

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Analytical Report

Dan Cooper
Chicago Park District
541 N Fairbanks Ct
Chicago, IL 60641

June 29, 2016

Work Order: 16F1049

RE: CPD Drinking Water
Lincoln Park Zoo

Dear Dan Cooper:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,



Tim Witrzek
Project Manager
847.967.6666

Approved by,



Matthew Gregory
Technical Manager

Approved for release: 6/29/2016 8:45:37AM

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 003674



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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LPZ #1 Elephant	16F1049-01	Drinking Water	06/27/16 11:15	06/27/16 13:12
LPZ #2 Elephant	16F1049-02	Drinking Water	06/27/16 11:15	06/27/16 13:12
LPZ #3 Elephant	16F1049-03	Drinking Water	06/27/16 11:16	06/27/16 13:12
LPZ #4 Elephant	16F1049-04	Drinking Water	06/27/16 11:16	06/27/16 13:12
LPZ #5 Elephant	16F1049-05	Drinking Water	06/27/16 11:17	06/27/16 13:12

Case Narrative

Client: Chicago Park District

Date: 06/29/2016

Project: CPD Drinking Water
Lincoln Park Zoo

Work Order: 16F1049

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 16F1049

The samples were received on 06/27/16 13:12. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was

<u>Cooler</u>	<u>Temp C°</u>
Default Cooler	26.0

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

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Client Sample Results

Client: Chicago Park District
Project: CPD Drinking Water
Lincoln Park Zoo
Work Order: 16F1049

Client Sample ID: LPZ #1 Elephant
Report Date: 06/29/2016
Collection Date: 06/27/2016 11:15
Matrix: Drinking Water
Lab ID: 16F1049-01

Analyses	Result	EMT Reporting		Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst
		Limit								
Metals by ICP-MS										
Method: E200.8										
Lead	78.7	5.00		ppb		15	0.120	06/28/16 13:48	B6F1781	CS2

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com**Client Sample Results**

(Continued)

Client: Chicago Park District**Client Sample ID:** LPZ #2 Elephant**Project:** CPD Drinking Water
Lincoln Park Zoo**Report Date:** 06/29/2016**Work Order:** 16F1049**Collection Date:** 06/27/2016 11:15**Matrix:** Drinking Water**Lab ID:** 16F1049-02

Analyses	Result	EMT	Qual	Units	Reg	MDL	Date/Time	Batch	Analyst
		Reporting Limit							
Metals by ICP-MS									
Method: E200.8									
Lead	29.3	5.00		ppb	15	0.120	06/28/16 13:50	B6F1781	CS2

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Client Sample Results

(Continued)

Client: Chicago Park District
Project: CPD Drinking Water
Lincoln Park Zoo
Work Order: 16F1049

Client Sample ID: LPZ #3 Elephant
Report Date: 06/29/2016
Collection Date: 06/27/2016 11:16
Matrix: Drinking Water
Lab ID: 16F1049-03

Analyses	Result	EMT Reporting		Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst
		Limit								
Metals by ICP-MS										
Method: E200.8										
Lead	8.06	5.00		ppb		15	0.120	06/28/16 13:51	B6F1781	CS2

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Client Sample Results

(Continued)

Client: Chicago Park District
Project: CPD Drinking Water
Lincoln Park Zoo
Work Order: 16F1049

Client Sample ID: LPZ #4 Elephant
Report Date: 06/29/2016
Collection Date: 06/27/2016 11:16
Matrix: Drinking Water
Lab ID: 16F1049-04

Analyses	Result	EMT Reporting		Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst
		Limit								
Metals by ICP-MS										
Method: E200.8										
Lead	1.27	5.00	J	ppb		15	0.120	06/28/16 13:52	B6F1781	CS2

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Client Sample Results

(Continued)

Client: Chicago Park District
Project: CPD Drinking Water
Lincoln Park Zoo
Work Order: 16F1049

Client Sample ID: LPZ #5 Elephant
Report Date: 06/29/2016
Collection Date: 06/27/2016 11:17
Matrix: Drinking Water
Lab ID: 16F1049-05

Analyses	Result	EMT Reporting		Qual	Units	Reg Limit	MDL	Date/Time Analyzed	Batch	Analyst
		Limit								
Metals by ICP-MS										
Method: E200.8										
Lead	1.09	5.00	J	ppb		15	0.120	06/28/16 13:54	B6F1781	CS2

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Dates Report

Client: Chicago Park District**Report Date:** 06/29/2016**Project:** CPD Drinking Water
Lincoln Park Zoo**Work Order:** 16F1049

