



Antea USA, Inc.  
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February 25, 2016

Brian Jankauskas, P.E.  
New York State Department of Environmental Conservation  
Remedial Bureau A, 12th Floor  
Division of Environmental Remediation  
625 Broadway  
Albany, NY 12233-7015

Subject: 2015 Operations & Maintenance Report  
Ciba Geigy/Hercules Main Plant Site  
EPA ID: NYD002069748  
Site No.: 557011

Dear Mr. Jankauskas:

On behalf of Hercules Incorporated, a wholly-owned subsidiary of Ashland, Inc., Antea® Group is pleased to submit the enclosed 2015 Operations & Maintenance (O&M) Report for the Ciba Geigy/Hercules Main Plant Site, located at 89 Lower Warren Street, Queensbury, New York for your review. The report summarizes the operation and maintenance activities conducted during the period from January 1, 2015 through December 31, 2015 in accordance with the requirements specified in the New York State Department of Environmental Conservation Part 373 Hazardous Waste Permit No. 5-5234-00008/00096, dated March 5, 2015.

If you need a hardcopy, kindly notify us and we will prepare and submit the required number of reports in hardcopy format. Should you have any questions or require additional information please feel free to contact James Vondracek (Ashland, Inc.) or myself at (914)495-9937 or [Christopher.Meyer@anteagroup.com](mailto:Christopher.Meyer@anteagroup.com).

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Meyer".

Christopher Meyer  
Senior Project Manager  
Antea Group

cc: Mr. James Vondracek – Ashland  
Mr. Stephen Havlik – BASF  
Mr. John Swartwout – NYSDEC



# ***2015 Operations & Maintenance Report***

*Former CIBA-GEIGY/HERCULES Facility  
89 Lower Warren Street, Queensbury, New York  
EPA ID: NYD002069748*

*Antea Group Project No. GLENSFA151  
February 24, 2016*

*Prepared for:*  
**Hercules Incorporated**  
5200 Blazer Pkwy  
Dublin, OH 43017

*Prepared by:*  
**Antea<sup>®</sup> Group**  
500 Summit Lake Drive, Suite 150  
Valhalla, NY 10595

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## **2015 Operations & Maintenance Report**

*Former CIBA-GEIGY/HERCULES Facility  
Queensbury, New York*

### **1.0 INTRODUCTION**

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This report summarizes the Operations and Maintenance conducted at the former Ciba-Geigy/Hercules facility located at 89 Lower Warren Street, Queensbury, New York (EPA ID No. NYD002069748) (the Site). Specifically, this includes the activities associated with Department of Environmental Conservation (NYSDEC) Part 373 Hazardous Waste Permit #5-5234-00008/00096 during the monitoring period from January 1, 2015 through December 31, 2015. NYSDEC Part 373 Hazardous Waste Permit #5-5234-00008/00096 was issued with updates on March 5, 2015.

Note that the Site was purchased by CIBA from Hercules in 1979, and was historically operated as a pigments manufacturing facility until 1989. Since that time, Ashland acquired Hercules and BASF Corporation (BASF) acquired CIBA. Hercules and CIBA are the Site permittees and share responsibility for environmental activities.

The activities described in this report were conducted by Antea® Group, on behalf of Hercules Incorporated (Hercules), a wholly-owned subsidiary of Ashland Inc., (Ashland).

### **2.0 POTW DISCHARGE MONITORING**

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Monthly Discharge Monitoring Reports (DMRs) for groundwater that was recovered by the GWES and discharged to the City of Glens Falls Publically Owned Treatment Works (POTW) are provided in Appendix A. During 2015 a total of 19,463,000 gallons of groundwater was discharged to the City of Glens Falls POTW. A summary of the average daily flow rates and required monitoring parameters (daily pH) as well as monthly and annual compliance sampling results are provided in the DMRs (Appendix A). During all monitoring periods for 2015, discharges to the POTW were found to be in compliance with the current Industrial User Permit (#002E), dated April 11, 2012 (effective April 24, 2012). A copy of the current Industrial User Permit has been included in Appendix B. A summary of discharge compliance and total monthly discharge volumes for 2015 can be found in the table below.



2015 Discharge Monitoring Report Summary		
Month	Compliance	Monthly Discharge (Gal)
January	Yes	1,960,000
February	Yes	1,304,000
March	Yes	1,545,000
April	Yes	1,780,000
May	Yes	1,569,000
June	Yes	1,843,000
July	Yes	1,757,000
August	Yes	1,598,000
September	Yes	1,493,000
October	Yes	1,564,000
November	Yes	1,524,000
December	Yes	1,526,000

On September 17, 2015 Lawrence Glasheen, Chief Operator for the City of Glens Falls POTW, conducted a yearly site inspection of the site in accordance with the discharge permit. No issues were identified during the inspection.

## **2.1 GWES and Site Operations and Maintenance**

Throughout 2015 the Site operated in compliance with the on-site operation and maintenance (O&M) requirements including site security, GWES O&M, site inspections and discharge monitoring. As part of the on-site operations, inspections were conducted on a weekly, monthly, and quarterly basis. Copies of these inspection sheets as well as the field maintenance notes are provided in Appendix C.

During 2015, routine and non-routine site and GWES maintenance activities were performed. This work is discussed in the following sections.

## **2.2 Site Maintenance**

A 6-foot high steel chain-link fence is in place at the perimeter of the former operational areas to protect against unauthorized site entry. Site fences were inspected as part of weekly inspections for damage or signs of unauthorized entry. During November 2015, the fence line was cut at five locations along the southern bank of the main plant site to permit drilling and monitoring well installation activities onsite. Following the conclusion of drilling activities, each cut section was temporarily closed with fence wire until permanent repairs were completed (in January 2016). The permanent repair includes addition of man-doors in two locations to facilitate access to the new wells along the riverbank.

Starting in December 2015, the site fenceline along the northern border of the main plant site, west and north sides of the Pre-Treatment Plant, and south sides of the East Lot parcel were cleared of vegetation and replaced with new fence and barbed wire in an effort to improve site security. Barbed wire was also installed along sections of site fenceline where barbed wire previously did not exist. This work began December 2015 and will continue around the perimeter of the property through early 2016. Fence signage was maintained along all fence lines of the Main Plant Site as well as along fence lines of the Pretreatment Plant SWMU and other offsite parcels. New signage will be installed along repaired or replaced fenceline once the repair work has been completed.

Access road conditions were assessed during weekly inspections for damage and repaired as soon as possible as needed. During 2015, repairs were made to access roads including refilling pot holes. Site access roads were regraded and stone added to restore roads to proper conditions.

Wooden stakes were placed next to monitoring wells protected by flush mount covers to facilitate locating of the monitoring wells during high grass and snow conditions. During 2015, the site was mowed during May, June, July and October, while the site access roads were plowed during the winter on an as-needed basis.

During June 2015, an unused job trailer located behind the actively used site job trailer was demolished due to its poor condition, and removed from the site. The area of the former trailer was regraded with stone, and a storage box/shipping container placed on the regraded stone, to be utilized for the storage of onsite materials.

Site inspections were conducted on a weekly, monthly and quarterly basis to evaluate the condition of multiple site features including the RCRA cap, permeable cover, surface drainage system and the vegetative cover. During

2015, maintenance of the cover systems generally included filling small erosional areas caused by rain events and filling ground disturbances caused by burrowing animals.

## **2.3 Groundwater Extraction System O&M**

Inspections and routine maintenance were conducted in 2015 to maintain operation of the GWES, as required by the permit conditions. This work included pump repairs and replacement, float replacements, cleaning of equipment, system component replacements, and periodic system inspections and adjustments for optimum functionality. All maintenance completed on the GWES was recorded on the on-site field logs found in Appendix C.

Groundwater gauging was conducted in July and December of 2015. Groundwater elevation contour maps illustrating flow to the GWES for extraction are included in Appendix D. Details of groundwater and surface water monitoring conducted for the Site were reported in the *Main Plant Groundwater and Surface Water Monitoring Report*, dated January 2016. Details of GWES system maintenance during the reporting period are discussed below.

### **2.3.1 Overburden French Drain System**

Preventative maintenance was conducted throughout 2015 to maintain and ensure proper operation of the overburden GWES components. All sump pumps were routinely pulled, cleaned and checked for functionality, and probes were cleaned, inspected for continuity and replaced as necessary. Biofoul build-up, scaling and iron buildup were removed from the probes, pumps and piping to ensure continued operation at peak efficiency. Weekly inspections were conducted to ensure the pumps and pump components were functioning properly and plumbing lines inspected for leaks. O&M activities in 2016 will continue to focus on maintaining functionality of the overburden GWES, as required by the permit conditions.

### **2.3.2 Bedrock Extraction System**

Preventative maintenance was conducted throughout 2015 to maintain and ensure proper operation of the bedrock GWES. All centrifugal pumps were routinely pulled, cleaned and checked for functionality, and probes were cleaned, inspected for continuity and replaced as necessary. Biofoul build-up, scaling and iron buildup was removed from the probes and pumps to ensure operation at peak efficiency. Due to pump biofouling, scaling and iron buildup, multiple pump heads and motors were repaired or replaced. Weekly inspections were conducted to ensure the pump vaults were clean and dry, totalizers were functioning properly and plumbing lines inspected for leaks. Multiple components of the extraction system were repaired and/or replaced including Warrick control

boards, pump starters, electrical breakers, pressure gauges, transformers and heat tape. O&M activities in 2016 will continue to focus on maintaining functionality and increasing efficiency of the bedrock GWES.

### **2.3.3 Lift Station and Discharge Force Main**

Preventative maintenance was conducted throughout 2015 to maintain and ensure proper operation of the lift station and discharge force main. The lift station was routinely inspected for proper functionality on a weekly basis. O&M activities in 2016 will continue to focus on maintaining functionality of the lift station and discharge force main.

### **2.3.4 EPS and Control Systems**

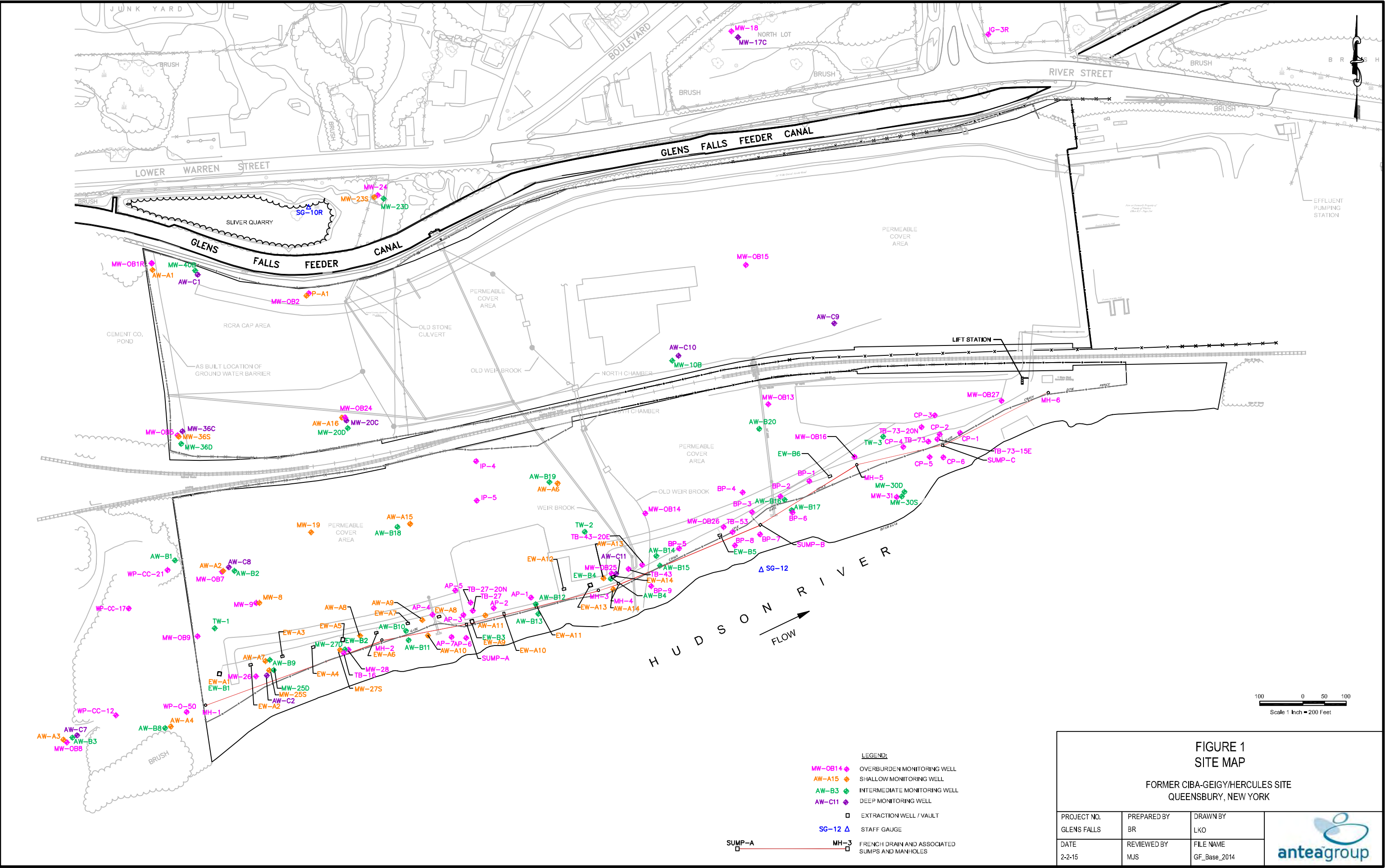
During 2014, telemetry data transmission from the extraction well vaults to the Effluent Pump Station (EPS) became intermittent, and ultimately the data ceased being recorded. Investigations during 2014 indicated numerous points where telemetry data transmission loss occurred, which were due to insulation faults and multiple line breaks in the direct line burial telemetry lines. Verification of the system performance parameters is conducted on at least a weekly basis, by manually inspecting all locations.

In April and May 2015, antennae were installed at the EPS and along the fenceline adjacent to Sump C to allow for the wireless transfer of data from the GWES at Sump C to the EPS. In October 2015, a new telemetry dataline was installed in a ¾" electrical conduit between locations Sump C, EW-B6, Sump B, and EW-B5. The installation of these components was completed to reduce observed lapses in telemetry transmission.

## **3.0 NYSDEC Inspection**

NYSDEC's most recent Hazardous Waste Compliance Inspection was conducted on July 17, 2014. No violations were observed during the 2014 inspection.

## ***Figure***



## ***Appendix A***

2015 Site Discharge Monitoring Reports to Glens Falls POTW



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

March 11, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for February 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the February 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on February 3, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation., Toms River, NJ



**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

3/11/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						5.0	
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
<b>Compliance</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Monthly min	0.47	0.00	0.00	0.28	0.00	7.1	37,000
Monthly ave	0.47	0.00	0.00	0.28	0.00	7.3	46,571
Monthly max	0.47	0.00	0.00	0.28	0.00	7.5	53,000
Data points	1	1	1	1	1	28	28
Date:							
02/01/15						7.2	50,000
02/02/15						7.5	51,000
02/03/15	0.470	ND	ND	0.28	ND	7.2	51,000
02/04/15						7.2	53,000
02/05/15						7.3	52,000
02/06/15						7.2	45,000
02/07/15						7.2	51,000
02/08/15						7.1	53,000
02/09/15						7.2	47,000
02/10/15						7.3	46,000
02/11/15						7.1	52,000
02/12/15						7.2	48,000
02/13/15						7.3	45,000
02/14/15						7.2	41,000
02/15/15						7.3	47,000
02/16/15						7.2	47,000
02/17/15						7.3	50,000
02/18/15						7.3	39,000
02/19/15						7.2	41,000
02/20/15						7.4	39,000
02/21/15						7.4	44,000
02/22/15						7.3	50,000
02/23/15						7.2	43,000
02/24/15						7.2	37,000
02/25/15						7.2	45,000
02/26/15						7.2	48,000
02/27/15						7.3	45,000
02/28/15						7.2	44,000
Monthly Average for Chromium							
Concentration	0.47 mg/L						
Ave. Flow	46571 gpd						
Ave. Load	0.18 #/day						
PERMIT	3.10 #/day						
Notes:							
ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.							
The laboratory Reporting Limit for Lead is 0.0015 mg/L.							
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.							
The laboratory Reporting Limit for Phenols is 0.050 mg/L.							

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-109604-1

Client Project/Site: Hercules Glens Falls O&M POTW

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

2/11/2015 9:59:36 AM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

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*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc

Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-109604-1	POTW	Water	02/03/15 11:00	02/04/15 09:38

1

2

3

4

5

6

7

8

9

10

11

12

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

**Job ID: 680-109604-1**

**Laboratory: TestAmerica Savannah**

### Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls O&M POTW**

**Report Number: 680-109604-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 02/04/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1 C.

