

**LIVESTOCK WATER ANALYSIS REPORT**

Sample Number: 24616520
Date Sampled: 03/06/2018
Date Received: 03/07/2018
Date Mailed: 03/08/2018
Description: 2 HOUSE

Statement ID: KATHERINE WINTERS

<u>Component</u>	<u>Result</u>	<u>Expected *</u>	<u>Possible problems for mature cattle. **</u>
Total Coliform / 100 ml	< 1	< 1	15
e. Coli	Negative		
Nitrates, ppm	ND	0 - 44	100
Nitrates - Nitrogen, ppm	ND	0 - 10	23
Sulfates, ppm	105	0 - 250	1000
Sulfates - Sulfur, ppm	35	0 - 83	333
Chlorides, ppm	< 10	0 - 250	300
Hardness, ppm CaCO ₃	450	0 - 370	
Total Dissolved Solids (TDS), ppm	515	0 - 500	3,000
Calcium (Ca), ppm	88.8	0 - 100	500
Phosphorus (P), ppm	< 0.1	0 - 0.3	0.7
Magnesium (Mg), ppm	55.7	0 - 29	125
Potassium (K), ppm	2.1	0 - 20	20
Sodium (Na), ppm	3.5	0 - 100	300
Iron (Fe), ppm	.01	0 - 0.3	0.3 (taste)
Zinc (Zn), ppm	.03	0 - 5	25
Copper (Cu), ppm	.03	0 - 0.6	0.6
Manganese (Mn), ppm	< 0.01	0 - 0.05	0.05 (taste)
Molybdenum (Mo), ppm	.01	0 - 0.07	.07
pH	7.2	6.8 - 7.5	< 5.5 or > 8.5

ND = None Detected

* Based primarily on criteria for water fit for human consumption.

** Based primarily on research literature and field experiences.

Source: Dairy Reference Manual, 3rd ed., NRAES-63, June 1995.

Additional diagnostic information is available at www.waterforcows.com.



LIVESTOCK WATER ANALYSIS REPORT

Sample Number: 24616530
Date Sampled: 03/06/2018
Date Received: 03/07/2018
Date Mailed: 03/09/2018
Description: 3 SOFTENED

Statement ID: KATHERINE WINTERS

Component	Result	Expected *	Possible problems for mature cattle. **
Total Coliform / 100 ml	< 1	< 1	15
e. Coli	Negative		
Nitrates, ppm	ND	0 - 44	100
Nitrates - Nitrogen, ppm	ND	0 - 10	23
Sulfates, ppm	84	0 - 250	1000
Sulfates - Sulfur, ppm	28	0 - 83	333
Chlorides, ppm	< 10	0 - 250	300
Hardness, ppm CaCO ₃	0	0 - 370	
Total Dissolved Solids (TDS), ppm	545	0 - 500	3,000
Calcium (Ca), ppm	< 0.1	0 - 100	500
Phosphorus (P), ppm	< 0.1	0 - 0.3	0.7
Magnesium (Mg), ppm	< 0.1	0 - 29	125
Potassium (K), ppm	< 0.1	0 - 20	20
Sodium (Na), ppm	220.8	0 - 100	300
Iron (Fe), ppm	.01	0 - 0.3	0.3 (taste)
Zinc (Zn), ppm	< 0.01	0 - 5	25
Copper (Cu), ppm	.01	0 - 0.6	0.6
Manganese (Mn), ppm	< 0.01	0 - 0.05	0.05 (taste)
Molybdenum (Mo), ppm	.01	0 - 0.07	.07
pH	7.4	6.8 - 7.5	< 5.5 or > 8.5

do not use softened water to mix formula as kidney cant tolerate this

ND = None Detected

* Based primarily on criteria for water fit for human consumption.

** Based primarily on research literature and field experiences.

Source: Dairy Reference Manual, 3rd ed., NRAES-63, June 1995.

Additional diagnostic information is available at www.waterforcows.com.



LIVESTOCK WATER ANALYSIS REPORT

Sample Number: **24616510**
 Date Sampled: 03/06/2018
 Date Received: 03/07/2018
 Date Mailed: 03/08/2018
 Description: 1 WELL

Statement ID: KATHERINE WINTERS

Component	Result	Expected *	Possible problems for mature cattle. **
Total Coliform / 100 ml	< 1	< 1	15
e. Coli	Negative		
Nitrates, ppm	ND	0 - 44	100
Nitrates - Nitrogen, ppm	ND	0 - 10	23
Sulfates, ppm	92	0 - 250	1000
Sulfates - Sulfur, ppm	30	0 - 83	333
Chlorides, ppm	< 10	0 - 250	300
Hardness, ppm CaCO ₃	452	0 - 370	
Total Dissolved Solids (TDS), ppm	516	0 - 500	3,000
Calcium (Ca), ppm	88.9	0 - 100	500
Phosphorus (P), ppm	< 0.1	0 - 0.3	0.7
Magnesium (Mg), ppm	56.0	0 - 29	125
Potassium (K), ppm	2.3	0 - 20	20
Sodium (Na), ppm	3.5	0 - 100	300
Iron (Fe), ppm	.01	0 - 0.3	0.3 (taste)
Zinc (Zn), ppm	.02	0 - 5	25
Copper (Cu), ppm	.01	0 - 0.6	0.6
Manganese (Mn), ppm	< 0.01	0 - 0.05	0.05 (taste)
Molybdenum (Mo), ppm	.01	0 - 0.07	.07
pH	7.3	6.8 - 7.5	< 5.5 or > 8.5

estimate ~ 2 gallons/day ~ 7.57 kg

Cu = 0.0757 mg

Mo = 0.0757 mg

ND = None Detected

* Based primarily on criteria for water fit for human consumption.

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