

11/02/2015

Westchester County Dept. of Env Facilities
Mike Farraro
35 Woods Road
Vahalla, NY 10595
maf6@westchestergov.com

Subject: LT2 R2 Event 30 MS 3/ASI #52023

Dear: Mike Farraro

Enclosed please find the test result(s) for sample(s) received at Analytical Services, Inc. (ASI) on 10/29/2015.

This report consists of eight (8) pages, including this cover page. The results reported herein relate only to the sample(s) included in this report. These results were generated under ASI's laboratory quality system, which is in accordance with the NELAC (TNI) standard. Deviations, if any, are noted. This report shall not be reproduced except in full without the written approval of the laboratory.

Please note that the Cryptosporidium recovery efficiency of the matrix spike sample was below the established acceptance criteria (32 – 100%). The purpose of the MS sample is to ensure that any gross matrix interferences that might cause false negative results are known, if they exist. Re-testing this site for Giardia and Cryptosporidium, along with another matrix spike, is recommended; however, neither the field or matrix spike samples need to be re-collected for LT2 compliance.

Thank you for using ASI for your testing needs. For additional information regarding this report, please contact ASI Client Services at 800-723-4432.

Sincerely,
ANALYTICAL SERVICES, INC.

Carolyn M. Fogg

for Carolyn M. Fogg
Technical Director





USEPA Method 1623.1 Analytical Report

Westchester County Dept. of Env Facilities
 Mike Farraro
 35 Woods Road
 Vahalla, NY 10595
 maf6@westchestergov.com

Analysis Start: 10/30/2015 4:15
 Analysis End: 10/30/2015 9:20
 Analyst: Shan Reynolds

ASI Sample ID No.: 52023-01

Method 1623.1 Batch No.: 1219 1623.1
 Cryptosporidium QC ID No.: 3172
 Giardia QC ID No.: 3173

Sample Information

PWS or Client Name:	Westchester County Water District #1
PWS ID:	5903488
Facility Name:	Kenisco Dam Master Chlorination Facility
Facility ID:	No Data
Sample Collection Point Name:	Raw Water Sample Tap
Sample Collection Point ID:	Raw Water
Matrix:	Water-Raw Surface
Method:	EPA 1623.1
Analysis Type:	Field
Date / Time Collected:	10/27/2015 9:00
Turbidity (NTU):	0.5

Volume and Filtration Information

Filter Type:	Gelman HV
No of Filters Used:	1
Volume Filtered (L):	56.43
Packed Pellet Volume (mL):	0.50
Total Resuspended Concentrate Volume (mL):	5.0
Total Resuspended Concentrate Volume to IMS (mL):	5.0
Number of Sub-samples:	1
Total Sample Volume Examined (L):	56.43

Analytical Results

Matrix Spike Results

Analyte	Total (Oo) cysts/L	Recovered (Oo) cysts/L	Spike Dose (Oo) cysts/L	Percent Recovery
<i>Giardia</i>	0.00	N/A	N/A	N/A
<i>Cryptosporidium</i>	0.00	N/A	N/A	N/A

Method: Samples processed, stained and examined using USEPA Method 1623.1: Cryptosporidium and Giardia in Water by Filtration/IMS/FA (USEPA Jan. 2012; EPA 816-R-12-001) (ASI SOP 224-9).

2/13

USEPA Method 1623.1 Analytical Report

 Westchester County Dept. of Env Facilities
 Mike Farraro
 35 Woods Road
 Vahalla, NY 10595
 maf6@westchestergov.com

 Analysis Start: 10/30/2015 4:15
 Analysis End: 10/30/2015 9:05
 Analyst: Danielle Gregoire

ASI Sample ID No.: 52023-02

 Method 1623.1 Batch No.: 1219 1623.1
 Cryptosporidium QC ID No.: 3172
 Giardia QC ID No.: 3173

Sample Information

PWS or Client Name:	Westchester County Water District #1
PWS ID:	5903488
Facility Name:	Kenisco Dam Master Chlorination Facility
Facility ID:	No Data
Sample Collection Point Name:	Raw Water Sample Tap
Sample Collection Point ID:	Raw Water
Matrix:	Water-Raw Surface
Method:	EPA 1623.1
Analysis Type:	MS
Date / Time Collected:	10/27/2015 8:15
Turbidity (NTU):	0.5