#### TOTAL METALS (ICPMS)

Sample POTW (680-109604-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 02/06/2015 and analyzed on 02/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL MERCURY

Sample POTW (680-109604-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared on 02/05/2015 and analyzed on 02/06/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW (680-109604-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 02/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW (680-109604-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 02/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

**Client Sample ID: POTW**

**Lab Sample ID: 680-109604-1**

**Date Collected: 02/03/15 11:00**

**Matrix: Water**

**Date Received: 02/04/15 09:38**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	470		5.0	2.5	ug/L		02/06/15 09:28	02/09/15 23:51	1
Lead	1.5	U	1.5	0.50	ug/L		02/06/15 09:28	02/09/15 23:51	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		02/05/15 12:32	02/06/15 11:27	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.28		0.050	0.013	mg/L		02/10/15 07:01	02/10/15 12:29	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		02/10/15 08:02	02/10/15 12:08	1



# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-369849/1-A  
Matrix: Water  
Analysis Batch: 370306

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 369849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		02/06/15 09:28	02/09/15 22:17	1
Lead	1.5	U	1.5	0.50	ug/L		02/06/15 09:28	02/09/15 22:17	1

Lab Sample ID: LCS 680-369849/2-A  
Matrix: Water  
Analysis Batch: 370306

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 369849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	112		ug/L		112	85 - 115
Lead	500	571		ug/L		114	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-369716/13-A  
Matrix: Water  
Analysis Batch: 369931

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 369716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		02/05/15 12:32	02/06/15 10:14	1

Lab Sample ID: LCS 680-369716/15-A  
Matrix: Water  
Analysis Batch: 369931

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 369716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.56		ug/L		102	85 - 115

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-370260/1-A  
Matrix: Water  
Analysis Batch: 370353

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 370260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		02/10/15 08:02	02/10/15 13:17	1

Lab Sample ID: LCS 680-370260/2-A  
Matrix: Water  
Analysis Batch: 370353

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 370260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0981		mg/L		98	75 - 125

TestAmerica Savannah

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

## Metals

### Prep Batch: 369716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	245.1	
LCS 680-369716/15-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-369716/13-A	Method Blank	Total/NA	Water	245.1	

### Prep Batch: 369849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	200.8	
LCS 680-369849/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-369849/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 369931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	245.1	369716
LCS 680-369716/15-A	Lab Control Sample	Total/NA	Water	245.1	369716
MB 680-369716/13-A	Method Blank	Total/NA	Water	245.1	369716

### Analysis Batch: 370306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	200.8	369849
LCS 680-369849/2-A	Lab Control Sample	Total/NA	Water	200.8	369849
MB 680-369849/1-A	Method Blank	Total/NA	Water	200.8	369849

## General Chemistry

### Prep Batch: 370246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	Distill/CN	

### Prep Batch: 370260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-370260/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 680-370260/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 370345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	335.4	370246

### Analysis Batch: 370353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-109604-1	POTW	Total/NA	Water	420.1	370260
LCS 680-370260/2-A	Lab Control Sample	Total/NA	Water	420.1	370260
MB 680-370260/1-A	Method Blank	Total/NA	Water	420.1	370260

## Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

**Client Sample ID: POTW**

**Date Collected: 02/03/15 11:00**

**Date Received: 02/04/15 09:38**

**Lab Sample ID: 680-109604-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			369849	02/06/15 09:28	CRW	TAL SAV
Total/NA	Analysis	200.8		1	370306	02/09/15 23:51	BJB	TAL SAV
Total/NA	Prep	245.1			369716	02/05/15 12:32	JKL	TAL SAV
Total/NA	Analysis	245.1		1	369931	02/06/15 11:27	JKL	TAL SAV
Total/NA	Prep	Distill/CN			370246	02/10/15 07:01	DAM	TAL SAV
Total/NA	Analysis	335.4		5	370345	02/10/15 12:29	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			370260	02/10/15 08:02	JRJ	TAL SAV
Total/NA	Analysis	420.1		1	370353	02/10/15 12:08	JRJ	TAL SAV

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-15 *
California	State Program	9	2939	07-31-15
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	09-005r	04-16-15
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-15
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-15
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-15
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-109604-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

## **ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD**

**TestAmerica Savannah**  
5102 LaRoche Avenue  
Savannah, GA 31404

Website: [www.testamericainc.com](http://www.testamericainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

☐ Alternate Laboratory Name/Location

Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-109604-1

Login Number: 109604

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

April 2, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for March 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the March 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on March 10, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation., Toms River, NJ



**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

4/2/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						5.0	
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
Monthly ave	0.38	0.00	0.00	0.22	0.00	7.2	49,839
Monthly max	0.38	0.00	0.00	0.22	0.00	7.4	64,000
Data points	1.00	1.00	1.00	1.00	1.00	31	31
Date:							
03/01/15						7.3	46,000
03/02/15						7.1	46,000
03/03/15						7.1	47,000
03/04/15						7.2	46,000
03/05/15						7.2	43,000
03/06/15						7.0	46,000
03/07/15						7.1	42,000
03/08/15						7.2	44,000
03/09/15						7.3	45,000
03/10/15	0.380	ND	ND	0.22	ND	7.2	44,000
03/11/15						7.3	40,000
03/12/15						7.0	48,000
03/13/15						7.0	49,000
03/14/15						7.1	47,000
03/15/15						7.2	46,000
03/16/15						7.4	50,000
03/17/15						7.4	48,000
03/18/15						7.3	52,000
03/19/15						7.2	53,000
03/20/15						7.2	50,000
03/21/15						7.1	53,000
03/22/15						7.2	51,000
03/23/15						7.2	57,000
03/24/15						7.3	53,000
03/25/15						7.2	51,000
03/26/15						7.3	52,000
03/27/15						7.2	56,000
03/28/15						7.3	59,000
03/29/15						7.2	64,000
03/30/15						7.1	60,000
03/31/15						7.3	57,000
Monthly Average for Chromium							
Concentration	0.38 mg/L						
Ave. Flow	49839 gpd						
Ave. Load	0.16 #/day						
PERMIT	3.10 #/day						
Notes:							
ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.							
The laboratory Reporting Limit for Lead is 0.0015 mg/L.							
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.							
The laboratory Reporting Limit for Phenols is 0.050 mg/L.							

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-110534-1

Client Project/Site: Hercules Glens Falls O&M POTW

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

3/17/2015 5:32:14 PM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc

TestAmerica Job ID: 680-110534-1

Project/Site: Hercules Glens Falls O&M POTW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-110534-1	POTW	Water	03/10/15 14:30	03/11/15 10:31

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

**Job ID: 680-110534-1**

**Laboratory: TestAmerica Savannah**

### Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls O&M POTW**

**Report Number: 680-110534-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### **RECEIPT**

The samples were received on 03/11/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.9 C.

#### **TOTAL METALS (ICPMS)**

Sample POTW (680-110534-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 03/12/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL MERCURY**

Sample POTW (680-110534-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared on 03/12/2015 and analyzed on 03/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL CYANIDE**

Sample POTW (680-110534-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 03/16/2015.

Cyanide, Total recovered high for the MS/MSD of sample POTW MS/MSD (680-110534-1) in batch 680-374836.

Sample POTW (680-110534-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **PHENOLS**

Sample POTW (680-110534-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 03/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

**Client Sample ID: POTW**

**Lab Sample ID: 680-110534-1**

**Date Collected: 03/10/15 14:30**

**Matrix: Water**

**Date Received: 03/11/15 10:31**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	380		5.0	2.5	ug/L		03/12/15 09:01	03/12/15 21:41	1
Lead	1.5	U	1.5	0.50	ug/L		03/12/15 09:01	03/12/15 21:41	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		03/12/15 12:18	03/13/15 09:25	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.22		0.050	0.025	mg/L		03/16/15 09:25	03/16/15 13:23	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		03/13/15 07:34	03/13/15 17:03	1



# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-374318/1-A  
Matrix: Water  
Analysis Batch: 374488

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 374318

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		03/12/15 09:01	03/12/15 18:24	1
Lead	1.5	U	1.5	0.50	ug/L		03/12/15 09:01	03/12/15 18:24	1

Lab Sample ID: LCS 680-374318/2-A  
Matrix: Water  
Analysis Batch: 374488

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 374318

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	107		ug/L		107	85 - 115
Lead	500	542		ug/L		108	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-374397/13-A  
Matrix: Water  
Analysis Batch: 374573

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 374397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		03/12/15 12:18	03/13/15 08:58	1

Lab Sample ID: LCS 680-374397/15-A  
Matrix: Water  
Analysis Batch: 374573

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 374397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.60		ug/L		104	85 - 115

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-374742/1-A  
Matrix: Water  
Analysis Batch: 374835

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 374742

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		03/16/15 09:15	03/16/15 12:47	1

Lab Sample ID: LCS 680-374742/2-A  
Matrix: Water  
Analysis Batch: 374835

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 374742

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0487		mg/L		97	90 - 110

Lab Sample ID: 680-110534-1 MS  
Matrix: Water  
Analysis Batch: 374836

Client Sample ID: POTW  
Prep Type: Total/NA  
Prep Batch: 374742

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.22		0.0500	0.291	4	mg/L		141	90 - 110

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

## Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: 680-110534-1 MSD

Matrix: Water

Analysis Batch: 374836

Client Sample ID: POTW

Prep Type: Total/NA

Prep Batch: 374742

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.22		0.0500	0.299	4	mg/L		156	90 - 110	3	20

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-374522/1-A

Matrix: Water

Analysis Batch: 374620

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 374522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		03/13/15 07:34	03/13/15 16:51	1

Lab Sample ID: LCS 680-374522/2-A

Matrix: Water

Analysis Batch: 374620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 374522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0928		mg/L		93	75 - 125

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

## Metals

### Prep Batch: 374318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	200.8	
LCS 680-374318/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-374318/1-A	Method Blank	Total/NA	Water	200.8	

### Prep Batch: 374397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	245.1	
LCS 680-374397/15-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-374397/13-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 374488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	200.8	374318
LCS 680-374318/2-A	Lab Control Sample	Total/NA	Water	200.8	374318
MB 680-374318/1-A	Method Blank	Total/NA	Water	200.8	374318

### Analysis Batch: 374573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	245.1	374397
LCS 680-374397/15-A	Lab Control Sample	Total/NA	Water	245.1	374397
MB 680-374397/13-A	Method Blank	Total/NA	Water	245.1	374397

## General Chemistry

### Prep Batch: 374522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-374522/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 680-374522/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 374620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	420.1	374522
LCS 680-374522/2-A	Lab Control Sample	Total/NA	Water	420.1	374522
MB 680-374522/1-A	Method Blank	Total/NA	Water	420.1	374522

### Prep Batch: 374742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	Distill/CN	
680-110534-1 MS	POTW	Total/NA	Water	Distill/CN	
680-110534-1 MSD	POTW	Total/NA	Water	Distill/CN	
LCS 680-374742/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-374742/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 374835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-374742/2-A	Lab Control Sample	Total/NA	Water	335.4	374742
MB 680-374742/1-A	Method Blank	Total/NA	Water	335.4	374742

TestAmerica Savannah

## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

### General Chemistry (Continued)

#### Analysis Batch: 374836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-110534-1	POTW	Total/NA	Water	335.4	374742
680-110534-1 MS	POTW	Total/NA	Water	335.4	374742
680-110534-1 MSD	POTW	Total/NA	Water	335.4	374742

## Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

**Client Sample ID: POTW**

**Date Collected: 03/10/15 14:30**

**Date Received: 03/11/15 10:31**

**Lab Sample ID: 680-110534-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			374318	03/12/15 09:01	CRW	TAL SAV
Total/NA	Analysis	200.8		1	374488	03/12/15 21:41	BJB	TAL SAV
Total/NA	Prep	245.1			374397	03/12/15 12:18	JKL	TAL SAV
Total/NA	Analysis	245.1		1	374573	03/13/15 09:25	JKL	TAL SAV
Total/NA	Prep	Distill/CN			374742	03/16/15 09:25	DAM	TAL SAV
Total/NA	Analysis	335.4		5	374836	03/16/15 13:23	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			374522	03/13/15 07:34	JRJ	TAL SAV
Total/NA	Analysis	420.1		1	374620	03/13/15 17:03	JRJ	TAL SAV

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-15
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-15 *
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	14-004r	04-16-15 *
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-15
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-15 *
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-15
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-110534-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 68217

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

# TestAmerica


THE LEADER IN ENVIRONMENTAL TESTING

Website: [www.testamericainc.com](http://www.testamericainc.com)  
 Phone: (912) 354-7858  
 Fax: (912) 352-0165

TestAmerica Savannah  
 5102 LaRoche Avenue  
 Savannah, GA 31404

Alternate Laboratory Name/Location

Phone:  
 Fax:

PROJECT REFERENCE		PROJECT NO.	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS	PAGE	OF
Ashtland - Glens Falls	Glens Falls	Glens Falls	NY	COMPOSITE (C) OR GRAB (G) INDICATE			
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.		AQUEOUS (WATER)			
Kathy Smith	Glens Falls			SOLID OR SEMISOLID			
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)			
Mark Schumacher	315 582 9832						
CLIENT NAME	CLIENT E-MAIL						
Ashtland	mark.schumacher@autogroup						
CLIENT ADDRESS							
By lower management; Queendary NY							
COMPANY CONTRACTING THIS WORK (if applicable)							
Antea							
SAMPLE		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS SUBMITTED			
DATE	TIME						
3/10/15	1430	POTW		X	X	X	
<div style="text-align: center;">  <p>680-110534 Chain of Custody</p> </div>				REMARKS			
RELINQUISHED BY: (SIGNATURE)		RELINQUISHED BY: (SIGNATURE)		DATE	TIME	TIME	
3/10/15		3/10/15		1600			
RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		DATE	TIME	TIME	
3/10/15		3/10/15		1445			

RECEIVED FOR LABORATORY BY: *m. hildes* DATE: *3/11/15* TIME: *10:31*

SAVANNAH LOG NO. *680-110534* LABORATORY REMARKS *3.2 °C / 2.9 °C*

TAL8240-680 (1008)

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## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-110534-1

Login Number: 110534

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

May 28, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for April 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the April 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on April 1, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation., Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

5/28/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						5.0	
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
<b>Compliance</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Monthly min	0.46	0.00	0.00	0.29	0.00	6.9	52,000
Monthly ave	0.46	0.00	0.00	0.29	0.00	7.1	59,333
Monthly max	0.46	0.00	0.00	0.29	0.00	7.4	64,000
Data points	1	1	1	1	1	30	30
Date:							
04/01/15	0.460	ND	ND	0.29	ND	7.4	59,000
04/02/15						7.2	57,000
04/03/15						7.0	54,000
04/04/15						7.2	57,000
04/05/15						7.2	57,000
04/06/15						7.3	57,000
04/07/15						7.1	56,000
04/08/15						7.1	54,000
04/09/15						7.1	52,000
04/10/15						7.0	57,000
04/11/15						7.3	61,000
04/12/15						7.2	63,000
04/13/15						7.1	60,000
04/14/15						7.3	63,000
04/15/15						7.2	59,000
04/16/15						7.2	64,000
04/17/15						7.1	61,000
04/18/15						7.1	62,000
04/19/15						7.4	60,000
04/20/15						7.0	60,000
04/21/15						7.0	60,000
04/22/15						7.1	63,000
04/23/15						7.2	62,000
04/24/15						6.9	58,000
04/25/15						7.2	63,000
04/26/15						7.2	64,000
04/27/15						7.1	60,000
04/28/15						7.1	58,000
04/29/15						6.9	60,000
04/30/15						7.3	59,000
Monthly Average for Chromium							
Concentration	0.46 mg/L						
Ave. Flow	59333 gpd						
Ave. Load	0.23 #/day						
PERMIT	3.10 #/day						
Notes:							
ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.							
The laboratory Reporting Limit for Lead is 0.0015 mg/L.							
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.							
The laboratory Reporting Limit for Phenols is 0.050 mg/L.							

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-111209-1

Client Project/Site: Hercules Glens Falls O&M POTW 04/15

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

4/7/2015 10:38:17 AM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc

TestAmerica Job ID: 680-111209-1

Project/Site: Hercules Glens Falls O&M POTW 04/15

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-111209-1	POTW	Water	04/01/15 11:00	04/02/15 09:25

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## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

**Job ID: 680-111209-1**

**Laboratory: TestAmerica Savannah**

### Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls O&M POTW 04/15**

**Report Number: 680-111209-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 04/02/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

#### TOTAL METALS (ICPMS)

Sample POTW (680-111209-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 04/06/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL MERCURY

Sample POTW (680-111209-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared on 04/03/2015 and analyzed on 04/06/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW (680-111209-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 04/06/2015.

