

ENVIRONMENTAL SAMPLING REPORT

Prepared for:



GSA Heartland Region
Facilities Management Division 6PF
1500 East Bannister Road
Kansas City, Missouri 64131-3088

Project Location:

Bannister Federal Complex
1500 East Bannister Road
Kansas City, Missouri

Project Number: 91105

Prepared by:



September 2, 2011

**ENVIRONMENTAL
SAMPLING REPORT -
WATER**



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September 2, 2011

Mr. Kevin Phillips, GSA Heartland Region
Computer Integrated Facilities (Project) Manager
1500 East Bannister Road, Room 2101
Kansas City, Missouri 64131-3088

**RE: Bannister Federal Complex – Environmental Drinking Water Retest
Building #4
Project # 91105**

Dear Mr. Phillips:

Thank you for the opportunity to provide the General Services Administration (GSA) with the subject assessment. The following is our report.

BACKGROUND

As requested, OCCU-TEC conducted drinking water re-testing for the presence of iron at Building #4 at the Bannister Federal Complex, located at 1500 East Bannister Road in Kansas City, Missouri. This re-test was conducted to determine the effectiveness of remedial actions taken by the GSA to control water contaminant levels.

Drinking water sampling and testing was conducted to determine the current levels of iron. The water sampling was conducted on August 16, 2011, by Mr. Jay Hurst of OCCU-TEC.

EXPERIMENTAL

The re-test included the following:

- One (1) water sample from the break room sink in Building #4 was analyzed for the presence and concentrations of iron.
- the sample was ONLY analyzed for contaminants that were above acceptable levels during the previous sampling events conducted on June 15, 2011.

Drinking water sampling was conducted in accordance with sampling protocols provided by Underwriters Laboratories (UL). Those procedures are summarized as follows:

Drinking water sampling for the presence of iron was conducted at one (1) distinct location within Buildings #4. A total of one (1) sample was obtained. The drinking water sample was collected using media supplied by UL. Iron samples were collected and analyzed in accordance with EPA Method 200.7.

The metal sample was collected in an individually labeled 120 mL plastic bottle capped with Teflon septa lined screw cap. The bottle was filled to its shoulder with water from the sample source. The sample was then placed in a cooler. The sample was acidified at the laboratory as needed.

The drinking water sample was submitted to UL for analyses of iron. UL is certified by the State of Missouri Department of Natural Resources (MDNR) as an approved drinking water laboratory. Bureau Veritas subcontracted all laboratory sample preparations and analyses to UL in South Bend, Indiana.

RESULTS AND DISCUSSION

The results for the subject testing are summarized in the tables below.

Samples with a “<” sign indicate that the results were below the reportable limit.

Water Samples

Analysis	Lowest Concentration	Highest Concentration	EPA MCL*
Iron	0.061 mg/L	0.061 mg/L	0.31 mg/L**

*MCL – Maximum contaminant level

**Secondary MCL

IRON

The sample was below the secondary MCL for iron.

Specific water sample locations are indicated in Appendix A. A summary of sampling results by location is included in Appendix B. The complete laboratory report for the drinking water sampling from UL is attached in Appendix C.

OCCU-TEC appreciates the opportunity to work with the General Services Administration on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.

Report Prepared By,



Joshua Ashley
Environmental Specialist

Report Reviewed By,



Duncan Heydon, CHMM

ATTACHMENTS

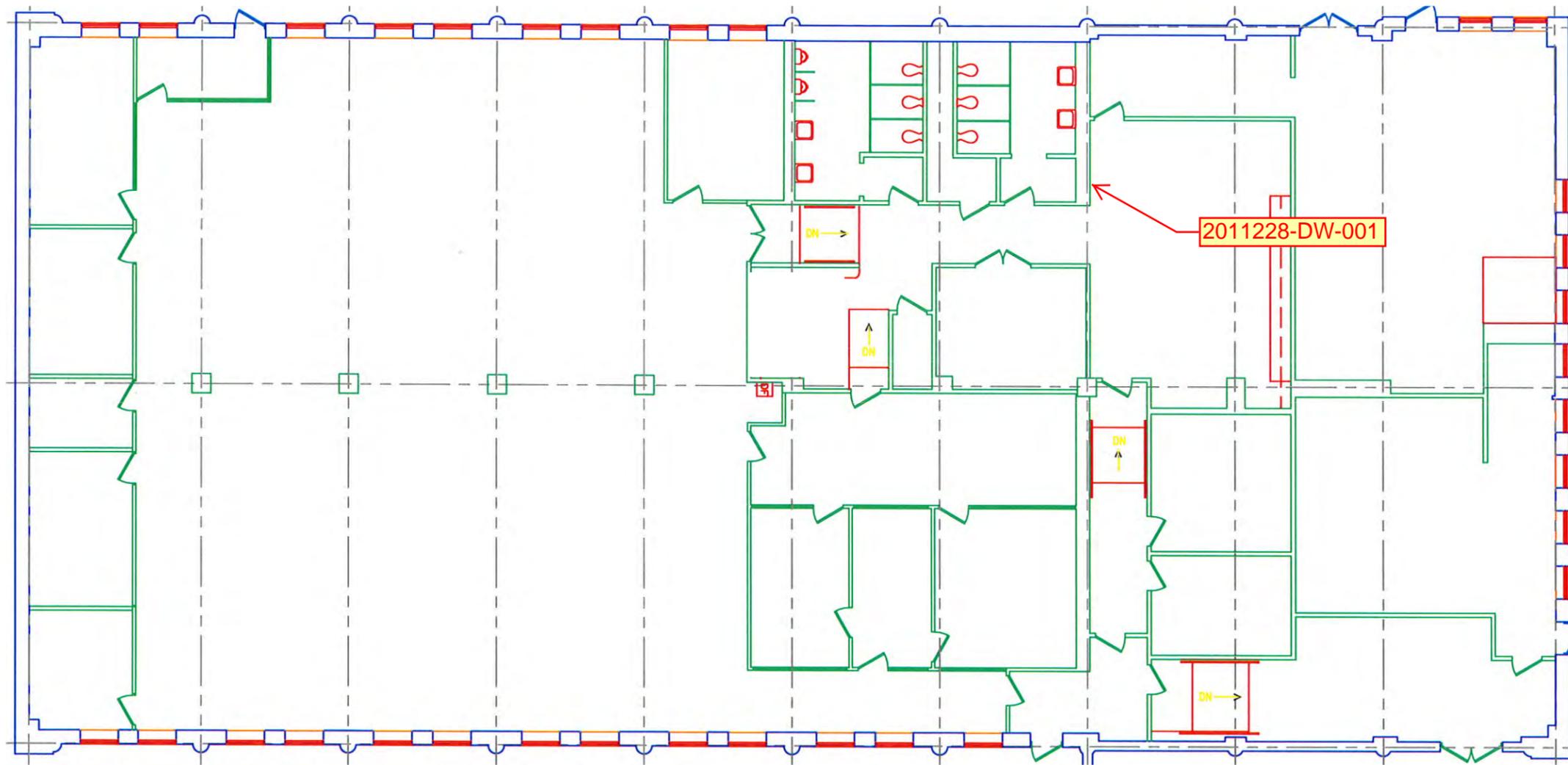
- Appendix A, Water Sample Location Diagrams
- Appendix B, Results Summary by Location
- Appendix C, Water Sample Laboratory Report

APPENDIX A

Water Sample Location Diagrams



Drinking Water Sample Locations
8/16/2011
Building #4



APPENDIX B

Results Summary by Location



Location	Water Source	Analyte		Result	Units	Above/Below
Break room sink	Sink	Iron	=	0.061	mg/L	Below MCL

APPENDIX C

Water Sample Laboratory Report





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Laboratories

LABORATORY REPORT

This report contains 5 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at
(800) 332-4345 or (574) 233-4777.

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Underwriters Laboratories Inc. (UL).*

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Laboratory Report

Client: OCCU-TEC Inc.
Attn: Jay Hurst
4151 North Mulberry Drive
Suite 275
Kansas City, MO 64116

Report: 267202
Priority: Standard Written
Status: Final
PWS ID: Not Supplied

Copies to: None

Sample Information					
UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2501625	2011228-DW-01	200.7	08/16/11 13:50	Client	08/19/11 09:15

Report Summary

Note: Building #4 - Breakroom Sink

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Trott at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from Underwriters Laboratories (UL).

Authorized Signature

Title

Date

Client Name: OCCU-TEC Inc.

Report #: 267202

Client Name: OCCU-TEC Inc.

Report #: 267202

Sampling Point: 2011228-DW-01

PWS ID: Not Supplied

Metals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
7439-89-6	Iron	200.7	0.3 ^	0.020	0.061	mg/L	---	08/23/11 18:16	2501625

† UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The LTB container follows the collection bottles to and from the collection site, but the LTB is not opened at any time during the trip. LTB is not exposed to site conditions or pumping and collection equipment. The LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Matrix Duplicate (LFD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Matrix (LFM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

