.00	mg/L		1		12/18/2018	CW
Analytical Method: SM 2340C - Total Hardness							
Total Hardness	<RL	mg/L		4		12/18/2018	CW

REMARKS: See reverse side of report for description of acronyms and data qualifiers. For inquiries on result interpretation call: (402) 471-6435.

Client/PWS name & address



Analytical Results

- Client Results
- Units
- Qualifiers
- Lab RL
- MCL



Demographic Info

**PARAMETER COMMENTS:**

[1] Value given is an average value; determined by analyzing aliquots of the same sample two or more times

**SAMPLE COMMENTS:**

[1] This is where you see sample level comments

**BATCH COMMENTS:**

This is where you see batch level comments



Sample Comments

## ACRONYMS

- MCL = Maximum Contaminant Level – The concentration of the analyte which has been determined by the EPA to put the public health at risk. Concentrations below this level are considered acceptable.
- AL = Action Levels (AL) apply only to lead and copper and are not based on known or expected health effects. An Action Level is the concentration of a contaminant in a sample which, if exceeded and grouped with other samples, triggers treatment techniques or other requirements which a water system must follow.
- <RL = Less than Reporting Limit. The lowest amount of the analyte that can be accurately reported by the method used.
- NG = Not Given. The information was not supplied by the collector on the request form or the information was not readable.
- ND or NT = Not determined or not tested.

## DATA QUALIFIERS

- A = The value given is an average value; determined by analyzing aliquots of the same sample two or more times
- B = The results are based upon colony counts outside the acceptable range. Fecal coliform results require that the plate count be in the range of 20-60. Fecal strep results require that the plate count be in the range of 20-100 colonies.
- C = The result given is a calculated value; it was not determined by direct analysis.
- E = Indication of possible interference.
- F = The sample was received in improper condition (container, temperature, preservative, sample container broken, paperwork discrepancies, air bubbles, insufficient volume, excess turbidity, chlorine smell, etc.)
- H = The sample was beyond the maximum holding time when received by the laboratory. It was therefore, not analyzed.
- J = The associated numerical value is an estimated quantity.
- K = The actual value is less than the value given.
- L = The actual value is greater than the value given.
- M = The analysis was inconclusive due to matrix interferences. The sample needs to be recollected.
- Q = The sample was beyond the maximum holding time prior to analysis.
- R = The sample was delivered to the lab, but due to laboratory accident, it was unable to be analyzed.
- S = Not all of the associated quality control criteria were met for this analyte.

## TOTAL COLIFORM TERMINOLOGY (DRINKING WATER)

**Total coliform / E.coli Routine Compliance Monitoring** – Required monitoring samples which are sent to each PWS System monthly or quarterly.

**Repeat Samples** – The method used for repeat samples, EPA 9223B-QT, provides the number of organisms in colony forming units (CFU) instead of presence or absence.

**OR – ORIGINAL** – One repeat sample must be taken from the same tap as the original positive.

**DN – DOWNSTREAM** – One repeat sample must be collected within 5 service connections downstream of the original positive sample site.

**UP – UPSTREAM** – One repeat sample must be collected within 5 service connections upstream of the original positive sample site.

**TG – TRIGGERED** – This water sample is to be collected from a source well (or a common or representative sample point for multiple wells) for systems required to conduct triggered sampling under the Ground Water Rule. If more than one well is being used by the system, additional samples should be collected using sample kits and submission forms designated as "TG". The system must request additional TG sample kits if needed.

**Additional Routines** – Systems collecting samples on a quarterly schedule must collect additional routine monitoring samples the month following one or more total coliform positive samples. Systems must collect at least three (3) routine samples during the next month.

**Special** – These samples are non-compliance samples and may be used to determine the presence of total coliform after a pressure loss, repairs, or routine maintenance.

**Units – cfu/100ml – Colony Forming Units per milliliters** – A unit of bacteria that will form one colony in 100 milliliters of sample.

**Excessive Age** – The sample was received at least 30 hours after it was collected. This test was not performed.

**Insufficient Amount** – The amount of samples the lab received was less than the 100 ml required to perform the test.

**Improper Container** – The container used to collect the sample was inappropriate for the test required.

**Damage** – Something damaged the sample before it could be tested. The bottle may have been broken or sample contaminated.

**Insufficient Sample Information** – The sample collector failed to include the laboratory request form with the sample, date of samples on the request form or the collector may have put the same lab number on multiple samples.

**Excess Chlorine Interference** – The results can not be determined due to excess chlorine in the sample.

**Total Coliform Present** – The test detected the presence of total coliform. The sample **does not** meet bacteriological standards.

**Total Coliform Absent** – The test did not detect the presence of any total coliform. The sample **meets** bacteriological standards.

**E. Coli Present** – The test detected the presence of E. Coli in the sample. The sample **does not** meet bacteriological standards.

**E. Coli Absent** – The test did not detect the presence of any E. Coli in the sample. The sample **meets** bacteriological standards.

**0** – The test did not detect the presence of any Total Coliform or E. Coli in the sample. The sample **meets** bacteriological standards.

**Any Number over 0** – The test detected Total Coliform or E. Coli present in the sample. The number indicated the total number of colony forming units present in 100 ml of the sample. The sample **does not** meet bacteriological standards.

**MPN-Most Probable Number.** An index of the number of bacteria that, more probably than any other number, would give the results shown by the lab examination; it is not an actual enumeration.

## Three Sections on Reverse Side of Reports

- Acronyms – very important section. Defines RL, MCL and other abbreviations
- Data Qualifiers
- Coliform Technology