Volume and Filtration Information

Filter Type:	Gelman HV
No of Filters Used:	1
Volume Filtered (L):	56.40
Packed Pellet Volume (mL):	0.50
Total Resuspended Concentrate Volume (mL):	5.0
Total Resuspended Concentrate Volume to IMS (mL):	5.0
Number of Sub-samples:	1
Total Sample Volume Examined (L):	56.40

Analytical Results
Matrix Spike Results

Analyte	Total (Oo) cysts/L	Recovered (Oo) cysts/L	Spike Dose (Oo) cysts/L	Percent Recovery
<i>Giardia</i>	0.30	0.30	1.77	17.0
<i>Cryptosporidium</i>	0.05	0.05	1.77	3.0

Method: Samples processed, stained and examined using USEPA Method 1623.1: Cryptosporidium and Giardia in Water by Filtration/IMS/FA (USEPA Jan. 2012: EPA 816-R-12-001) (ASI SOP 224-9).

Recovered (Oo)cysts/L (applies to Matrix Spikes only) = Total (Oo)cysts/L in Matrix Spike - Total (Oo)cysts/L in Field Sample.

P318

CHAIN OF CUSTODY RECORD

Ship to: Analytical Services, Inc., 130 Allen Brook Lane, Williston, VT 05495, Attn: Sample Management
 Phone: 1-800-723-4432 or 802-878-5138 • Fax: 802-878-6765 Web site: www.analyticalservices.com

Submitted By: _____ <u>WWD #1</u> _____ Phone: <u>9142311286</u> Fax: _____		Report To: _____ _____ Phone: _____ Fax: _____	
Project Name	<u>WWD LT2</u>	Invoice To: _____ _____ Phone: _____ Fax: _____	
Job Site	<u>KENSICO DAM</u>		
P.O. Number			

Sample Identification*	Sample Collection		Sample Matrix						Analysis Requested
	Date	Time	check one						
			Water - Raw	Water - Finished	Waste Water	Biosolids	Soil/Sediment	Other	
<u>DRAW WATER</u>	<u>10-27-15</u>	<u>10:15</u>	<input checked="" type="checkbox"/>						<u>CRYPTO</u>
<u>DRAW WATER</u>	<u>10-27-15</u>	<u>10:30</u>	<input checked="" type="checkbox"/>						<u>CRYPTO</u>

6.5°
6.5°

*Sample ID should match ID written on the sample containers and data sheets. Sample ID will appear on the report for identification.

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
<u>[Signature]</u>	<u>10-28-15 09:00</u>	<u>[Signature]</u>	<u>10/29/15 10:20</u>
Field Comments:		Lab Comments:	

page

CHAIN OF CUSTODY RECORD

Ship to: Analytical Services, Inc., 130 Allen Brook Lane, Williston, VT 05495, Attn: Sample Management
 Phone: 1-800-723-4432 or 802-878-5138 • Fax: 802-878-6765 Web site: www.analyticalservices.com

Submitted By: _____ <u>WICWD #1</u>		Report To: _____ _____ _____	
Phone: <u>914 231 1280</u> Fax: _____		Phone: _____ Fax: _____	
Project Name	<u>WSD1 LT2</u>	Invoice To: _____ _____ _____	
Job Site	<u>Keenico Dam</u>	Phone: _____ Fax: _____	
P.O. Number			

Sample Identification*	Sample Collection		Sample Matrix						Analysis Requested
	Date	Time	check one						
			Water - Raw	Water - Finished	Waste Water	Biosolids	Soil/Sediment	Other	
<u>RAW WATER</u>	<u>10-27-15</u>	<u>0945</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>CRYPTO</u>				
<u>RAW WATER</u>	<u>10-27-15</u>	<u>1000</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>CRYPTO</u>				

6.8^{oc}
4.5^{oc}

*Sample ID should match ID written on the sample containers and data sheets. Sample ID will appear on the report for identification.

