

Hygienic Laboratory

The University of Iowa

Date of report: 11-05-2010



MARION MUNI WATER DEPARTMENT
1225 6TH AVE SUITE 150

MARION IA 52302

Sample Number 2010040002
Date Received 10-15-2010
Project SDWA
Date Collected 10-15-2010 07:30
Collection Site #7 well echo hill rd
Collection Town Marion
Description water
Reference
Collector SMITH ANDY
Phone (319) 743-6310
Purchase Order

Comments: Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.

SDWIS Information

PWS Id: IA5751035 Facility Id: WL07 Sample Point Id: NEW
Sample Category: Chemical Sample Type: Routine (RT)

Results of Analyses

Total Suspended Solids

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Suspended Solids	3	1

Comments: Dried at 103 degrees C

Date Analyzed: 10-20-2010
Method: USGS I-3765-85

Analyzed at: Ankeny

Analyst: MP
Verified: LF

Total Mercury

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Mercury	<0.0002	0.0002

Date Analyzed: 11-04-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DS

Silica as SiO2

Analyte	Concentration mg/L	Quantitation Limit mg/L
Silica as SiO2	9.2	1.0

Date Analyzed: 10-25-2010
Method: SM 4500-SI D

Analyzed at: Ankeny

Analyst: DH
Verified: LF

Page 1 - Continued on next page



Hygienic Laboratory

The University of Iowa

Page 2
Sample Number 2010040002

Laboratory pH

Analyte	Concentration pH Units	Quantitation Limit pH Units
Laboratory pH	7.2	

Date Analyzed: 10-18-2010
Method: SM 4500-H+ B

Analyzed at: Ankeny

Analyst: AB
Verified: TAB

Specific Conductance

Analyte	Concentration umho/cm	Quantitation Limit umho/cm
Specific Conductance	870	1.0

Date Analyzed: 10-19-2010
Method: SM 2510B

Analyzed at: Ankeny

Analyst: AB
Verified: TAB

Total Alkalinity

Analyte	Concentration mg/L as CaCO ₃	Quantitation Limit mg/L as CaCO ₃
Total Alkalinity	280	1.0

Date Analyzed: 10-18-2010
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	320	5.0

Date Analyzed: 10-21-2010
Method: SM18 2340 B

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Total Dissolved Solids

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Dissolved Solids	510	1

Date Analyzed: 10-20-2010
Method: SM 2540 C

Comments: Dried at 180 degrees C.

Analyzed at: Ankeny

Secondary MCL
500

Analyst: MP
Verified: LF

Total Calcium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Calcium	69	1.0

Date Analyzed: 10-21-2010
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Page 2 - Continued on next page



Hygienic Laboratory

The University of Iowa

Page 3
Sample Number 2010040002

Total Magnesium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Magnesium	36	0.50

Date Analyzed: 10-21-2010
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Total Potassium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Potassium	12	1.0

Date Analyzed: 10-21-2010
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Total Sodium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Sodium	68	0.50

Date Analyzed: 10-21-2010
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Chloride

Analyte	Concentration mg/L	Quantitation Limit mg/L
Chloride	66	1.0

Date Analyzed: 10-26-2010
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	1.41	0.10

Date Analyzed: 10-22-2010
Method: SM 4500-F C

Analyzed at: Ankeny

Analyst: BR
Verified: LF

Sulfate

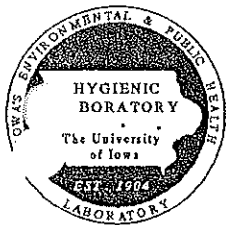
Analyte	Concentration mg/L	Quantitation Limit mg/L
Sulfate	130	1.0

Date Analyzed: 10-25-2010
Method: EPA 300.0

Analyzed at: Ankeny

Analyst: LDA
Verified: DS

Page 3 - Continued on next page



Hygienic Laboratory

The University of Iowa

Page 4
Sample Number: 2010040002

Nitrite as N (water)

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

Date Analyzed: 10-15-2010 13:19

Analyzed at: Iowa City

Analyst: RAD

Method: SM18 4500-NO2-B

Verified: VR

Ammonia as N

Analyte	Concentration mg/L	Quantitation Limit mg/L
Ammonia Nitrogen as N	0.89	0.05

Date Analyzed: 10-21-2010

Analyzed at: Ankeny

Analyst: JE

Method: LAC10-107-06-1J

Verified: DS

Automated Cadmium Reduction Nitrate as N

Analyte	Concentration mg/L	Quantitation Limit mg/L
Nitrate Nitrogen as N	<0.2	0.2

Date Analyzed: 10-16-2010 10:40

Analyzed at: Iowa City

Analyst: L

Method: EPA 353.2

Verified: KO

Total Manganese

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Manganese	0.03	0.02

Date Analyzed: 10-19-2010

Analyzed at: Ankeny

Analyst: SB

Method: EPA 200.8

Verified: DC

Total Arsenic

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

Date Analyzed: 10-19-2010

Analyzed at: Ankeny

Analyst: SB

Method: EPA 200.8

Verified: DC

Total Antimony

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Antimony	<0.005	0.005

Date Analyzed: 10-19-2010

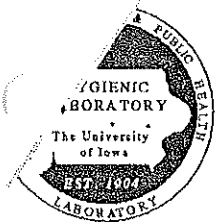
Analyzed at: Ankeny

Analyst: SB

Method: EPA 200.8

Verified: DC

Page 4 - Continued on next page



Hygienic Laboratory

The University of Iowa

Page 5
Sample Number 2010040002

Total Selenium

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

Date Analyzed: 10-21-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: LF

Total Thallium

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

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Total Uranium

Analyte	Concentration ug/L	Quantitation Limit ug/L
Total Uranium	<1.0	1.0
Comments	<i>The MCL value set by EPA for Uranium is 30 ug/L.</i>	

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Total Barium

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

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Total Copper

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

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Total Cadmium

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

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Page 5 - Continued on next page



Hygienic Laboratory

The University of Iowa

Page 6
Sample Number 2010040002

Total Zinc

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

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Total Chromium

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

Date Analyzed: 10-19-2010
Method: EPA 200.8

Analyzed at: Ankeny

Analyst: SB
Verified: DC

Total Iron

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Iron	0.29	0.02

Date Analyzed: 10-21-2010
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Dissolved Iron

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

Date Analyzed: 10-21-2010
Method: EPA 200.7

Analyzed at: Ankeny

Analyst: DC
Verified: DS

Description of units used within this report

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

ug/L - Micrograms per Liter
umho/cm - Micromho per Centimeter
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.

Page 6 - End of Report