Sample POTW (680-111209-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW (680-111209-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 04/06/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

**Client Sample ID: POTW**

**Date Collected: 04/01/15 11:00**

**Date Received: 04/02/15 09:25**

**Lab Sample ID: 680-111209-1**

**Matrix: Water**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	460		5.0	2.5	ug/L		04/06/15 10:07	04/06/15 21:35	1
Lead	1.5	U	1.5	0.50	ug/L		04/06/15 10:07	04/06/15 21:35	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		04/03/15 13:16	04/06/15 11:39	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.29		0.050	0.025	mg/L		04/06/15 08:40	04/06/15 12:34	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		04/06/15 10:39	04/06/15 14:26	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-377567/1-A  
Matrix: Water  
Analysis Batch: 377697

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 377567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		04/06/15 10:07	04/06/15 19:21	1
Lead	1.5	U	1.5	0.50	ug/L		04/06/15 10:07	04/06/15 19:21	1

Lab Sample ID: LCS 680-377567/2-A  
Matrix: Water  
Analysis Batch: 377697

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 377567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	104		ug/L		104	85 - 115
Lead	500	536		ug/L		107	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-377417/1-A  
Matrix: Water  
Analysis Batch: 377608

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 377417

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.091	ug/L		04/03/15 13:16	04/06/15 11:02	1

Lab Sample ID: LCS 680-377417/3-A  
Matrix: Water  
Analysis Batch: 377608

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 377417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.43		ug/L		97	85 - 115

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-377529/1-A  
Matrix: Water  
Analysis Batch: 377601

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 377529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		04/06/15 08:40	04/06/15 12:12	1

Lab Sample ID: LCS 680-377529/2-A  
Matrix: Water  
Analysis Batch: 377601

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 377529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0513		mg/L		103	90 - 110

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-377599/1-A  
Matrix: Water  
Analysis Batch: 377627

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 377599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	—	04/06/15 10:39	04/06/15 14:21	1

Lab Sample ID: LCS 680-377599/2-A  
Matrix: Water  
Analysis Batch: 377627

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 377599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0839		mg/L	—	84	75 - 125

Lab Sample ID: LCSD 680-377599/3-A  
Matrix: Water  
Analysis Batch: 377627

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 377599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.100	0.0862		mg/L	—	86	75 - 125	3	30

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

## Metals

### Prep Batch: 377417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	245.1	
LCS 680-377417/3-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-377417/1-A	Method Blank	Total/NA	Water	245.1	

### Prep Batch: 377567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	200.8	
LCS 680-377567/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-377567/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 377608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	245.1	377417
LCS 680-377417/3-A	Lab Control Sample	Total/NA	Water	245.1	377417
MB 680-377417/1-A	Method Blank	Total/NA	Water	245.1	377417

### Analysis Batch: 377697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	200.8	377567
LCS 680-377567/2-A	Lab Control Sample	Total/NA	Water	200.8	377567
MB 680-377567/1-A	Method Blank	Total/NA	Water	200.8	377567

## General Chemistry

### Prep Batch: 377529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	Distill/CN	
LCS 680-377529/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-377529/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Prep Batch: 377599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-377599/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-377599/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-377599/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 377601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	335.4	377529
LCS 680-377529/2-A	Lab Control Sample	Total/NA	Water	335.4	377529
MB 680-377529/1-A	Method Blank	Total/NA	Water	335.4	377529

### Analysis Batch: 377627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-111209-1	POTW	Total/NA	Water	420.1	377599
LCS 680-377599/2-A	Lab Control Sample	Total/NA	Water	420.1	377599
LCSD 680-377599/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	377599
MB 680-377599/1-A	Method Blank	Total/NA	Water	420.1	377599

TestAmerica Savannah

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

**Client Sample ID: POTW**

**Date Collected: 04/01/15 11:00**

**Date Received: 04/02/15 09:25**

**Lab Sample ID: 680-111209-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			377567	04/06/15 10:07	CRW	TAL SAV
Total/NA	Analysis	200.8		1	377697	04/06/15 21:35	BJB	TAL SAV
Total/NA	Prep	245.1			377417	04/03/15 13:16	JKL	TAL SAV
Total/NA	Analysis	245.1		1	377608	04/06/15 11:39	JKL	TAL SAV
Total/NA	Prep	Distill/CN			377529	04/06/15 08:40	DAM	TAL SAV
Total/NA	Analysis	335.4		5	377601	04/06/15 12:34	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			377599	04/06/15 10:39	JME	TAL SAV
Total/NA	Analysis	420.1		1	377627	04/06/15 14:26	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW 04/15

TestAmerica Job ID: 680-111209-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-15
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-15 *
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	14-004r	04-16-15 *
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-15
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-15
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc

TestAmerica Job ID: 680-111209-1

Project/Site: Hercules Glens Falls O&M POTW 04/15

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858



Serial Number 92183

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

# TestAmerica


THE LEADER IN ENVIRONMENTAL TESTING

Website: [www.testamericainc.com](http://www.testamericainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

TestAmerica Savannah  
5102 LaRoche Avenue  
Savannah, GA 31404

Alternate Laboratory Name/Location

Phone:  
Fax:

PROJECT REFERENCE		PROJECT NO.	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS	PAGE	OF						
Ashland - Glens Falls		Glens Falls	NY				1						
TAL (LAB) PROJECT MANAGER		P.O. NUMBER	CONTRACT NO.			STANDARD REPORT DELIVERY							
Kathy Smith		Glens Falls				DATE DUE							
CLIENT (SITE) PM		CLIENT PHONE	CLIENT FAX			EXPEDITED REPORT DELIVERY (SURCHARGE)							
mark.schneider		315 263 1183				DATE DUE							
CLIENT NAME		CLIENT E-MAIL				NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	1						
Ashland		mark.schneider@antengang											
CLIENT ADDRESS													
5788 Winderwater Pkwy, Syracuse, NY													
COMPANY CONTRACTING THIS WORK (if applicable)													
Anten Group													
SAMPLE		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS SUBMITTED		REMARKS							
DATE	TIME												
4/1/15	1100	POTW		1 1 1									
<div style="text-align: center;">  <p>680-111209 Chain of Custody</p> </div>													
								RELINQUISHED BY: (SIGNATURE)		DATE	TIME	DATE	TIME
								RECEIVED BY: (SIGNATURE)		DATE	TIME	DATE	TIME
								RELINQUISHED BY: (SIGNATURE)		DATE	TIME	DATE	TIME
								RECEIVED BY: (SIGNATURE)		DATE	TIME	DATE	TIME
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								RELINQUISHED BY: (SIGNATURE)		DATE	TIME	DATE	TIME
								RECEIVED BY: (SIGNATURE)		DATE	TIME	DATE	TIME
								RELINQUISHED BY: (SIGNATURE)		DATE	TIME	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY:		DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
m.kelly		4/2/15	09:25	YES	0	680-111209	1.6/2.0

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-111209-1

Login Number: 111209

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

June 4, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for May 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the May 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on May 4, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation., Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

6/4/2015

[illegible]

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-112202-1

Client Project/Site: Hercules Glens Falls O&M POTW

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

5/8/2015 5:55:37 PM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
$\alpha$	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



## Sample Summary

Client: Ashland Inc

TestAmerica Job ID: 680-112202-1

Project/Site: Hercules Glens Falls O&M POTW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112202-1	POTW	Water	05/04/15 10:30	05/05/15 09:49

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

**Job ID: 680-112202-1**

**Laboratory: TestAmerica Savannah**

### Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls O&M POTW**

**Report Number: 680-112202-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 05/05/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.6 C.

#### TOTAL METALS (ICPMS)

Sample POTW (680-112202-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/06/2015 and analyzed on 05/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL MERCURY

Sample POTW (680-112202-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared on 05/06/2015 and analyzed on 05/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW (680-112202-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 05/07/2015.

Sample POTW (680-112202-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW (680-112202-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 05/08/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

**Client Sample ID: POTW**

**Lab Sample ID: 680-112202-1**

**Date Collected: 05/04/15 10:30**

**Matrix: Water**

**Date Received: 05/05/15 09:49**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	400		5.0	2.5	ug/L		05/06/15 12:47	05/07/15 20:57	1
Lead	1.5	U	1.5	0.50	ug/L		05/06/15 12:47	05/07/15 20:57	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.20	0.080	ug/L		05/06/15 14:23	05/07/15 12:42	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.22		0.050	0.025	mg/L		05/07/15 07:13	05/07/15 10:44	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		05/08/15 12:14	05/08/15 15:15	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-381751/1-A  
Matrix: Water  
Analysis Batch: 382128

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 381751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		05/06/15 12:47	05/07/15 19:57	1
Lead	1.5	U	1.5	0.50	ug/L		05/06/15 12:47	05/07/15 19:57	1

Lab Sample ID: LCS 680-381751/2-A  
Matrix: Water  
Analysis Batch: 382128

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 381751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	102		ug/L		102	85 - 115
Lead	500	507		ug/L		101	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-381777/1-A  
Matrix: Water  
Analysis Batch: 381976

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 381777

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		05/06/15 14:23	05/07/15 11:53	1

Lab Sample ID: LCS 680-381777/3-A  
Matrix: Water  
Analysis Batch: 381976

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 381777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.65		ug/L		106	85 - 115

Lab Sample ID: LLCS 680-381777/2-A  
Matrix: Water  
Analysis Batch: 381976

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 381777

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.200	0.160	J	ug/L		80	50 - 150

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-381820/1-A  
Matrix: Water  
Analysis Batch: 381891

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 381820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		05/07/15 07:13	05/07/15 10:07	1

Lab Sample ID: LCS 680-381820/2-A  
Matrix: Water  
Analysis Batch: 381891

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 381820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0485		mg/L		97	90 - 110

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-382170/1-A

Matrix: Water

Analysis Batch: 382214

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 382170

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		05/08/15 12:14	05/08/15 15:08	1

Lab Sample ID: LCS 680-382170/2-A

Matrix: Water

Analysis Batch: 382214

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 382170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0855		mg/L		86	75 - 125

Lab Sample ID: LCSD 680-382170/3-A

Matrix: Water

Analysis Batch: 382214

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 382170

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.100	0.0832		mg/L		83	75 - 125	3	30

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

## Metals

### Prep Batch: 381751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	200.8	
LCS 680-381751/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-381751/1-A	Method Blank	Total/NA	Water	200.8	

### Prep Batch: 381777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	245.1	
LCS 680-381777/3-A	Lab Control Sample	Total/NA	Water	245.1	
LLCS 680-381777/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-381777/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 381976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	245.1	381777
LCS 680-381777/3-A	Lab Control Sample	Total/NA	Water	245.1	381777
LLCS 680-381777/2-A	Lab Control Sample	Total/NA	Water	245.1	381777
MB 680-381777/1-A	Method Blank	Total/NA	Water	245.1	381777

### Analysis Batch: 382128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	200.8	381751
LCS 680-381751/2-A	Lab Control Sample	Total/NA	Water	200.8	381751
MB 680-381751/1-A	Method Blank	Total/NA	Water	200.8	381751

## General Chemistry

### Prep Batch: 381820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	Distill/CN	
LCS 680-381820/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-381820/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 381891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	335.4	381820
LCS 680-381820/2-A	Lab Control Sample	Total/NA	Water	335.4	381820
MB 680-381820/1-A	Method Blank	Total/NA	Water	335.4	381820

### Prep Batch: 382170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-382170/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-382170/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-382170/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 382214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112202-1	POTW	Total/NA	Water	420.1	382170
LCS 680-382170/2-A	Lab Control Sample	Total/NA	Water	420.1	382170
LCSD 680-382170/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	382170

TestAmerica Savannah

## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

### General Chemistry (Continued)

#### Analysis Batch: 382214 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-382170/1-A	Method Blank	Total/NA	Water	420.1	382170

## Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

**Client Sample ID: POTW**

**Date Collected: 05/04/15 10:30**

**Date Received: 05/05/15 09:49**

**Lab Sample ID: 680-112202-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			381751	05/06/15 12:47	BJB	TAL SAV
Total/NA	Analysis	200.8		1	382128	05/07/15 20:57	BWR	TAL SAV
Total/NA	Prep	245.1			381777	05/06/15 14:23	JKL	TAL SAV
Total/NA	Analysis	245.1		1	381976	05/07/15 12:42	JKL	TAL SAV
Total/NA	Prep	Distill/CN			381820	05/07/15 07:13	DAM	TAL SAV
Total/NA	Analysis	335.4		5	381891	05/07/15 10:44	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			382170	05/08/15 12:14	JME	TAL SAV
Total/NA	Analysis	420.1		1	382214	05/08/15 15:15	JRJ	TAL SAV

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858



# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-15
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	14-004r	04-16-15 *
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-15
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-15
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-112202-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 93302

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

# TestAmerica

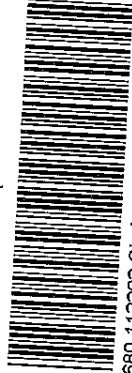
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah  
5102 LaRoche Avenue  
Savannah, GA 31404

Website: www.testamericainc.com  
Phone: (912) 354-7858  
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:  
Fax:

PROJECT REFERENCE		PROJECT NO	PROJECT LOCATION (STATE)	MATRIX TYPE	REQUIRED ANALYSIS	PAGE	OF
TAL (LAB) PROJECT MANAGER	Glens Falls	Glens Falls	NY	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	STANDARD REPORT DELIVERY		1
CLIENT (SITE) PM	Kathryn Smith	P.O. NUMBER	11	AIR	DATE DUE		
CLIENT NAME	Mark Schneider	CLIENT PHONE	315 532 9832	SOLID OR SEMISOLID	EXPEDITED REPORT DELIVERY (SURCHARGE)		
CLIENT ADDRESS	Ashland	CLIENT E-MAIL	Mark.Schneider@entegroup.com	AQUEOUS (WATER)	DATE DUE		
COMPANY CONTRACTING THIS WORK (if applicable)				COMPOSITE (C) OR GRAB (G) INDICATE	NUMBER OF COOLERS SUBMITTED PER SHIPMENT:		
5700 Widenwater Hwy, Syracuse							
Antea							
SAMPLE		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS SUBMITTED			
DATE	TIME						
5/4/15	1030	POTW		XX			
<div style="text-align: center;">  <p>680-112202 Chain of Custody</p> </div>							
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME
[Signature]		5/4/15	1245	[Signature]		5-4-15	1030
RECEIVED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME
[Signature]		5-4-15	1245	[Signature]			

LABORATORY USE ONLY			
RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT
[Signature]	5/8/2015	05:05	YES <input type="radio"/> NO <input type="radio"/>
CUSTODY SEAL NO.	LOG NO.	LABORATORY REMARKS	
680-112202	680-112202	1.260	

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-112202-1

Login Number: 112202

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

July 16, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for June 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the June 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on June 3, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation., Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

7/7/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	Total Lead	Total Mercury	Total Cyanide	Total Phenols	Compliance Point	Compliance Point
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						5.0	
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monthly min	0.32	0.00	0.00	0.28	0.00	6.8	58,000
Monthly ave	0.32	0.00	0.00	0.28	0.00	7.0	61,433
Monthly max	0.32	0.00	0.00	0.28	0.00	7.2	66,000
Data points	1	1	1	1	1	30	30
Date:							
06/01/15						7.0	62,000
06/02/15						7.0	59,000
06/03/15	0.320	ND	ND	0.28	ND	7.1	63,000
06/04/15						6.9	61,000
06/05/15						7.0	66,000
06/06/15						7.1	61,000
06/07/15						7.1	59,000
06/08/15						7.1	58,000
06/09/15						6.9	62,000
06/10/15						7.1	58,000
06/11/15						7.0	63,000
06/12/15						7.2	60,000
06/13/15						7.1	63,000
06/14/15						7.1	60,000
06/15/15						7.0	61,000
06/16/15						7.0	59,000
06/17/15						7.1	63,000
06/18/15						7.0	66,000
06/19/15						6.9	62,000
06/20/15						7.2	63,000
06/21/15						6.9	63,000
06/22/15						7.0	62,000
06/23/15						6.8	59,000
06/24/15						7.0	61,000
06/25/15						7.0	63,000
06/26/15						7.2	63,000
06/27/15						7.1	60,000
06/28/15						6.9	59,000
06/29/15						7.0	63,000
06/30/15						7.1	61,000
Monthly Average for Chromium							
Concentration	0.32 mg/L						
Ave. Flow	61,433 gpd						
Ave. Load	0.16 #/day						
PERMIT	3.10 #/day						
<b>Notes:</b>							
ND = Non-Detect. Value reported to be below the laboratory Reporting Limit. The laboratory Reporting Limit for Lead is 0.0015 mg/L. The laboratory Reporting Limit for Mercury is 0.00020 mg/L. The laboratory Reporting Limit for Phenols is 0.050 mg/L.							

**ATTACHMENT 2**  
**ANALYTICAL DATA**



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-113222-1

Client Project/Site: Hercules Glens Falls O&M POTW

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

6/12/2015 3:52:48 PM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

#### General Chemistry

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
---	---

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
--------------	---

α	Listed under the "D" column to designate that the result is reported on a dry weight basis
---	--

%R	Percent Recovery
----	------------------

CFL	Contains Free Liquid
-----	----------------------

CNF	Contains no Free Liquid
-----	-------------------------

DER	Duplicate error ratio (normalized absolute difference)
-----	--

Dil Fac	Dilution Factor
---------	-----------------

DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
----------------	---

DLC	Decision level concentration
-----	------------------------------

MDA	Minimum detectable activity
-----	-----------------------------

EDL	Estimated Detection Limit
-----	---------------------------

MDC	Minimum detectable concentration
-----	----------------------------------

MDL	Method Detection Limit
-----	------------------------

ML	Minimum Level (Dioxin)
----	------------------------

NC	Not Calculated
----	----------------

ND	Not detected at the reporting limit (or MDL or EDL if shown)
----	--

PQL	Practical Quantitation Limit
-----	------------------------------

QC	Quality Control
----	-----------------

RER	Relative error ratio
-----	----------------------

RL	Reporting Limit or Requested Limit (Radiochemistry)
----	---

RPD	Relative Percent Difference, a measure of the relative difference between two points
-----	--

TEF	Toxicity Equivalent Factor (Dioxin)
-----	-------------------------------------

TEQ	Toxicity Equivalent Quotient (Dioxin)
-----	---------------------------------------

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-113222-1	POTW	Water	06/03/15 08:00	06/04/15 09:22

# Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

**Job ID: 680-113222-1**

**Laboratory: TestAmerica Savannah**

## Narrative

### **CASE NARRATIVE** **Client: Ashland Inc** **Project: Hercules Glens Falls O&M POTW**

**Report Number: 680-113222-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### **RECEIPT**

The samples were received on 06/04/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

#### **TOTAL METALS (ICPMS)**

Sample POTW (680-113222-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/05/2015 and analyzed on 06/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL MERCURY**

Sample POTW (680-113222-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/08/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL CYANIDE**

Sample POTW (680-113222-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 06/12/2015.

Cyanide, Total recovered low for the MS/MSD of sample POTW (680-113222-1) in batch 680-387302.

Sample POTW (680-113222-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **PHENOLS**

Sample POTW (680-113222-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 06/05/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

**Client Sample ID: POTW**

**Date Collected: 06/03/15 08:00**

**Date Received: 06/04/15 09:22**

**Lab Sample ID: 680-113222-1**

**Matrix: Water**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chromium</b>	<b>320</b>		5.0	2.5	ug/L		06/05/15 11:05	06/07/15 21:44	1
Lead	1.5	U	1.5	0.50	ug/L		06/05/15 11:05	06/07/15 21:44	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		06/08/15 12:05	06/08/15 17:39	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.28</b>		0.050	0.025	mg/L		06/12/15 07:00	06/12/15 12:45	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		06/05/15 10:41	06/05/15 17:16	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-386214/1-A

Matrix: Water

Analysis Batch: 386455

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 386214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		06/05/15 11:05	06/07/15 19:18	1
Lead	1.5	U	1.5	0.50	ug/L		06/05/15 11:05	06/07/15 19:18	1

Lab Sample ID: LCS 680-386214/2-A

Matrix: Water

Analysis Batch: 386455

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 386214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	102		ug/L		102	85 - 115
Lead	500	513		ug/L		103	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-386508/1-A

Matrix: Water

Analysis Batch: 386617

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 386508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		06/08/15 12:05	06/08/15 16:55	1

Lab Sample ID: LCS 680-386508/3-A

Matrix: Water

Analysis Batch: 386617

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 386508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.58		ug/L		103	85 - 115

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-387214/1-A

Matrix: Water

Analysis Batch: 387301

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 387214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		06/12/15 07:00	06/12/15 11:29	1

Lab Sample ID: LCS 680-387214/2-A

Matrix: Water

Analysis Batch: 387301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 387214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0518		mg/L		104	90 - 110

Lab Sample ID: 680-113222-1 MS

Matrix: Water

Analysis Batch: 387302

Client Sample ID: POTW

Prep Type: Total/NA

Prep Batch: 387214

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.28		0.0500	0.303	4	mg/L		47	90 - 110

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

## Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: 680-113222-1 MSD

Matrix: Water

Analysis Batch: 387302

Client Sample ID: POTW

Prep Type: Total/NA

Prep Batch: 387214

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.28		0.0500	0.286	4	mg/L		13	90 - 110	6	20

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-386222/1-A

Matrix: Water

Analysis Batch: 386442

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 386222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		06/05/15 10:41	06/05/15 17:16	1

Lab Sample ID: LCS 680-386222/2-A

Matrix: Water

Analysis Batch: 386442

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 386222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0970		mg/L		97	75 - 125

Lab Sample ID: LCSD 680-386222/3-A

Matrix: Water

Analysis Batch: 386442

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 386222

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.100	0.0995		mg/L		100	75 - 125	3	30

TestAmerica Savannah

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

## Metals

### Prep Batch: 386214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	200.8	
LCS 680-386214/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-386214/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 386455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	200.8	386214
LCS 680-386214/2-A	Lab Control Sample	Total/NA	Water	200.8	386214
MB 680-386214/1-A	Method Blank	Total/NA	Water	200.8	386214

### Prep Batch: 386508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	245.1	
LCS 680-386508/3-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-386508/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 386617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	245.1	386508
LCS 680-386508/3-A	Lab Control Sample	Total/NA	Water	245.1	386508
MB 680-386508/1-A	Method Blank	Total/NA	Water	245.1	386508

## General Chemistry

### Prep Batch: 386222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-386222/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-386222/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-386222/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 386442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	420.1	386222
LCS 680-386222/2-A	Lab Control Sample	Total/NA	Water	420.1	386222
LCSD 680-386222/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	386222
MB 680-386222/1-A	Method Blank	Total/NA	Water	420.1	386222

### Prep Batch: 387214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	Distill/CN	
680-113222-1 MS	POTW	Total/NA	Water	Distill/CN	
680-113222-1 MSD	POTW	Total/NA	Water	Distill/CN	
LCS 680-387214/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-387214/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 387301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-387214/2-A	Lab Control Sample	Total/NA	Water	335.4	387214
MB 680-387214/1-A	Method Blank	Total/NA	Water	335.4	387214

TestAmerica Savannah



## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

### General Chemistry (Continued)

#### Analysis Batch: 387302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-113222-1	POTW	Total/NA	Water	335.4	387214
680-113222-1 MS	POTW	Total/NA	Water	335.4	387214
680-113222-1 MSD	POTW	Total/NA	Water	335.4	387214

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

**Client Sample ID: POTW**

**Date Collected: 06/03/15 08:00**

**Date Received: 06/04/15 09:22**

**Lab Sample ID: 680-113222-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			386214	06/05/15 11:05	CRW	TAL SAV
Total/NA	Analysis	200.8		1	386455	06/07/15 21:44	BJB	TAL SAV
Total/NA	Prep	245.1			386508	06/08/15 12:05	JKL	TAL SAV
Total/NA	Analysis	245.1		1	386617	06/08/15 17:39	JKL	TAL SAV
Total/NA	Prep	Distill/CN			387214	06/12/15 07:00	DAM	TAL SAV
Total/NA	Analysis	335.4		5	387302	06/12/15 12:45	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			386222	06/05/15 10:41	JME	TAL SAV
Total/NA	Analysis	420.1		1	386442	06/05/15 17:16	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15 *
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-15
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-15 *
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-16
Guam	State Program	9	14-004r	04-16-15 *
Hawaii	State Program	9	N/A	06-30-15 *
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15 *
Iowa	State Program	7	353	07-01-15 *
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-15 *
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15 *
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-15 *
Michigan	State Program	5	9925	06-30-15 *
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15 *
New Jersey	NELAP	2	GA769	06-30-15 *
New Mexico	State Program	6	N/A	06-30-15 *
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15 *
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15 *
Tennessee	State Program	4	TN02961	06-30-15 *
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-15 *
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-15 *
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15 *

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M POTW

TestAmerica Job ID: 680-113222-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

**TestAmerica Savannah**  
5102 LaRoche Avenue  
Savannah, GA 31404

Website: [www.testamericainc.com](http://www.testamericainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

# TestAmerica

## THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-113222-1

Login Number: 113222

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

September 2, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for July 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the July 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on July 6, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation, Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**



## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

9/2/2015

[illegible]

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-114220-1

Client Project/Site: Hercules Glens Falls POTW Monthly

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

7/14/2015 11:20:38 AM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-114220-1	POTW	Water	07/06/15 11:00	07/07/15 09:27

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

**Job ID: 680-114220-1**

**Laboratory: TestAmerica Savannah**

### Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls POTW Monthly**

**Report Number: 680-114220-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### **RECEIPT**

The samples were received on 07/07/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.7 C.

#### **TOTAL METALS (ICPMS)**

Sample POTW (680-114220-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 07/10/2015 and analyzed on 07/11/2015.

Chromium recovered high for the MS/MSD of sample POTW (680-114220-1) in batch 680-391196.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL MERCURY**

Sample POTW (680-114220-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 07/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL CYANIDE**

Sample POTW (680-114220-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 07/08/2015.

Sample POTW (680-114220-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **PHENOLS**

Sample POTW (680-114220-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 07/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

**Client Sample ID: POTW**

**Date Collected: 07/06/15 11:00**

**Date Received: 07/07/15 09:27**

**Lab Sample ID: 680-114220-1**

**Matrix: Water**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chromium</b>	<b>340</b>	<b>F1</b>	5.0	2.5	ug/L	—	07/10/15 10:37	07/11/15 03:32	1
Lead	1.5	U	1.5	0.50	ug/L	—	07/10/15 10:37	07/11/15 03:32	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L	—	07/13/15 10:19	07/13/15 17:09	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.38</b>		0.050	0.025	mg/L	—	07/08/15 07:00	07/08/15 12:32	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	—	07/13/15 09:55	07/13/15 13:45	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-391019/1-A

Matrix: Water

Analysis Batch: 391196

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 391019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		07/10/15 10:37	07/11/15 03:22	1
Lead	1.5	U	1.5	0.50	ug/L		07/10/15 10:37	07/11/15 03:22	1

Lab Sample ID: LCS 680-391019/2-A

Matrix: Water

Analysis Batch: 391196

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 391019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	101		ug/L		101	85 - 115
Lead	500	521		ug/L		104	85 - 115

Lab Sample ID: 680-114220-1 MS

Matrix: Water

Analysis Batch: 391196

Client Sample ID: POTW

Prep Type: Total/NA

Prep Batch: 391019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	340	F1	100	484	F1	ug/L		145	70 - 130
Lead	1.5	U	500	564		ug/L		113	70 - 130

Lab Sample ID: 680-114220-1 MSD

Matrix: Water

Analysis Batch: 391196

Client Sample ID: POTW

Prep Type: Total/NA

Prep Batch: 391019

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	340	F1	100	478	F1	ug/L		138	70 - 130	1	20
Lead	1.5	U	500	550		ug/L		110	70 - 130	2	20

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-391208/1-A

Matrix: Water

Analysis Batch: 391380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 391208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		07/13/15 10:19	07/13/15 16:48	1

Lab Sample ID: LCS 680-391208/3-A

Matrix: Water

Analysis Batch: 391380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 391208

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.46		ug/L		98	85 - 115

TestAmerica Savannah



# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-390567/1-A  
Matrix: Water  
Analysis Batch: 390657

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 390567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L	-	07/08/15 07:00	07/08/15 11:41	1

Lab Sample ID: LCS 680-390567/2-A  
Matrix: Water  
Analysis Batch: 390657

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 390567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0506		mg/L	-	101	90 - 110

Lab Sample ID: 680-114220-1 DU  
Matrix: Water  
Analysis Batch: 390657

Client Sample ID: POTW  
Prep Type: Total/NA  
Prep Batch: 390567

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.38		0.395		mg/L	-	3	20

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-391216/1-A  
Matrix: Water  
Analysis Batch: 391289

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 391216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	-	07/13/15 09:55	07/13/15 12:21	1

Lab Sample ID: LCS 680-391216/2-A  
Matrix: Water  
Analysis Batch: 391289

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 391216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0828		mg/L	-	83	75 - 125

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

## Metals

### Prep Batch: 391019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	200.8	
680-114220-1 MS	POTW	Total/NA	Water	200.8	
680-114220-1 MSD	POTW	Total/NA	Water	200.8	
LCS 680-391019/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-391019/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 391196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	200.8	391019
680-114220-1 MS	POTW	Total/NA	Water	200.8	391019
680-114220-1 MSD	POTW	Total/NA	Water	200.8	391019
LCS 680-391019/2-A	Lab Control Sample	Total/NA	Water	200.8	391019
MB 680-391019/1-A	Method Blank	Total/NA	Water	200.8	391019

### Prep Batch: 391208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	245.1	
LCS 680-391208/3-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-391208/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 391380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	245.1	391208
LCS 680-391208/3-A	Lab Control Sample	Total/NA	Water	245.1	391208
MB 680-391208/1-A	Method Blank	Total/NA	Water	245.1	391208

## General Chemistry

### Prep Batch: 390567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	Distill/CN	
680-114220-1 DU	POTW	Total/NA	Water	Distill/CN	
LCS 680-390567/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-390567/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 390657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	335.4	390567
680-114220-1 DU	POTW	Total/NA	Water	335.4	390567
LCS 680-390567/2-A	Lab Control Sample	Total/NA	Water	335.4	390567
MB 680-390567/1-A	Method Blank	Total/NA	Water	335.4	390567

### Prep Batch: 391216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-391216/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 680-391216/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

TestAmerica Savannah

## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

### General Chemistry (Continued)

#### Analysis Batch: 391289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-114220-1	POTW	Total/NA	Water	420.1	391216
LCS 680-391216/2-A	Lab Control Sample	Total/NA	Water	420.1	391216
MB 680-391216/1-A	Method Blank	Total/NA	Water	420.1	391216

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

**Client Sample ID: POTW**

**Date Collected: 07/06/15 11:00**

**Date Received: 07/07/15 09:27**

**Lab Sample ID: 680-114220-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			391019	07/10/15 10:37	BJB	TAL SAV
Total/NA	Analysis	200.8		1	391196	07/11/15 03:32	BWR	TAL SAV
Total/NA	Prep	245.1			391208	07/13/15 10:19	JKL	TAL SAV
Total/NA	Analysis	245.1		1	391380	07/13/15 17:09	JKL	TAL SAV
Total/NA	Prep	Distill/CN			390567	07/08/15 07:00	DAM	TAL SAV
Total/NA	Analysis	335.4		5	390657	07/08/15 12:32	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			391216	07/13/15 09:55	JME	TAL SAV
Total/NA	Analysis	420.1		1	391289	07/13/15 13:45	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15 *
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15 *
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15 *
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	06-30-15 *
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15 *
New Jersey	NELAP	2	GA769	09-30-15
New Mexico	State Program	6	N/A	06-30-15 *
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-15 *
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15 *
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15 *

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-114220-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Buffalo  
18 Hazelwood Drive

Auburn, NY 14228

Phone: 716.691.2600 Fax: 716.691.7991

# Chain of Custody Record

040719

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.  
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Project Manager: <u>Michael Schmitt</u> Date: <u>7/6/15</u>				
Company Name: <u>Ashtland - Glens Falls</u>		Tel/Fax: <u>315-552-9890</u>				
Address: <u>89 Lower Warren St</u>		Lab Contact: <u>Ruth Smith</u> Carrier:				
City/State/Zip: <u>Glens Falls, NY</u>		Analysis Turnaround Time				
Phone:		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS				
Fax:		TAT if different from below				
Project Name: <u>Glens Falls</u>		<input type="checkbox"/> 2 weeks				
Site:		<input type="checkbox"/> 1 week				
P.O.#: <u>114</u>		<input type="checkbox"/> 2 days				
		<input type="checkbox"/> 1 day				
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
<u>POTW</u>		<u>7/6/15</u>	<u>11:00</u>	<u>G</u>	<u>W</u>	<u>3</u>
Sample Specific Notes:						
<div style="border: 1px solid black; padding: 5px; text-align: center;">680-114220 Chain of Custody</div>						
Preservation/Used: <u>1-100% HCL, 2-100% H2SO4, 4-100% NaOH, 6-Other</u>						
Possible Hazard Identification: <u>Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample</u>						
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						
Special Instructions/QC Requirements & Comments:						
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.		Company: <u>Anteq</u> Date/Time: <u>7/6/15 1400</u>		
Relinquished by: <u>Mike Gokhale</u>		Relinquished by:		Company: <u>TA-ALB</u> Date/Time: <u>7/6/15 1400</u>		
Relinquished by:		Relinquished by:		Company: <u>SAV</u> Date/Time: <u>07-01-15 0927</u>		

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-114220-1

**Login Number: 114220**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Banda, Christy S**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

September 14, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for August 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the August 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on August 3, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation, Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

9/14/2015

[illegible]

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-115211-1

Client Project/Site: Hercules Glens Falls POTW

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

8/12/2015 12:23:30 PM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-115211-1	POTW	Water	08/03/15 14:00	08/05/15 09:31

# Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

**Job ID: 680-115211-1**

**Laboratory: TestAmerica Savannah**

## Narrative

### CASE NARRATIVE

**Client: Ashland Inc**

**Project: Hercules Glens Falls POTW**

**Report Number: 680-115211-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 08/05/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

#### TOTAL METALS (ICPMS)

Sample POTW (680-115211-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 08/07/2015 and analyzed on 08/08/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL MERCURY

Sample POTW (680-115211-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared on 08/06/2015 and analyzed on 08/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW (680-115211-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 08/07/2015.