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
16F1049-01	LPZ #1 Elephant	06/27/16	Drinking Water	Lead, Total ICP-MS		06/28/16 10:44	06/28/16 13:48	B6F1781	S6F0554
16F1049-02	LPZ #2 Elephant			Lead, Total ICP-MS		06/28/16 10:44	06/28/16 13:50		
16F1049-03	LPZ #3 Elephant	06/27/16		Lead, Total ICP-MS		06/28/16 10:44	06/28/16 13:51		
16F1049-04	LPZ #4 Elephant			Lead, Total ICP-MS		06/28/16 10:44	06/28/16 13:52		
16F1049-05	LPZ #5 Elephant	06/27/16		Lead, Total ICP-MS		06/28/16 10:44	06/28/16 13:54		

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Quality Control

Client: Chicago Park District

Report Date: 06/29/2016

Project: CPD Drinking Water
Lincoln Park Zoo

Matrix: Drinking Water

Work Order: 16F1049

Metals by ICP-MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch: B6F1781

Blank (B6F1781-BLK1)

Prepared: 06/28/2016 10:44 Analyzed: 06/28/2016 13:38

Lead	< 0.120	5.00	ppb							U
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LCS (B6F1781-BS1)

Prepared: 06/28/2016 10:44 Analyzed: 06/28/2016 13:39

Lead	99.3	10.0	ppb	100.0		99.3	85-115			
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Post Spike (B6F1781-PS1)

Source: 16F0527-80RE1

Prepared: 06/28/2016 10:44 Analyzed: 06/28/2016 14:14

Lead	95.3	10.0	ppb	100.0	0.722	94.6	80-120			
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Post Spike (B6F1781-PS2)

Source: 16F0529-07RE1

Prepared: 06/28/2016 10:44 Analyzed: 06/28/2016 14:19

Lead	97.8	10.0	ppb	100.0	0.332	97.5	80-120			
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Certified Analyses included in this Report

Analyte	CAS #	Certifications
<i>E200.8 in Drinking Water</i>		
Lead	7439-92-1	ILEPA

List of Certifications

Code	Description	Number	Expires
AKDEC	State of Alaska, Dept. Environmental Conservation	UST-105	07/16/2016
CPSC	US Consumer Product Safety Commission, Accredited by PJLA Lab No. 1050	L14-56	04/30/2016
DoD	Department of Defense, Accredited by PJLA	L14-55	04/30/2018
ILEPA	State of Illinois, NELAP Accredited Lab No. 100256	003674	07/27/2016
ISO	ISO/IEC 17025, Accredited by PJLA	L14-56	04/30/2018
LELAP	State of Louisiana, NELAP Accredited Lab No. 171344	05015	06/30/2016
WDNR	State of Wisconsin Dept of Natural Resources	999888890	08/31/2016

Qualifiers and Definitions

Item	Description
J	Estimated Value
U	Analyte included in the analysis, but not detected
%Rec	Percent Recovery



16F1049

PM: Tim Witzek

Chicago Park District
CPD Drinking Water

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

Study Record

TURNAROUND TIME:

☐ RUSH

pay turnaround

☐ ROUTINE

148901

Due Date:

#000

Company: Chicago Park District
Address: 541 N Fairbanks Ct
Chicago Park District
Chicago IL 60611
Phone #: (312) 742-4287 Fax #: () - -
P.O. #: Proj. #:
Client Contact: Don Caspice
Project ID / Location: Lincoln Park Zoo -

Sample Type:

1. Waste Water	4. Sludge	7. Groundwater (filtered)
2. Drinking Water	5. Oil	8. Other
3. Soil	6. Groundwater	

Container Type:

Container type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:

1. None	4. NaOH	7. Zn Ace
2. H ₂ SO ₄	5. HCl	8. Other
3. HNO ₃	6. MeOH	

Analyses

EMT
USE
ONLY

FMT

WORKORDER

#

Relinquished By:

Date: 1-23-11

Received By:

Data:

EMT USE ONLY

☐ SAMPLE RECEIVED

ONCE SAMPLE

☐ TEMPERATURE

(Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

Relinquished By:

Time: _____
Date: _____

Received For Lab By:

Time: _____
Date: _____

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SPECIAL INSTRUCTIONS:

dan.corp@chicagoparkdist.net, timothy-king@chicagoparkdist.net

MTEFI DDOC2014001

Sample Receipt Checklist**Work Order: 16F1049****Printed: 6/27/2016 1:38:27PM****Client: Chicago Park District**
Project: CPD Drinking Water**Date Due: 07/05/16 17:00 (5 day TAT)****Received By: Tim Witrzek****Date Received: 06/27/16 13:12****Logged In By: Tim Witrzek****Date Logged In: 06/27/16 13:31**

Samples Received at:	26°C
How were samples received?	Client
Custody Seals Present	No
Custody Seals Intact	NA
Sample Cont/Cooler Intact	Yes
COC Present/Complete	Yes
COC/Labels Agree	Yes
Proper Cont/Preservation	Yes
Sufficient Sample Volume	Yes
Samples Within Holdtime	Yes
Cooler Temp Within Limits	Yes
VOA Water Vials Received	No
VOA Water Vials/Zero Headspace	NA
PM or Client Contacted	No

COMMENTS
6/27/16