Relinquished By (signature) <u>[Signature]</u>	Date/Time <u>10-28-15 0900</u>	Received By (signature) <u>[Signature]</u>	Date/Time <u>10/29/15 10:20</u>
Field Comments:		Lab Comments:	

PS/20

CHAIN OF CUSTODY RECORD

Ship to: Analytical Services, Inc., 130 Allen Brook Lane, Williston, VT 05495, Attn: Sample Management
 Phone: 1-800-723-4432 or 802-878-5138 • Fax: 802-878-6765 Web site: www.analyticalservices.com

Submitted By: _____ <i>WCWD #1</i>		Report To: _____ _____ _____	
Phone: <i>9142311286</i> Fax: _____		Phone: _____ Fax: _____	
Project Name	<i>WCWD 1 LT2</i>	Invoice To: _____ _____ _____	
Job Site	<i>KENSICO DAM</i>	Phone: _____ Fax: _____	
P.O. Number	_____		

Sample Identification*	Sample Collection		Sample Matrix						Analysis Requested
	Date	Time	check one						
			Water - Raw	Water - Finished	Waste Water	Biosolids	Soil/Sediment	Other	
<i>RAW WATER</i>	<i>10-27-15</i>	<i>0845</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>CRYPTO MS</i>				
<i>RAW WATER</i>	<i>10-27-15</i>	<i>0900</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>CRYPTO</i>				

*5.86
5.00*

*Sample ID should match ID written on the sample containers and data sheets. Sample ID will appear on the report for identification.

Relinquished By (signature) <i>Alex D...</i>	Date/Time <i>10-28-15 0900</i>	Received By (signature) <i>[Signature]</i>	Date/Time <i>10/29/15 10:20</i>
Field Comments:		Lab Comments:	

Page

CHAIN OF CUSTODY RECORD

Ship to: Analytical Services, Inc., 130 Allen Brook Lane, Williston, VT 05495, Attn: Sample Management
 Phone: 1-800-723-4432 or 802-878-5138 • Fax: 802-878-6765 Web site: www.analyticalservices.com

Submitted By: <u>WWD #4</u>		Report To: _____	
Phone: <u>9142311286</u> Fax: _____		Phone: _____ Fax: _____	
Project Name	<u>WWD 1 LT2</u>	Invoice To: _____	
Job Site	<u>KENSICO DAM</u>	_____	
P.O. Number	_____	Phone: _____ Fax: _____	

Sample Identification*	Sample Collection		Sample Matrix						Analysis Requested
	Date	Time	check one						
			Water - Raw	Water - Finished	Waste Water	Biosolids	Soil/Sediment	Other	
<u>RAW WATER</u>	<u>10-27-15</u>	<u>0815</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>CRYPTO</u>				
<u>RAW WATER</u>	<u>10-27-15</u>	<u>0830</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>CRYPTO</u>				

4.50c
4.50c

*Sample ID should match ID written on the sample containers and data sheets. Sample ID will appear on the report for identification.

Relinquished By (signature) <u>Audrey Dwyer</u>	Date/Time <u>10-28-15 0900</u>	Received By (signature) <u>Pat St...</u>	Date/Time <u>10/29/15 10:20</u>
Field Comments:		Lab Comments: <u>MS</u>	

P7/s

CHAIN OF CUSTODY RECORD

Ship to: Analytical Services, Inc., 130 Allen Brook Lane, Williston, VT 05495, Attn: Sample Management
 Phone: 1-800-723-4432 or 802-878-5138 • Fax: 802-878-6765 Web site: www.analyticalservices.com

Submitted By: <u>WCWD #1</u>		Report To: _____	
Phone: <u>914 231 1286</u> Fax: _____		Phone: _____ Fax: _____	
Project Name	<u>WCWD 1 LT2</u>	Invoice To: _____	
Job Site	<u>KENSICO DAM</u>	_____	
P.O. Number	_____	Phone: _____ Fax: _____	

Sample Identification*	Sample Collection		Sample Matrix						Analysis Requested
	Date	Time	check one						
			Water - Raw	Water - Finished	Waste Water	Biosolids	Soil/Sediment	Other	
RAW WATER	10-27-15	0915	✓						CRYPTO
RAW WATER	10-27-15	0930	✓						CRYPTO

4.4^u
4.4^{oc}

*Sample ID should match ID written on the sample containers and data sheets. Sample ID will appear on the report for identification.

Relinquished By (signature) <u>A. Kelly</u>	Date/Time <u>10-28-15 0900</u>	Received By (signature) <u>[Signature]</u>	Date/Time <u>10/29/15 10:20</u>
Field Comments:		Lab Comments: <u>MS</u>	

p818