Sample POTW (680-115211-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW (680-115211-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 08/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

**Client Sample ID: POTW**

**Date Collected: 08/03/15 14:00**

**Date Received: 08/05/15 09:31**

**Lab Sample ID: 680-115211-1**

**Matrix: Water**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chromium</b>	<b>290</b>		5.0	2.5	ug/L		08/07/15 08:13	08/08/15 01:22	1
Lead	1.5	U	1.5	0.50	ug/L		08/07/15 08:13	08/08/15 01:22	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		08/06/15 08:43	08/07/15 11:56	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.30</b>		0.050	0.025	mg/L		08/07/15 06:57	08/07/15 12:12	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		08/10/15 14:20	08/10/15 17:34	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-394981/1-A

Matrix: Water

Analysis Batch: 395177

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 394981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		08/07/15 08:13	08/08/15 00:01	1
Lead	1.5	U	1.5	0.50	ug/L		08/07/15 08:13	08/08/15 00:01	1

Lab Sample ID: LCS 680-394981/2-A

Matrix: Water

Analysis Batch: 395177

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 394981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	96.0		ug/L		96	85 - 115
Lead	500	501		ug/L		100	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-394809/13-A

Matrix: Water

Analysis Batch: 395096

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 394809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		08/06/15 08:43	08/07/15 11:10	1

Lab Sample ID: LCS 680-394809/15-A

Matrix: Water

Analysis Batch: 395096

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 394809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.55		ug/L		102	85 - 115

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-394964/1-A

Matrix: Water

Analysis Batch: 395044

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 394964

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		08/07/15 06:57	08/07/15 11:23	1

Lab Sample ID: LCS 680-394964/2-A

Matrix: Water

Analysis Batch: 395044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 394964

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0518		mg/L		104	90 - 110

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-395366/1-A

Matrix: Water

Analysis Batch: 395450

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 395366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	-	08/10/15 14:20	08/10/15 17:34	1

Lab Sample ID: LCS 680-395366/2-A

Matrix: Water

Analysis Batch: 395450

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 395366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0817		mg/L	-	82	75 - 125

Lab Sample ID: LCSD 680-395366/3-A

Matrix: Water

Analysis Batch: 395450

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 395366

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.100	0.0780		mg/L	-	78	75 - 125	5	30

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

## Metals

### Prep Batch: 394809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	245.1	
LCS 680-394809/15-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-394809/13-A	Method Blank	Total/NA	Water	245.1	

### Prep Batch: 394981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	200.8	
LCS 680-394981/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-394981/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 395096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	245.1	394809
LCS 680-394809/15-A	Lab Control Sample	Total/NA	Water	245.1	394809
MB 680-394809/13-A	Method Blank	Total/NA	Water	245.1	394809

### Analysis Batch: 395177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	200.8	394981
LCS 680-394981/2-A	Lab Control Sample	Total/NA	Water	200.8	394981
MB 680-394981/1-A	Method Blank	Total/NA	Water	200.8	394981

## General Chemistry

### Prep Batch: 394964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	Distill/CN	
LCS 680-394964/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-394964/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 395044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	335.4	394964
LCS 680-394964/2-A	Lab Control Sample	Total/NA	Water	335.4	394964
MB 680-394964/1-A	Method Blank	Total/NA	Water	335.4	394964

### Prep Batch: 395366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	Distill/Phenol	
LCS 680-395366/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-395366/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-395366/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 395450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115211-1	POTW	Total/NA	Water	420.1	395366
LCS 680-395366/2-A	Lab Control Sample	Total/NA	Water	420.1	395366
LCSD 680-395366/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	395366
MB 680-395366/1-A	Method Blank	Total/NA	Water	420.1	395366

TestAmerica Savannah

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

**Client Sample ID: POTW**

**Date Collected: 08/03/15 14:00**

**Date Received: 08/05/15 09:31**

**Lab Sample ID: 680-115211-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			394981	08/07/15 08:13	BJB	TAL SAV
Total/NA	Analysis	200.8		1	395177	08/08/15 01:22	BWR	TAL SAV
Total/NA	Prep	245.1			394809	08/06/15 08:43	JKL	TAL SAV
Total/NA	Analysis	245.1		1	395096	08/07/15 11:56	JKL	TAL SAV
Total/NA	Prep	Distill/CN			394964	08/07/15 06:57	DAM	TAL SAV
Total/NA	Analysis	335.4		5	395044	08/07/15 12:12	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			395366	08/10/15 14:20	JME	TAL SAV
Total/NA	Analysis	420.1		1	395450	08/10/15 17:34	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-15 *
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15 *
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-15 *
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	09-30-15
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15 *
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15 *
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-15 *
Wyoming	State Program	8	8TMS-L	06-30-16

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW

TestAmerica Job ID: 680-115211-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

99272

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

**TestAmerica Savannah**  
5102 LaRoche Avenue  
Savannah, GA 31404

Website: [www.testamericainc.com](http://www.testamericainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location

Phone:  
Fax:

# TestAmerica

## THE LEADER IN ENVIRONMENTAL TESTING

PROJECT REFERENCE		PROJECT NO.		PROJECT LOCATION (STATE)		MATRIX TYPE		REQUIRED ANALYSIS					PAGE		OF	
TAL (LAB) PROJECT MANAGER		P.O. NUMBER		CONTRACT NO.		COMPOSITE (C) OR GRAB (G) INDICATE		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
CLIENT (SITE)/PM		CLIENT PHONE		CLIENT FAX		AQUEOUS (WATER)		SOLID OR SEMISOLID		EXPEDITED REPORT DELIVERY (SURCHARGE)		DATE DUE		0		
CLIENT NAME		CLIENT E-MAIL		CLIENT FAX		COMPOSITE (C) OR GRAB (G) INDICATE		SOLID OR SEMISOLID		DATE DUE		DATE DUE		0		
CLIENT ADDRESS		CLIENT E-MAIL		CLIENT FAX		COMPOSITE (C) OR GRAB (G) INDICATE		SOLID OR SEMISOLID		DATE DUE		DATE DUE		0		
COMPANY CONTRACTING THIS WORK (if applicable)		CLIENT E-MAIL		CLIENT FAX		COMPOSITE (C) OR GRAB (G) INDICATE		SOLID OR SEMISOLID		DATE DUE		DATE DUE		0		
SAMPLE		SAMPLE IDENTIFICATION		CLIENT FAX		COMPOSITE (C) OR GRAB (G) INDICATE		SOLID OR SEMISOLID		DATE DUE		DATE DUE		0		
DATE		TIME		CLIENT FAX		COMPOSITE (C) OR GRAB (G) INDICATE		SOLID OR SEMISOLID		DATE DUE		DATE DUE		0		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)		AIR		STANDARD REPORT DELIVERY		1		
08/31/15		1400		P&TW		GX		NONAQUEOUS LI								



## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-115211-1

**Login Number: 115211**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Barnett, Eddie T**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

October 15, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE:    Discharge Monitoring Report for September 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the September 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on September 8, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc:     Stephen K. Havlik, BASF Corporation, Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

10/15/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter					
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America							
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1							
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled							
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>					
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd					
POTW Permit or min						5.0						
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000					
Monthly ave.			0.005				175,000					
Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Monthly min	0.33	0.00	0.00	0.28	0.00	6.8	47,000					
Monthly ave	0.33	0.00	0.00	0.28	0.00	7.2	49,767					
Monthly max	0.33	0.00	0.00	0.28	0.00	7.9	54,000					
Data points	1	1	1	1	1	30	30					
Date:												
09/01/15						7.7	49,000					
09/02/15						7.2	53,000					
09/03/15						7.5	48,000					
09/04/15						7.5	54,000					
09/05/15						7.4	49,000					
09/06/15						7.9	50,000					
09/07/15						7.3	52,000					
09/08/15						0.330	ND	ND	0.28	ND	7.0	49,000
09/09/15						7.0	50,000					
09/10/15						7.5	51,000					
09/11/15						7.0	51,000					
09/12/15						7.0	48,000					
09/13/15						6.8	49,000					
09/14/15						6.9	52,000					
09/15/15						7.0	51,000					
09/16/15						6.8	49,000					
09/17/15						7.4	51,000					
09/18/15						7.0	50,000					
09/19/15						7.2	47,000					
09/20/15						7.6	52,000					
09/21/15						7.5	49,000					
09/22/15						7.1	49,000					
09/23/15						6.9	50,000					
09/24/15						7.0	50,000					
09/25/15						7.1	49,000					
09/26/15						7.0	47,000					
09/27/15						7.1	48,000					
09/28/15						7.1	49,000					
09/29/15						7.1	47,000					
09/30/15						6.9	50,000					
Monthly Average for Chromium												
Concentration	0.33 mg/L											
Ave. Flow	49,767 gpd											
Ave. Load	0.14 #/day											
PERMIT	3.10 #/day											
Notes:												
ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.												
The laboratory Reporting Limit for Lead is 0.0025 mg/L.												
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.												
The laboratory Reporting Limit for Phenols is 0.050 mg/L.												

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-116596-1

Client Project/Site: Hercules Glens Falls POTW Monthly

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

9/17/2015 4:53:58 PM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-116596-1	POTW_09082015	Water	09/08/15 13:45	09/10/15 09:28

1

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# Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

**Job ID: 680-116596-1**

**Laboratory: TestAmerica Savannah**

## Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls POTW Monthly**  
**Report Number: 680-116596-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 09/10/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

### TOTAL METALS (ICPMS)

Sample POTW\_09082015 (680-116596-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 09/14/2015 and analyzed on 09/16/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL MERCURY

Sample POTW\_09082015 (680-116596-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 09/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL CYANIDE

Sample POTW\_09082015 (680-116596-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 09/15/2015.

Sample POTW\_09082015 (680-116596-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### PHENOLS

Sample POTW\_09082015 (680-116596-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 09/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

**Client Sample ID: POTW\_09082015**

**Date Collected: 09/08/15 13:45**

**Date Received: 09/10/15 09:28**

**Lab Sample ID: 680-116596-1**

**Matrix: Water**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	330		5.0	1.6	ug/L		09/14/15 09:08	09/16/15 22:06	1
Lead	2.5	U	2.5	0.98	ug/L		09/14/15 09:08	09/16/15 22:06	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		09/15/15 12:50	09/15/15 22:13	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.28		0.050	0.025	mg/L		09/15/15 07:00	09/15/15 12:32	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		09/13/15 16:23	09/13/15 19:44	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-400850/1-A  
Matrix: Water  
Analysis Batch: 401194

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 400850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L	-	09/14/15 09:08	09/15/15 14:47	1
Lead	2.5	U	2.5	0.98	ug/L	-	09/14/15 09:08	09/15/15 14:47	1

Lab Sample ID: LCS 680-400850/2-A  
Matrix: Water  
Analysis Batch: 401194

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 400850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	101		ug/L	-	101	85 - 115
Lead	500	534		ug/L	-	107	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-401088/1-A  
Matrix: Water  
Analysis Batch: 401182

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 401088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L	-	09/15/15 12:50	09/15/15 21:03	1

Lab Sample ID: LCS 680-401088/3-A  
Matrix: Water  
Analysis Batch: 401182

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 401088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.61		ug/L	-	105	85 - 115

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-401011/1-A  
Matrix: Water  
Analysis Batch: 401087

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 401011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L	-	09/15/15 07:00	09/15/15 11:35	1

Lab Sample ID: LCS 680-401011/2-A  
Matrix: Water  
Analysis Batch: 401087

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 401011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0518		mg/L	-	104	90 - 110

Lab Sample ID: 680-116596-1 DU  
Matrix: Water  
Analysis Batch: 401087

Client Sample ID: POTW\_09082015  
Prep Type: Total/NA  
Prep Batch: 401011

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.28		0.290		mg/L	-	3	20

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-400819/1-A

Matrix: Water

Analysis Batch: 400829

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 400819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	-	09/13/15 16:23	09/13/15 19:14	1

Lab Sample ID: LCS 680-400819/2-A

Matrix: Water

Analysis Batch: 400829

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 400819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0859		mg/L	-	86	75 - 125

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

## Metals

### Prep Batch: 400850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	200.8	
LCS 680-400850/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-400850/1-A	Method Blank	Total/NA	Water	200.8	

### Prep Batch: 401088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	245.1	
LCS 680-401088/3-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-401088/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 401182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	245.1	401088
LCS 680-401088/3-A	Lab Control Sample	Total/NA	Water	245.1	401088
MB 680-401088/1-A	Method Blank	Total/NA	Water	245.1	401088

### Analysis Batch: 401194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-400850/2-A	Lab Control Sample	Total/NA	Water	200.8	400850
MB 680-400850/1-A	Method Blank	Total/NA	Water	200.8	400850

### Analysis Batch: 401583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	200.8	400850

## General Chemistry

### Prep Batch: 400819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	Distill/Phenol	
LCS 680-400819/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 680-400819/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 400829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	420.1	400819
LCS 680-400819/2-A	Lab Control Sample	Total/NA	Water	420.1	400819
MB 680-400819/1-A	Method Blank	Total/NA	Water	420.1	400819

### Prep Batch: 401011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	Distill/CN	
680-116596-1 DU	POTW_09082015	Total/NA	Water	Distill/CN	
LCS 680-401011/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-401011/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 401087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-116596-1	POTW_09082015	Total/NA	Water	335.4	401011
680-116596-1 DU	POTW_09082015	Total/NA	Water	335.4	401011

TestAmerica Savannah

## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

### General Chemistry (Continued)

#### Analysis Batch: 401087 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-401011/2-A	Lab Control Sample	Total/NA	Water	335.4	401011
MB 680-401011/1-A	Method Blank	Total/NA	Water	335.4	401011

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

**Client Sample ID: POTW\_09082015**

**Date Collected: 09/08/15 13:45**

**Date Received: 09/10/15 09:28**

**Lab Sample ID: 680-116596-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			400850	09/14/15 09:08	CRW	TAL SAV
Total/NA	Analysis	200.8		1	401583	09/16/15 22:06	BWR	TAL SAV
Total/NA	Prep	245.1			401088	09/15/15 12:50	JKL	TAL SAV
Total/NA	Analysis	245.1		1	401182	09/15/15 22:13	BJB	TAL SAV
Total/NA	Prep	Distill/CN			401011	09/15/15 07:00	DAM	TAL SAV
Total/NA	Analysis	335.4		5	401087	09/15/15 12:32	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			400819	09/13/15 16:23	JME	TAL SAV
Total/NA	Analysis	420.1		1	400829	09/13/15 19:44	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-15 *
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	09-30-15 *
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-15 *
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15 *
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah



## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls POTW Monthly

TestAmerica Job ID: 680-116596-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt \_\_\_\_\_

Drinking Water? Yes ☐ No ☒

## Chain of Custody Record

TAL-4124 (1007)

Client <b>Antea Group</b>		Project Manager <b>Byron Reles</b>		Date <b>9/8/2015</b>	Chain of Custody Number <b>198037</b>
Address <b>5788 Wide Waters Parkway, 2nd Floor</b>		Telephone Number (Area Code)/Fax Number <b>607-765-1480 (cell phone)</b>		Lab Number	Page <b>1</b> of <b>1</b>
City <b>Syracuse</b>	State <b>NY</b>	Zip Code <b>13214</b>	Site Contact <b>Byron Reles</b>	Lab Contact <b>Kathryn E. Smith</b>	
Project Name and Location (State) <b>Glens Falls POTW, Ashland</b>		Carrier/Vehicle Number			

Contract/Purchase Order/Quote No. **PO# 4502471936, Proj. # 68000956**

Sample I.D. No. and Description  
(Containers for each sample may be combined on one line)  
**POTW\_09082015**

Date **9/8/2015** Time **1345**

Matrix

Containers & Preservatives

Analysis (Attach list if more space is needed)

Special Instructions/Conditions of Receipt

Analysis (Attach list if more space is needed)

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## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-116596-1

**Login Number: 116596**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Barnett, Eddie T**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

November 5, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for October 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the October 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on October 6, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation, Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

11/5/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter					
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America							
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1							
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled							
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>					
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd					
POTW Permit or min						5.0						
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000					
Monthly ave.			0.005				175,000					
Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Monthly min	0.32	0.00	0.00	0.41	0.00	6.9	25,000					
Monthly ave	0.32	0.00	0.00	0.41	0.00	7.3	50,452					
Monthly max	0.32	0.00	0.00	0.41	0.00	8.0	75,000					
Data points	1	1	1	1	1	31	31					
Date:												
10/01/15						7.2	48,000					
10/02/15						7.2	55,000					
10/03/15						7.1	52,000					
10/04/15						7.0	49,000					
10/05/15						7.1	53,000					
10/06/15						0.320	ND	ND	0.41	ND	7.7	48,000
10/07/15						7.4	25,000					
10/08/15						7.6	45,000					
10/09/15						6.9	70,000					
10/10/15						7.0	51,000					
10/11/15						7.8	49,000					
10/12/15						7.5	53,000					
10/13/15						7.0	51,000					
10/14/15						7.2	50,000					
10/15/15						7.4	49,000					
10/16/15						8.0	50,000					
10/17/15						7.1	52,000					
10/18/15						7.9	47,000					
10/19/15						7.4	49,000					
10/20/15						7.5	49,000					
10/21/15						7.8	47,000					
10/22/15						7.0	48,000					
10/23/15						7.5	46,000					
10/24/15						7.2	46,000					
10/25/15						6.9	48,000					
10/26/15						7.1	48,000					
10/27/15						7.1	49,000					
10/28/15						7.1	26,000					
10/29/15						7.1	75,000					
10/30/15						7.2	63,000					
10/31/15						7.1	73,000					
Monthly Average for Chromium												
Concentration	0.32 mg/L											
Ave. Flow	50,452 gpd											
Ave. Load	0.13 #/day											
PERMIT	3.10 #/day											
Notes:												
ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.												
The laboratory Reporting Limit for Lead is 0.0025 mg/L.												
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.												
The laboratory Reporting Limit for Phenols is 0.050 mg/L.												

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-117606-1

Client Project/Site: Hercules Glens Falls O&M Quarterly

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

10/19/2015 2:47:30 PM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



# Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-117606-1	POTW_10062015	Water	10/06/15 10:18	10/08/15 09:26

1

2

3

4

5

6

7

8

9

10

11

12

# Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

**Job ID: 680-117606-1**

**Laboratory: TestAmerica Savannah**

## Narrative

### CASE NARRATIVE

**Client: Ashland Inc**

**Project: Hercules Glens Falls O&M Quarterly**

**Report Number: 680-117606-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 10/08/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.2 C.

#### TOTAL METALS (ICPMS)

Sample POTW\_10062015 (680-117606-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 10/16/2015 and analyzed on 10/17/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL MERCURY

Sample POTW\_10062015 (680-117606-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 10/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW\_10062015 (680-117606-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 10/19/2015.

Sample POTW\_10062015 (680-117606-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW\_10062015 (680-117606-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared on 10/12/2015 and analyzed on 10/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

**Client Sample ID: POTW\_10062015**

**Date Collected: 10/06/15 10:18**

**Date Received: 10/08/15 09:26**

**Lab Sample ID: 680-117606-1**

**Matrix: Water**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	320		5.0	1.6	ug/L		10/16/15 08:54	10/17/15 05:21	1
Lead	2.5	U	2.5	0.98	ug/L		10/16/15 08:54	10/17/15 05:21	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		10/09/15 12:56	10/09/15 18:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.41		0.050	0.025	mg/L		10/19/15 06:37	10/19/15 12:36	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		10/12/15 15:42	10/13/15 12:15	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-406018/1-A

Matrix: Water

Analysis Batch: 406210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 406018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		10/16/15 08:54	10/17/15 04:31	1
Lead	2.5	U	2.5	0.98	ug/L		10/16/15 08:54	10/17/15 04:31	1

Lab Sample ID: LCS 680-406018/2-A

Matrix: Water

Analysis Batch: 406210

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 406018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	96.1		ug/L		96	85 - 115
Lead	500	502		ug/L		100	85 - 115

Lab Sample ID: 680-117606-1 MS

Matrix: Water

Analysis Batch: 406210

Client Sample ID: POTW\_10062015

Prep Type: Total/NA

Prep Batch: 406018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	320		100	419		ug/L		100	70 - 130
Lead	2.5	U	500	520		ug/L		104	70 - 130

Lab Sample ID: 680-117606-1 MSD

Matrix: Water

Analysis Batch: 406210

Client Sample ID: POTW\_10062015

Prep Type: Total/NA

Prep Batch: 406018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	320		100	420		ug/L		101	70 - 130	0	20
Lead	2.5	U	500	538		ug/L		108	70 - 130	3	20

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-405065/13-A

Matrix: Water

Analysis Batch: 405146

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 405065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		10/09/15 12:56	10/09/15 17:18	1

Lab Sample ID: LCS 680-405065/15-A

Matrix: Water

Analysis Batch: 405146

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 405065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.51		ug/L		100	85 - 115

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-406251/1-A  
Matrix: Water  
Analysis Batch: 406353

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 406251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L	-	10/19/15 06:37	10/19/15 11:45	1

Lab Sample ID: LCS 680-406251/2-A  
Matrix: Water  
Analysis Batch: 406353

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 406251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0518		mg/L	-	104	90 - 110

Lab Sample ID: 680-117606-1 DU  
Matrix: Water  
Analysis Batch: 406353

Client Sample ID: POTW\_10062015  
Prep Type: Total/NA  
Prep Batch: 406251

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Cyanide, Total	0.41		0.387		mg/L	-	5	20

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-405437/1-A  
Matrix: Water  
Analysis Batch: 405529

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 405437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	-	10/12/15 15:42	10/13/15 12:15	1

Lab Sample ID: LCS 680-405437/2-A  
Matrix: Water  
Analysis Batch: 405529

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 405437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0974		mg/L	-	97	75 - 125

Lab Sample ID: LCSD 680-405437/3-A  
Matrix: Water  
Analysis Batch: 405529

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 405437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Phenolics, Total Recoverable	0.100	0.0942		mg/L	-	94	75 - 125	3	30

TestAmerica Savannah

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

## Metals

### Prep Batch: 405065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	245.1	
LCS 680-405065/15-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-405065/13-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 405146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	245.1	405065
LCS 680-405065/15-A	Lab Control Sample	Total/NA	Water	245.1	405065
MB 680-405065/13-A	Method Blank	Total/NA	Water	245.1	405065

### Prep Batch: 406018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	200.8	
680-117606-1 MS	POTW_10062015	Total/NA	Water	200.8	
680-117606-1 MSD	POTW_10062015	Total/NA	Water	200.8	
LCS 680-406018/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-406018/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 406210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	200.8	406018
680-117606-1 MS	POTW_10062015	Total/NA	Water	200.8	406018
680-117606-1 MSD	POTW_10062015	Total/NA	Water	200.8	406018
LCS 680-406018/2-A	Lab Control Sample	Total/NA	Water	200.8	406018
MB 680-406018/1-A	Method Blank	Total/NA	Water	200.8	406018

## General Chemistry

### Prep Batch: 405437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	Distill/Phenol	
LCS 680-405437/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-405437/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-405437/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 405529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	420.1	405437
LCS 680-405437/2-A	Lab Control Sample	Total/NA	Water	420.1	405437
LCSD 680-405437/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	405437
MB 680-405437/1-A	Method Blank	Total/NA	Water	420.1	405437

### Prep Batch: 406251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	Distill/CN	
680-117606-1 DU	POTW_10062015	Total/NA	Water	Distill/CN	
LCS 680-406251/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-406251/1-A	Method Blank	Total/NA	Water	Distill/CN	

TestAmerica Savannah

## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

### General Chemistry (Continued)

#### Analysis Batch: 406353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-117606-1	POTW_10062015	Total/NA	Water	335.4	406251
680-117606-1 DU	POTW_10062015	Total/NA	Water	335.4	406251
LCS 680-406251/2-A	Lab Control Sample	Total/NA	Water	335.4	406251
MB 680-406251/1-A	Method Blank	Total/NA	Water	335.4	406251



# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

**Client Sample ID: POTW\_10062015**

**Date Collected: 10/06/15 10:18**

**Date Received: 10/08/15 09:26**

**Lab Sample ID: 680-117606-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			406018	10/16/15 08:54	KMN	TAL SAV
Total/NA	Analysis	200.8		1	406210	10/17/15 05:21	BJB	TAL SAV
Total/NA	Prep	245.1			405065	10/09/15 12:56	JKL	TAL SAV
Total/NA	Analysis	245.1		1	405146	10/09/15 18:37	BCB	TAL SAV
Total/NA	Prep	Distill/CN			406251	10/19/15 06:37	DAM	TAL SAV
Total/NA	Analysis	335.4		5	406353	10/19/15 12:36	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			405437	10/12/15 15:42	JME	TAL SAV
Total/NA	Analysis	420.1		1	405529	10/13/15 12:15	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc

TestAmerica Job ID: 680-117606-1

Project/Site: Hercules Glens Falls O&M Quarterly

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Arkansas DEQ	State Program	6	88-0692	01-31-16
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-15
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-15
Indiana	State Program	5	N/A	06-30-16
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-15
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA150014	12-31-15
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	10-30-16 *
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-15
Oklahoma	State Program	6	9984	08-31-16
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-15
South Carolina	State Program	4	98001	06-30-15 *
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-15
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-117606-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 92609

### ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

# TestAmerica

## THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Savannah**  
5102 LaRoche Avenue  
Savannah, GA 31404

Website: [www.testamericainc.com](http://www.testamericainc.com)  
Phone: (912) 354-7858  
Fax: (912) 352-0165

[illegible]

Phone:  
Fax:

[illegible]

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-117606-1

**Login Number: 117606**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Kirkland, Keyon A**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

December 17, 2015

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for November 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the November 2015 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on November 4, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation, Toms River, NJ

**ATTACHMENT 1**  
**DISCHARGE DATA**

## GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

12/17/2015

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						5.0	
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monthly min	0.32	0.00	0.00	0.44	0.00	6.9	38,000
Monthly ave	0.32	0.00	0.00	0.44	0.00	7.1	50,800
Monthly max	0.32	0.00	0.00	0.44	0.00	7.4	66,000
Data points	1	1	1	1	1	30	30
Date:							
11/01/15						7.3	56,000
11/02/15						7.2	63,000
11/03/15						7.3	56,000
11/04/15	0.320	ND	ND	0.44	ND	7.2	57,000
11/05/15						7.2	57,000
11/06/15						7.0	56,000
11/07/15						7.0	66,000
11/08/15						6.9	52,000
11/09/15						6.9	56,000
11/10/15						7.0	61,000
11/11/15						7.1	56,000
11/12/15						6.9	53,000
11/13/15						7.0	53,000
11/14/15						7.2	53,000
11/15/15						7.1	51,000
11/16/15						7.1	51,000
11/17/15						7.3	52,000
11/18/15						7.2	44,000
11/19/15						7.3	38,000
11/20/15						6.9	39,000
11/21/15						7.1	51,000
11/22/15						7.2	48,000
11/23/15						7.1	46,000
11/24/15						7.0	44,000
11/25/15						7.0	50,000
11/26/15						7.4	45,000
11/27/15						6.9	44,000
11/28/15						6.9	41,000
11/29/15						6.9	42,000
11/30/15						7.0	43,000
Monthly Average for Chromium							
Concentration	0.32 mg/L						
Ave. Flow	50,800 gpd						
Ave. Load	0.14 #/day						
PERMIT	3.10 #/day						
Notes:							
The laboratory Reporting Limit for Lead is 0.0015 mg/L.							
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.							
The laboratory Reporting Limit for Phenols is 0.050 mg/L.							



**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-118738-1

Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

11/18/2015 9:53:38 AM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-118738-1	POTW-11042015	Water	11/04/15 11:00	11/06/15 09:54

1

2

3

4

5

6

7

8

9

10

11

12

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

**Job ID: 680-118738-1**

**Laboratory: TestAmerica Savannah**

### Narrative

**CASE NARRATIVE**  
**Client: Ashland Inc**  
**Project: Hercules Glens Falls O&M Monthly POTW**  
**Report Number: 680-118738-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 11/06/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.6 C.

#### TOTAL METALS (ICPMS)

Sample POTW-11042015 (680-118738-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 11/10/2015 and analyzed on 11/11/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL MERCURY

Sample POTW-11042015 (680-118738-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 11/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW-11042015 (680-118738-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 11/17/2015.

Sample POTW-11042015 (680-118738-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW-11042015 (680-118738-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared on 11/11/2015 and analyzed on 11/12/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

**Client Sample ID: POTW-11042015**

**Lab Sample ID: 680-118738-1**

**Date Collected: 11/04/15 11:00**

**Matrix: Water**

**Date Received: 11/06/15 09:54**

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	320		5.0	1.6	ug/L		11/10/15 12:55	11/11/15 03:50	1
Lead	2.5	U	2.5	0.98	ug/L		11/10/15 12:55	11/11/15 03:50	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		11/10/15 08:49	11/10/15 14:56	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.44		0.050	0.013	mg/L		11/17/15 07:00	11/17/15 11:41	5
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		11/11/15 16:48	11/12/15 11:54	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-409722/1-A

Matrix: Water

Analysis Batch: 409880

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 409722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		11/10/15 12:55	11/11/15 01:18	1
Lead	2.5	U	2.5	0.98	ug/L		11/10/15 12:55	11/11/15 01:18	1

Lab Sample ID: LCS 680-409722/2-A

Matrix: Water

Analysis Batch: 409880

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 409722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	102		ug/L		102	85 - 115
Lead	500	531		ug/L		106	85 - 115

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-409671/13-A

Matrix: Water

Analysis Batch: 409847

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 409671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		11/10/15 08:49	11/10/15 14:35	1

Lab Sample ID: LCS 680-409671/15-A

Matrix: Water

Analysis Batch: 409847

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 409671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.53		ug/L		101	85 - 115

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-410669/1-A

Matrix: Water

Analysis Batch: 410743

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 410669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		11/17/15 07:00	11/17/15 10:53	1

Lab Sample ID: LCS 680-410669/2-A

Matrix: Water

Analysis Batch: 410745

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 410669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0513	0.0535		mg/L		104	90 - 110

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-409988/1-A  
Matrix: Water  
Analysis Batch: 410109

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 409988

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	—	11/11/15 16:48	11/12/15 11:31	1

Lab Sample ID: LCS 680-409988/2-A  
Matrix: Water  
Analysis Batch: 410109

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 409988

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0880		mg/L	—	88	75 - 125

Lab Sample ID: LCSD 680-409988/3-A  
Matrix: Water  
Analysis Batch: 410109

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 409988

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Phenolics, Total Recoverable	0.100	0.0910		mg/L	—	91	75 - 125	3	30



# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

## Metals

### Prep Batch: 409671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	245.1	
LCS 680-409671/15-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-409671/13-A	Method Blank	Total/NA	Water	245.1	

### Prep Batch: 409722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	200.8	
LCS 680-409722/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-409722/1-A	Method Blank	Total/NA	Water	200.8	

### Analysis Batch: 409847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	245.1	409671
LCS 680-409671/15-A	Lab Control Sample	Total/NA	Water	245.1	409671
MB 680-409671/13-A	Method Blank	Total/NA	Water	245.1	409671

### Analysis Batch: 409880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	200.8	409722
LCS 680-409722/2-A	Lab Control Sample	Total/NA	Water	200.8	409722
MB 680-409722/1-A	Method Blank	Total/NA	Water	200.8	409722

## General Chemistry

### Prep Batch: 409988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	Distill/Phenol	
LCS 680-409988/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-409988/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-409988/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 410109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	420.1	409988
LCS 680-409988/2-A	Lab Control Sample	Total/NA	Water	420.1	409988
LCSD 680-409988/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	409988
MB 680-409988/1-A	Method Blank	Total/NA	Water	420.1	409988

### Prep Batch: 410669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	Distill/CN	
LCS 680-410669/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-410669/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 410743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-118738-1	POTW-11042015	Total/NA	Water	335.4	410669
MB 680-410669/1-A	Method Blank	Total/NA	Water	335.4	410669

TestAmerica Savannah

## QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

### General Chemistry (Continued)

#### Analysis Batch: 410745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-410669/2-A	Lab Control Sample	Total/NA	Water	335.4	410669

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

**Client Sample ID: POTW-11042015**

**Date Collected: 11/04/15 11:00**

**Date Received: 11/06/15 09:54**

**Lab Sample ID: 680-118738-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			409722	11/10/15 12:55	CRW	TAL SAV
Total/NA	Analysis	200.8		1	409880	11/11/15 03:50	BWR	TAL SAV
Total/NA	Prep	245.1			409671	11/10/15 08:49	JKL	TAL SAV
Total/NA	Analysis	245.1		1	409847	11/10/15 14:56	JKL	TAL SAV
Total/NA	Prep	Distill/CN			410669	11/17/15 07:00	DAM	TAL SAV
Total/NA	Analysis	335.4		5	410743	11/17/15 11:41	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			409988	11/11/15 16:48	JME	TAL SAV
Total/NA	Analysis	420.1		1	410109	11/12/15 11:54	JME	TAL SAV

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Arkansas DEQ	State Program	6	88-0692	01-31-16 *
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-15 *
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-15 *
Indiana	State Program	5	N/A	06-30-16
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-15 *
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15 *
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA150014	12-31-15 *
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15 *
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	10-31-15 *
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-15 *
Oklahoma	State Program	6	9984	08-31-16
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-15 *
South Carolina	State Program	4	98001	06-30-15 *
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-15 *
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15 *
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-118738-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt \_\_\_\_\_  
Drinking Water? Yes ☐ No ☒

Chain of Custody Record  
480501-Albany

TAL-4124 (1007)

Client: Ashland - ~~Glens Falls~~  
Address: 5788 Wide Winters Parkway  
City: Syracuse State: NY Zip Code: 13214

Project Name and Location (State): Ashland Glens Falls, NY  
Contract/Purchase Order/Quote No.:

Project Manager: Brian Reles  
Telephone Number (Area Code)/Fax Number: 607-765-1480

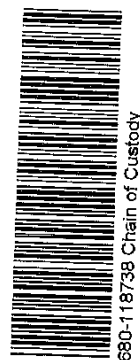
Date: 11/14/2015 Chain of Custody Number: 228384  
Lab Number: Page 1 of 1

Site Contact: Brian Reles  
Lab Contact: Kathy Smith  
Carrier/Voybill Number:

Analysis (Attach list if more space is needed):

Special Instructions/Conditions of Receipt:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives				
			Aqueous	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc	HNO3
POTW-110112015	11/14/2015	1100	X			X	X	X			
<div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to top right, transparent 49%, black 49%, black 51%, transparent 51%); background-size: 40px 40px;"></div>											



680-118738 Chain of Custody

Possible Hazard Identification:  
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☐ Disposal By Lab ☐ Archive For \_\_\_\_\_ Months  
 (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify):

Turn Around Time Required:  
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other \_\_\_\_\_

1. Relinquished By: [Signature] Date: 11/15/2015 Time: 0915  
 2. Relinquished By: [Signature] Date: 11/15/2015 Time: 1800  
 3. Relinquished By: [Signature] Date: 11/15/2015 Time: 0915

Test America - Lock Box Outside Office  
 680-118738  
 427(5)460

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-118738-1

**Login Number: 118738**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: Banda, Christy S**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Hercules Incorporated  
Ashland Inc. - EH&S - DS4  
5200 Blazer Parkway  
Dublin, Ohio 43017

January 6, 2016

Mr. Larry Glasheen  
Glens Falls Wastewater Treatment Plant  
Water and Sewer Department  
2 Shermantown Road  
Glens Falls, New York 12801

**RE: Discharge Monitoring Report for December 2015**  
**Industrial Wastewater - Discharge Permit No. 002D**

Dear Mr. Glasheen:

Attached is the December 2015 Discharge Monitoring Report for the Hercules/Ciba site. The annual wastewater sample was collected on December 15, 2015. All parameters meet the limits of the wastewater discharge permit, effective April 23, 2007 and renewed April 2012.

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.*

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

A handwritten signature in blue ink, appearing to read "James E. Vondracek".

James E. Vondracek, P.E.  
Principal Remediation Engineer

Attachments

cc: Stephen K. Havlik, BASF Corporation., Toms River, NJ



**ATTACHMENT 1**  
**DISCHARGE DATA**

1/7/2016

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	<b>Total Chromium</b>	<b>Total Lead</b>	<b>Total Mercury</b>	<b>Total Cyanide</b>	<b>Total Phenols</b>	<b>Compliance Point</b>	<b>Compliance Point</b>
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						5.0	
Daily max.	1.0	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monthly min	0.39	0.00	0.00	0.40	0.00	6.1	37,000
Monthly ave	0.39	0.00	0.00	0.40	0.00	7.1	49,226
Monthly max	0.39	0.00	0.00	0.40	0.00	7.3	60,000
Data points	1	1	1	1	1	31	31
12/01/15						7.1	43,000
12/02/15						7.0	43,000
12/03/15						7.0	48,000
12/04/15						7.1	51,000
12/05/15						7.2	51,000
12/06/15						7.1	49,000
12/07/15						7.2	49,000
12/08/15						7.2	49,000
12/09/15						7.2	50,000
12/10/15						7.2	48,000
12/11/15						7.3	48,000
12/12/15						7.1	48,000
12/13/15						7.2	46,000
12/14/15						7.1	46,000
12/15/15	0.390	ND	ND	0.40	ND	7.0	45,000
12/16/15						6.1	39,000
12/17/15						7.3	37,000
12/18/15						7.2	47,000
12/19/15						7.1	48,000
12/20/15						7.2	46,000
12/21/15						7.1	44,000
12/22/15						7.2	49,000
12/23/15						7.1	44,000
12/24/15						7.1	54,000
12/25/15						7.1	57,000
12/26/15						7.1	56,000
12/27/15						7.0	59,000
12/28/15						7.1	57,000
12/29/15						7.1	60,000
12/30/15						7.1	56,000
12/31/11						7.1	59,000
Monthly Average for Chromium							
Concentration	0.39 mg/L						
Ave. Flow	49,226 gpd						
Ave. Load	0.16 #/day						
PERMIT	3.10 #/day						
Notes:							
The laboratory Reporting Limit for Lead is 0.0025 mg/L.							
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.							
The laboratory Reporting Limit for Phenols is 0.050 mg/L.							

**ATTACHMENT 2**  
**ANALYTICAL DATA**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-120072-1

Client Project/Site: Hercules Glens Falls O&M Annual

For:

Ashland Inc

5200 Blazer Parkway

DS-4

Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

*Kathryn Smith*

Authorized for release by:

1/6/2016 11:27:14 AM

Kathryn Smith, Project Manager II

(912)354-7858

[kathy.smith@testamericainc.com](mailto:kathy.smith@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Definitions/Glossary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Sample Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-120072-1	POTW-20151215	Water	12/15/15 12:00	12/16/15 09:17
680-120072-2	TRIP-BLANK	Water	12/10/15 00:00	12/16/15 09:17

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

**Job ID: 680-120072-1**

**Laboratory: TestAmerica Savannah**

### Narrative

## CASE NARRATIVE

Client: Ashland Inc  
Project: Hercules Glens Falls O&M Annual

**Report Number: 680-120072-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 12/16/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.6 C.

### VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples POTW-20151215 (680-120072-1) and TRIP-BLANK (680-120072-2) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 12/17/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-414947.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample POTW-20151215 (680-120072-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 12/21/2015 and analyzed on 12/31/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### METALS (ICP)

Sample POTW-20151215 (680-120072-1) was analyzed for Metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 12/17/2015 and analyzed on 12/18/2015.

Boron was detected in method blank MB 680-415035/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL METALS (ICPMS)

Sample POTW-20151215 (680-120072-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 12/17/2015 and analyzed on 12/18/2015.

Chromium recovered high for the MS/MSD of sample POTW-20151215 (680-120072-1) in batch 680-415323.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL MERCURY

Sample POTW-20151215 (680-120072-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 12/18/2015.

## Case Narrative

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

### Job ID: 680-120072-1 (Continued)

#### Laboratory: TestAmerica Savannah (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### OIL AND GREASE AND TPH

Sample POTW-20151215 (680-120072-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were prepared and analyzed on 12/21/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL SUSPENDED SOLIDS

Sample POTW-20151215 (680-120072-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 12/20/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### TOTAL CYANIDE

Sample POTW-20151215 (680-120072-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 12/18/2015.

Sample POTW-20151215 (680-120072-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### AMMONIA

Sample POTW-20151215 (680-120072-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/18/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PHENOLS

Sample POTW-20151215 (680-120072-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared on 12/21/2015 and analyzed on 12/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### BIOCHEMICAL OXYGEN DEMAND

Sample POTW-20151215 (680-120072-1) was analyzed for Biochemical Oxygen Demand in accordance with SM 5210B. The samples were analyzed on 12/17/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

**Client Sample ID: POTW-20151215**

**Lab Sample ID: 680-120072-1**

**Date Collected: 12/15/15 12:00**

**Matrix: Water**

**Date Received: 12/16/15 09:17**

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/17/15 17:21	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/17/15 17:21	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/17/15 17:21	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/17/15 17:21	1
Toluene	1.0	U	1.0	0.48	ug/L			12/17/15 17:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/17/15 17:21	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/17/15 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		79 - 119		12/17/15 17:21	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		12/17/15 17:21	1
4-Bromofluorobenzene (Surr)	95		71 - 121		12/17/15 17:21	1
Dibromofluoromethane (Surr)	105		77 - 129		12/17/15 17:21	1

## Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	9.6	U	9.6	0.67	ug/L		12/21/15 16:29	12/31/15 05:04	1
Pentachlorophenol	48	U	48	1.7	ug/L		12/21/15 16:29	12/31/15 05:04	1
2,4,6-Trichlorophenol	9.6	U	9.6	0.78	ug/L		12/21/15 16:29	12/31/15 05:04	1
2,4,5-Trichlorophenol	9.6	U	9.6	9.6	ug/L		12/21/15 16:29	12/31/15 05:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	54		38 - 121	12/21/15 16:29	12/31/15 05:04	1
2-Fluorophenol	48		35 - 110	12/21/15 16:29	12/31/15 05:04	1
Nitrobenzene-d5	60		44 - 119	12/21/15 16:29	12/31/15 05:04	1
Phenol-d5	49		27 - 119	12/21/15 16:29	12/31/15 05:04	1
Terphenyl-d14	44		10 - 165	12/21/15 16:29	12/31/15 05:04	1
2,4,6-Tribromophenol	70		34 - 132	12/21/15 16:29	12/31/15 05:04	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	150	B	100	36	ug/L		12/17/15 15:52	12/18/15 17:20	1
Calcium	75000		500	25	ug/L		12/17/15 15:52	12/18/15 17:20	1

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	J	5.0	0.50	ug/L		12/17/15 15:52	12/18/15 18:08	1
Arsenic	3.0	U	3.0	1.5	ug/L		12/17/15 15:52	12/18/15 18:08	1
Cadmium	2.3		0.50	0.15	ug/L		12/17/15 15:52	12/18/15 18:08	1
Chromium	390	F1	5.0	1.6	ug/L		12/17/15 15:52	12/18/15 18:08	1
Copper	2.0	J	5.0	1.7	ug/L		12/17/15 15:52	12/18/15 18:08	1
Iron	270		100	25	ug/L		12/17/15 15:52	12/18/15 18:08	1
Lead	2.5	U	2.5	0.98	ug/L		12/17/15 15:52	12/18/15 18:08	1
Manganese	12		5.0	1.8	ug/L		12/17/15 15:52	12/18/15 18:08	1
Nickel	1.9	J	5.0	1.9	ug/L		12/17/15 15:52	12/18/15 18:08	1
Silver	1.0	U	1.0	0.10	ug/L		12/17/15 15:52	12/18/15 18:08	1
Zinc	20	U	20	9.6	ug/L		12/17/15 15:52	12/18/15 18:08	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		12/18/15 13:40	12/18/15 18:14	1

TestAmerica Savannah

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	4.6	U	4.6	1.3	mg/L	—	12/21/15 08:00	12/21/15 11:50	1
Cyanide, Total	0.40		0.050	0.013	mg/L		12/18/15 08:00	12/18/15 12:17	5
Ammonia	0.25	U	0.25	0.10	mg/L			12/18/15 11:42	1
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		12/21/15 15:55	12/22/15 11:03	1
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/17/15 10:36	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.5		1.0	1.0	mg/L	—		12/20/15 17:21	1

# Client Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

**Client Sample ID: TRIP-BLANK**

**Date Collected: 12/10/15 00:00**

**Date Received: 12/16/15 09:17**

**Lab Sample ID: 680-120072-2**

**Matrix: Water**

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/17/15 16:58	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/17/15 16:58	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/17/15 16:58	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/17/15 16:58	1
Toluene	1.0	U	1.0	0.48	ug/L			12/17/15 16:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/17/15 16:58	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/17/15 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		79 - 119		12/17/15 16:58	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		12/17/15 16:58	1
4-Bromofluorobenzene (Surr)	94		71 - 121		12/17/15 16:58	1
Dibromofluoromethane (Surr)	105		77 - 129		12/17/15 16:58	1

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-414947/7

Matrix: Water

Analysis Batch: 414947

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/17/15 15:24	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/17/15 15:24	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/17/15 15:24	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/17/15 15:24	1
Toluene	1.0	U	1.0	0.48	ug/L			12/17/15 15:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/17/15 15:24	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/17/15 15:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		79 - 119		12/17/15 15:24	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		12/17/15 15:24	1
4-Bromofluorobenzene (Surr)	97		71 - 121		12/17/15 15:24	1
Dibromofluoromethane (Surr)	107		77 - 129		12/17/15 15:24	1

Lab Sample ID: LCS 680-414947/3

Matrix: Water

Analysis Batch: 414947

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.7		ug/L		98	37 - 151
Chloroform	20.0	19.3		ug/L		96	51 - 138
Ethylbenzene	20.0	16.9		ug/L		84	37 - 162
Methylene Chloride	20.0	21.8		ug/L		109	1 - 221
Toluene	20.0	18.1		ug/L		90	47 - 150
1,1,1-Trichloroethane	20.0	22.1		ug/L		111	52 - 162
Xylenes, Total	40.0	31.8		ug/L		80	78 - 119

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	95		79 - 119
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
4-Bromofluorobenzene (Surr)	89		71 - 121
Dibromofluoromethane (Surr)	96		77 - 129

Lab Sample ID: LCSD 680-414947/4

Matrix: Water

Analysis Batch: 414947

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	20.0	19.4		ug/L		97	37 - 151	1	30
Chloroform	20.0	19.1		ug/L		95	51 - 138	1	30
Ethylbenzene	20.0	16.9		ug/L		85	37 - 162	0	30
Methylene Chloride	20.0	21.7		ug/L		108	1 - 221	0	30
Toluene	20.0	18.0		ug/L		90	47 - 150	0	30
1,1,1-Trichloroethane	20.0	21.6		ug/L		108	52 - 162	2	30
Xylenes, Total	40.0	32.3		ug/L		81	78 - 119	2	30

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-414947/4

Matrix: Water

Analysis Batch: 414947

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		79 - 119
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	88		71 - 121
Dibromofluoromethane (Surr)	96		77 - 129

## Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-415462/11-A

Matrix: Water

Analysis Batch: 416348

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	10	U	10	0.70	ug/L		12/21/15 16:29	12/29/15 14:56	1
Pentachlorophenol	50	U	50	1.8	ug/L		12/21/15 16:29	12/29/15 14:56	1
2,4,6-Trichlorophenol	10	U	10	0.82	ug/L		12/21/15 16:29	12/29/15 14:56	1
2,4,5-Trichlorophenol	10	U	10	10	ug/L		12/21/15 16:29	12/29/15 14:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	54		38 - 121	12/21/15 16:29	12/29/15 14:56	1
2-Fluorophenol	41		35 - 110	12/21/15 16:29	12/29/15 14:56	1
Nitrobenzene-d5	46		44 - 119	12/21/15 16:29	12/29/15 14:56	1
Phenol-d5	40		27 - 119	12/21/15 16:29	12/29/15 14:56	1
Terphenyl-d14	75		10 - 165	12/21/15 16:29	12/29/15 14:56	1
2,4,6-Tribromophenol	57		34 - 132	12/21/15 16:29	12/29/15 14:56	1

Lab Sample ID: LCS 680-415462/12-A

Matrix: Water

Analysis Batch: 416348

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Naphthalene	100	59.7		ug/L		60	21 - 133
Pentachlorophenol	200	140		ug/L		70	14 - 176
2,4,6-Trichlorophenol	100	70.6		ug/L		71	37 - 144
2,4,5-Trichlorophenol	100	68.6		ug/L		69	62 - 119

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	66		38 - 121
2-Fluorophenol	46		35 - 110
Nitrobenzene-d5	60		44 - 119
Phenol-d5	52		27 - 119
Terphenyl-d14	82		10 - 165
2,4,6-Tribromophenol	83		34 - 132

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-415462/13-A

Matrix: Water

Analysis Batch: 416348

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 415462

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	100	60.8		ug/L		61	21 - 133	2	40
Pentachlorophenol	200	131		ug/L		66	14 - 176	6	40
2,4,6-Trichlorophenol	100	74.0		ug/L		74	37 - 144	5	40
2,4,5-Trichlorophenol	100	69.7		ug/L		70	62 - 119	2	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	66		38 - 121
2-Fluorophenol	49		35 - 110
Nitrobenzene-d5	62		44 - 119
Phenol-d5	56		27 - 119
Terphenyl-d14	80		10 - 165
2,4,6-Tribromophenol	85		34 - 132

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 680-415035/1-A

Matrix: Water

Analysis Batch: 415268

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415035

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	40.5	J	100	36	ug/L		12/17/15 15:52	12/18/15 17:04	1
Calcium	500	U	500	25	ug/L		12/17/15 15:52	12/18/15 17:04	1

Lab Sample ID: LCS 680-415035/2-A

Matrix: Water

Analysis Batch: 415268

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415035

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	200	222		ug/L		111	85 - 115
Calcium	5000	5270		ug/L		105	85 - 115

Lab Sample ID: 680-120072-1 MS

Matrix: Water

Analysis Batch: 415268

Client Sample ID: POTW-20151215

Prep Type: Total/NA

Prep Batch: 415035

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	150	B	200	366		ug/L		107	75 - 125
Calcium	75000		5000	80100	4	ug/L		97	75 - 125

Lab Sample ID: 680-120072-1 MSD

Matrix: Water

Analysis Batch: 415268

Client Sample ID: POTW-20151215

Prep Type: Total/NA

Prep Batch: 415035

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	150	B	200	373		ug/L		110	75 - 125	2	20
Calcium	75000		5000	81300	4	ug/L		120	75 - 125	1	20

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-415034/1-A

Matrix: Water

Analysis Batch: 415323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415034

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.0	U	5.0	0.50	ug/L		12/17/15 15:52	12/18/15 17:58	1
Arsenic	3.0	U	3.0	1.5	ug/L		12/17/15 15:52	12/18/15 17:58	1
Cadmium	0.50	U	0.50	0.15	ug/L		12/17/15 15:52	12/18/15 17:58	1
Chromium	5.0	U	5.0	1.6	ug/L		12/17/15 15:52	12/18/15 17:58	1
Copper	5.0	U	5.0	1.7	ug/L		12/17/15 15:52	12/18/15 17:58	1
Iron	100	U	100	25	ug/L		12/17/15 15:52	12/18/15 17:58	1
Lead	2.5	U	2.5	0.98	ug/L		12/17/15 15:52	12/18/15 17:58	1
Manganese	5.0	U	5.0	1.8	ug/L		12/17/15 15:52	12/18/15 17:58	1
Nickel	5.0	U	5.0	1.9	ug/L		12/17/15 15:52	12/18/15 17:58	1
Silver	1.0	U	1.0	0.10	ug/L		12/17/15 15:52	12/18/15 17:58	1
Zinc	20	U	20	9.6	ug/L		12/17/15 15:52	12/18/15 17:58	1

Lab Sample ID: LCS 680-415034/2-A

Matrix: Water

Analysis Batch: 415323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415034

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	53.0		ug/L		106	85 - 115
Arsenic	100	102		ug/L		102	85 - 115
Cadmium	50.0	49.1		ug/L		98	85 - 115
Chromium	100	104		ug/L		104	85 - 115
Copper	100	106		ug/L		106	85 - 115
Iron	5000	5530		ug/L		111	85 - 115
Lead	500	517		ug/L		103	85 - 115
Manganese	500	555		ug/L		111	85 - 115
Nickel	100	105		ug/L		105	85 - 115
Silver	50.0	53.1		ug/L		106	85 - 115
Zinc	100	103		ug/L		103	85 - 115

Lab Sample ID: 680-120072-1 MS

Matrix: Water

Analysis Batch: 415323

Client Sample ID: POTW-20151215

Prep Type: Total/NA

Prep Batch: 415034

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	1.5	J	50.0	66.1		ug/L		129	70 - 130
Arsenic	3.0	U	100	122		ug/L		122	70 - 130
Cadmium	2.3		50.0	58.3		ug/L		112	70 - 130
Chromium	390	F1	100	567	F1	ug/L		176	70 - 130
Copper	2.0	J	100	121		ug/L		119	70 - 130
Iron	270		5000	6670		ug/L		128	70 - 130
Lead	2.5	U	500	576		ug/L		115	70 - 130
Manganese	12		500	660		ug/L		130	70 - 130
Nickel	1.9	J	100	124		ug/L		122	70 - 130
Silver	1.0	U	50.0	59.8		ug/L		120	70 - 130
Zinc	20	U	100	121		ug/L		121	70 - 130

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# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-120072-1 MSD

Matrix: Water

Analysis Batch: 415323

Client Sample ID: POTW-20151215

Prep Type: Total/NA

Prep Batch: 415034

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	1.5	J	50.0	61.9		ug/L		121	70 - 130	6	20
Arsenic	3.0	U	100	115		ug/L		115	70 - 130	6	20
Cadmium	2.3		50.0	57.5		ug/L		110	70 - 130	1	20
Chromium	390	F1	100	542	F1	ug/L		151	70 - 130	5	20
Copper	2.0	J	100	116		ug/L		114	70 - 130	5	20
Iron	270		5000	6360		ug/L		122	70 - 130	5	20
Lead	2.5	U	500	564		ug/L		113	70 - 130	2	20
Manganese	12		500	631		ug/L		124	70 - 130	5	20
Nickel	1.9	J	100	117		ug/L		115	70 - 130	6	20
Silver	1.0	U	50.0	57.7		ug/L		115	70 - 130	4	20
Zinc	20	U	100	120		ug/L		120	70 - 130	1	20

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-415197/13-A

Matrix: Water

Analysis Batch: 415257

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		12/18/15 13:40	12/18/15 17:28	1

Lab Sample ID: LCS 680-415197/15-A

Matrix: Water

Analysis Batch: 415257

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415197

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	2.50	2.39		ug/L		95	85 - 115

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-415434/21-A

Matrix: Water

Analysis Batch: 415509

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	5.0	U	5.0	1.4	mg/L		12/21/15 08:00	12/21/15 11:50	1

Lab Sample ID: LCS 680-415434/22-A

Matrix: Water

Analysis Batch: 415509

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
HEM (Oil & Grease)	40.0	33.4		mg/L		83	78 - 114

TestAmerica Savannah



# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 680-415434/23-A

Matrix: Water

Analysis Batch: 415509

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 415434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	33.2		mg/L		83	78 - 114	1	18

## Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-415078/1-A

Matrix: Water

Analysis Batch: 415172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415078

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		12/18/15 08:00	12/18/15 11:51	1

Lab Sample ID: LCS 680-415078/2-A

Matrix: Water

Analysis Batch: 415172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0513	0.0470		mg/L		92	90 - 110		

## Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-415153/22

Matrix: Water

Analysis Batch: 415153

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25	0.10	mg/L			12/18/15 10:56	1

Lab Sample ID: LCS 680-415153/33

Matrix: Water

Analysis Batch: 415153

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	1.00	0.987		mg/L		99	90 - 110		

Lab Sample ID: LCSD 680-415153/13

Matrix: Water

Analysis Batch: 415153

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	1.00	0.978		mg/L		98	90 - 110	1	30

TestAmerica Savannah

# QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-415635/1-A

Matrix: Water

Analysis Batch: 415736

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415635

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L	-	12/21/15 15:55	12/22/15 10:12	1

Lab Sample ID: LCS 680-415635/2-A

Matrix: Water

Analysis Batch: 415736

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415635

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0820		mg/L	-	82	75 - 125

Lab Sample ID: LCSD 680-415635/3-A

Matrix: Water

Analysis Batch: 415736

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 415635

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Phenolics, Total Recoverable	0.100	0.0815		mg/L	-	82	75 - 125	1	30

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-415413/1

Matrix: Water

Analysis Batch: 415413

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.0	U	1.0	1.0	mg/L	-		12/20/15 17:21	1

Lab Sample ID: LCS 680-415413/2

Matrix: Water

Analysis Batch: 415413

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	20.0	21.5		mg/L	-	108	80 - 120

Lab Sample ID: LCSD 680-415413/3

Matrix: Water

Analysis Batch: 415413

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Total Suspended Solids	20.0	19.5		mg/L	-	98	80 - 120	10	25

## Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-280337/1

Matrix: Water

Analysis Batch: 280337

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L	-		12/17/15 10:36	1

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## QC Sample Results

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

### Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: LCS 480-280337/2

Matrix: Water

Analysis Batch: 280337

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	179		mg/L	—	90	85 - 115

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## GC/MS VOA

### Analysis Batch: 414947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	624	
680-120072-2	TRIP-BLANK	Total/NA	Water	624	
LCS 680-414947/3	Lab Control Sample	Total/NA	Water	624	
LCSD 680-414947/4	Lab Control Sample Dup	Total/NA	Water	624	
MB 680-414947/7	Method Blank	Total/NA	Water	624	

## GC/MS Semi VOA

### Prep Batch: 415462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	625	
LCS 680-415462/12-A	Lab Control Sample	Total/NA	Water	625	
LCSD 680-415462/13-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 680-415462/11-A	Method Blank	Total/NA	Water	625	

### Analysis Batch: 416348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-415462/12-A	Lab Control Sample	Total/NA	Water	625	415462
LCSD 680-415462/13-A	Lab Control Sample Dup	Total/NA	Water	625	415462
MB 680-415462/11-A	Method Blank	Total/NA	Water	625	415462

### Analysis Batch: 416659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	625	415462

## Metals

### Prep Batch: 415034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	200.8	
680-120072-1 MS	POTW-20151215	Total/NA	Water	200.8	
680-120072-1 MSD	POTW-20151215	Total/NA	Water	200.8	
LCS 680-415034/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 680-415034/1-A	Method Blank	Total/NA	Water	200.8	

### Prep Batch: 415035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	200.7	
680-120072-1 MS	POTW-20151215	Total/NA	Water	200.7	
680-120072-1 MSD	POTW-20151215	Total/NA	Water	200.7	
LCS 680-415035/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 680-415035/1-A	Method Blank	Total/NA	Water	200.7	

### Prep Batch: 415197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	245.1	
LCS 680-415197/15-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-415197/13-A	Method Blank	Total/NA	Water	245.1	

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# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Metals (Continued)

### Analysis Batch: 415257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	245.1	415197
LCS 680-415197/15-A	Lab Control Sample	Total/NA	Water	245.1	415197
MB 680-415197/13-A	Method Blank	Total/NA	Water	245.1	415197

### Analysis Batch: 415268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	200.7 Rev 4.4	415035
680-120072-1 MS	POTW-20151215	Total/NA	Water	200.7 Rev 4.4	415035
680-120072-1 MSD	POTW-20151215	Total/NA	Water	200.7 Rev 4.4	415035
LCS 680-415035/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	415035
MB 680-415035/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	415035

### Analysis Batch: 415323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	200.8	415034
680-120072-1 MS	POTW-20151215	Total/NA	Water	200.8	415034
680-120072-1 MSD	POTW-20151215	Total/NA	Water	200.8	415034
LCS 680-415034/2-A	Lab Control Sample	Total/NA	Water	200.8	415034
MB 680-415034/1-A	Method Blank	Total/NA	Water	200.8	415034

## General Chemistry

### Analysis Batch: 280337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	SM 5210B	
LCS 480-280337/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-280337/1	Method Blank	Total/NA	Water	SM 5210B	

### Prep Batch: 415078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	Distill/CN	
LCS 680-415078/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-415078/1-A	Method Blank	Total/NA	Water	Distill/CN	

### Analysis Batch: 415153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	350.1	
LCS 680-415153/33	Lab Control Sample	Total/NA	Water	350.1	
LCSD 680-415153/13	Lab Control Sample Dup	Total/NA	Water	350.1	
MB 680-415153/22	Method Blank	Total/NA	Water	350.1	

### Analysis Batch: 415172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-415078/2-A	Lab Control Sample	Total/NA	Water	335.4	415078
MB 680-415078/1-A	Method Blank	Total/NA	Water	335.4	415078

### Analysis Batch: 415178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	335.4	415078

TestAmerica Savannah

# QC Association Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## General Chemistry (Continued)

### Analysis Batch: 415413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	SM 2540D	
LCS 680-415413/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-415413/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 680-415413/1	Method Blank	Total/NA	Water	SM 2540D	

### Prep Batch: 415434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	1664A	
LCS 680-415434/22-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 680-415434/23-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 680-415434/21-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 415509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	1664A	415434
LCS 680-415434/22-A	Lab Control Sample	Total/NA	Water	1664A	415434
LCSD 680-415434/23-A	Lab Control Sample Dup	Total/NA	Water	1664A	415434
MB 680-415434/21-A	Method Blank	Total/NA	Water	1664A	415434

### Prep Batch: 415635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	Distill/Phenol	
LCS 680-415635/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-415635/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	
MB 680-415635/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 415736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-120072-1	POTW-20151215	Total/NA	Water	420.1	415635
LCS 680-415635/2-A	Lab Control Sample	Total/NA	Water	420.1	415635
LCSD 680-415635/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	415635
MB 680-415635/1-A	Method Blank	Total/NA	Water	420.1	415635

# Lab Chronicle

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

**Client Sample ID: POTW-20151215**

**Date Collected: 12/15/15 12:00**

**Date Received: 12/16/15 09:17**

**Lab Sample ID: 680-120072-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	414947	12/17/15 17:21	AAH	TAL SAV
Total/NA	Prep	625			415462	12/21/15 16:29	RBS	TAL SAV
Total/NA	Analysis	625		1	416659	12/31/15 05:04	JEM	TAL SAV
Total/NA	Prep	200.7			415035	12/17/15 15:52	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	415268	12/18/15 17:20	BCB	TAL SAV
Total/NA	Prep	200.8			415034	12/17/15 15:52	BJB	TAL SAV
Total/NA	Analysis	200.8		1	415323	12/18/15 18:08	BWR	TAL SAV
Total/NA	Prep	245.1			415197	12/18/15 13:40	JKL	TAL SAV
Total/NA	Analysis	245.1		1	415257	12/18/15 18:14	BCB	TAL SAV
Total/NA	Prep	1664A			415434	12/21/15 08:00	DLG	TAL SAV
Total/NA	Analysis	1664A		1	415509	12/21/15 11:50	DLG	TAL SAV
Total/NA	Prep	Distill/CN			415078	12/18/15 08:00	DAM	TAL SAV
Total/NA	Analysis	335.4		5	415178	12/18/15 12:17	DAM	TAL SAV
Total/NA	Analysis	350.1		1	415153	12/18/15 11:42	JME	TAL SAV
Total/NA	Prep	Distill/Phenol			415635	12/21/15 15:55	JME	TAL SAV
Total/NA	Analysis	420.1		1	415736	12/22/15 11:03	JME	TAL SAV
Total/NA	Analysis	SM 2540D		1	415413	12/20/15 17:21	LAF	TAL SAV
Total/NA	Analysis	SM 5210B		1	280337	12/17/15 10:36	LED	TAL BUF

**Client Sample ID: TRIP-BLANK**

**Date Collected: 12/10/15 00:00**

**Date Received: 12/16/15 09:17**

**Lab Sample ID: 680-120072-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	414947	12/17/15 16:58	AAH	TAL SAV

## Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Alaska (UST)	State Program	10	UST-104	11-05-16
Arkansas DEQ	State Program	6	88-0692	01-31-16 *
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-16
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-16
Indiana	State Program	5	N/A	06-30-16
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15 *
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA160019	12-31-16
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-16
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-16
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	06-30-16
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-16
Oklahoma	State Program	6	9984	08-31-16
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-16
South Carolina	State Program	4	98001	06-30-16
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-16
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15 *
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

## Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah



# Certification Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

## Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-16
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-16
Georgia	State Program	4	N/A	03-31-16
Georgia	State Program	4	956	03-31-16
Illinois	NELAP	5	200003	09-30-16
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	01-31-16 *
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-16
Kentucky (WW)	State Program	4	90029	12-31-15 *
Louisiana	NELAP	6	02031	06-30-16
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-16
Massachusetts	State Program	1	M-NY044	06-30-16
Michigan	State Program	5	9937	03-31-16
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-16
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-16
New York	NELAP	2	10026	03-31-16
North Dakota	State Program	8	R-176	03-31-16
Oklahoma	State Program	6	9421	08-31-16
Oregon	NELAP	10	NY200003	06-09-16
Pennsylvania	NELAP	3	68-00281	07-31-16
Rhode Island	State Program	1	LAO00328	12-30-15 *
Tennessee	State Program	4	TN02970	03-31-16
Texas	NELAP	6	T104704412-15-6	07-31-16
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-16
Washington	State Program	10	C784	02-10-16 *
West Virginia DEP	State Program	3	252	09-30-16
Wisconsin	State Program	5	998310390	08-31-16

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah

## Method Summary

Client: Ashland Inc  
Project/Site: Hercules Glens Falls O&M Annual

TestAmerica Job ID: 680-120072-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SAV
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SAV
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL SAV
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
1664A	HEM and SGT-HEM	1664A	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SAV
SM 5210B	BOD, 5-Day	SM	TAL BUF

### Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

## Chain of Custody Record

Drinking Water? Yes ☐ No ☒

# THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

## Chain of Custody Record

[illegible]

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-120072-1

**Login Number: 120072**

**List Source: TestAmerica Savannah**

**List Number: 1**

**Creator: White, Menica R**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-120072-1

**Login Number: 120072**

**List Number: 2**

**Creator: Kinecki, Kenneth P**

**List Source: TestAmerica Buffalo**

**List Creation: 12/17/15 10:48 AM**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

## ***Appendix B***

City of Glens Falls Industrial User Permit #002E (April 24, 2012)

Waste Water Treatment Plant Telephone: [518] 761-3850

Water & Sewer Telephone: [518] 761-3814

• Fax: [518] 761-3862

• [www.cityofglensfalls.com](http://www.cityofglensfalls.com)

RECEIVED  
MAY 16 2012  
REMEDIATION

James E. Vondracek ✓  
Hercules, Incorporated  
Ashland Inc.  
5200 Blazer Parkway  
Dublin, Ohio 43017

and

Stephen K. Havlik  
BASF Corporation  
227 Oak Ridge Parkway  
Toms River, NJ 08754-0071

Dear Sirs;

Please find included the Permit renewal for the "Hercules/Ciba-Geigy" site located on Lower Warren Street, