



State Hygienic Laboratory

The University of Iowa

Page 2
Sample Number 2011021049

Laboratory pH

Analyte	Concentration pH Units	Quantitation Limit pH Units
Laboratory pH	9.1	

Date Analyzed: 06-22-2011
Method: SM 4500-H+ B

Analyzed at: Ankeny

Analyst: AB
Verified: TAB

Specific Conductance

Analyte	Concentration umho/cm	Quantitation Limit umho/cm
Specific Conductance	330	1.0

Date Analyzed: 06-20-2011
Method: SM 2510B

Analyzed at: Ankeny

Analyst: AB
Verified: DS

Total Alkalinity

Analyte	Concentration mg/L as CaCO ₃	Quantitation Limit mg/L as CaCO ₃
Total Alkalinity	48	1.0

Date Analyzed: 06-22-2011
Method: SM 2320B

Analyzed at: Ankeny

Analyst: AB
Verified: TAB

Total Hardness

Analyte	Concentration mg/L as CaCO ₃	Quantitation Limit mg/L as CaCO ₃
Total Hardness	120	5.0

Date Analyzed: 06-27-2011
Method: SM18 2340 B

Analyzed at: Ankeny

Analyst: MC
Verified: DC

Total Dissolved Solids

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Dissolved Solids	220	1
Comments	<i>Dried at 180 degrees C.</i>	

Date Analyzed: 06-20-2011
Method: SM 2540 C

Analyzed at: Ankeny

Analyst: JE
Verified: TAB

Total Calcium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Calcium	31	1.0

Date Analyzed: 06-27-2011
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: MC
Verified: DC

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Total Magnesium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Magnesium	10	0.50

Date Analyzed: 06-27-2011
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: MC
Verified: DC

Total Potassium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Potassium	2.4	1.0

Date Analyzed: 06-27-2011
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: MC
Verified: DC

Total Sodium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Sodium	19	0.50

Date Analyzed: 06-27-2011
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: MC
Verified: DC

Bicarbonate Alkalinity as CaCO₃

Analyte	Concentration mg/L	Quantitation Limit mg/L
Bicarbonate	48	

Date Analyzed: 06-22-2011
Method: SM 2320B

Analyzed at: Ankeny

Analyst: AB
Verified: TAB

Chloride

Analyte	Concentration mg/L	Quantitation Limit mg/L
Chloride	12	1.0

Date Analyzed: 06-21-2011
Method: EPA 300.0

Analyzed at: Ankeny

Analyst: LDA
Verified: LF

Manual Fluoride by ISE (SDWA)

Analyte	Concentration mg/L	Quantitation Limit mg/L
Fluoride	1.09	0.10

Date Analyzed: 06-20-2011
Method: SM 4500-F C

Analyzed at: Ankeny

Analyst: BR
Verified: DS

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Sulfate

Analyte	Concentration mg/L	Quantitation Limit mg/L
Sulfate	84	1.0

Date Analyzed: 06-21-2011
Method: EPA 300.0

Analyzed at: Ankeny

Analyst: LDA
Verified: LF

Calcium Hardness

Analyte	Concentration mg/L as CaCO ₃	Quantitation Limit mg/L as CaCO ₃
Calcium Hardness	77	2.5

Date Analyzed: 06-27-2011
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: MC
Verified: DC

Nitrite as N (SDWA)

Analyte	Concentration mg/L	Quantitation Limit mg/L
Nitrite Nitrogen as N	<0.02	0.02

Date Analyzed: 06-16-2011 14:14
Method: EPA 353.2

Analyzed at: Ankeny

Analyst: BR
Verified: TAB

Nitrate as N (Water)

Analyte	Concentration mg/L	Quantitation Limit mg/L
Nitrate Nitrogen as N	<0.1	0.1

Date Analyzed: 06-16-2011 14:14
Method: EPA 353.2

Analyzed at: Ankeny

Analyst: BR
Verified: TAB

Langelier Index

Analyte	Concentration Units	Quantitation Limit Units
Langelier Index	-0.85	

Date Analyzed: 06-28-2011
Method: SM 203

Analyzed at: Ankeny

Analyst: AB
Verified: DS

Stability Index

Analyte	Concentration Units	Quantitation Limit Units
Stability Index	8.4	

Date Analyzed: 06-28-2011
Method: SM 203

Analyzed at: Ankeny

Analyst: AB
Verified: DS

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Sample Number 2011021049

Total Zinc

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Zinc	<0.02	0.02

Date Analyzed: 06-20-2011
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

Total Manganese

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Manganese	<0.02	0.02

Date Analyzed: 06-20-2011
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

Total Copper

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Copper	<0.01	0.01

Date Analyzed: 06-20-2011
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

Total Arsenic

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Arsenic	<0.001	0.001

Date Analyzed: 06-20-2011
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

Total Selenium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Selenium	<0.01	0.01

Date Analyzed: 06-20-2011
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

Total Lead

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Lead	<0.001	0.001

Date Analyzed: 06-20-2011
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

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Total Barium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Barium	<0.05	0.05

Date Analyzed: 06-20-2011

Analyzed at: Ankeny

Analyst: SB

Method: EPA 200.8

Verified: DS

Total Cadmium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Cadmium	<0.001	0.001

Date Analyzed: 06-20-2011

Analyzed at: Ankeny

Analyst: SB

Method: EPA 200.8

Verified: DS

Total Chromium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Chromium	<0.01	0.01

Date Analyzed: 06-20-2011

Analyzed at: Ankeny

Analyst: SB

Method: EPA 200.8

Verified: DS

Total Iron

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Iron	<0.02	0.02

Date Analyzed: 06-27-2011

Analyzed at: Ankeny

Analyst: MC

Method: EPA 200.7

Verified: DC

Description of units used within this report

mg/L - Milligrams per Liter

pH Units - pH Units

umho/cm - Micromho per Centimeter

Units - Units

mg/L as CaCO₃ - Milligrams per Liter as Calcium Carbonate

Quant Limit - Lowest concentration reliably measured

The results of this report relate only to the items analyzed. This report shall not be reproduced except in full without the written approval of the laboratory.

Iowa Environmental Laboratory IDs are: Ankeny #397, Iowa City #027, Lakeside #393.

If you have any questions please call Client Services at 800/421-IOWA (4692) or 319/335-4500. Thank you.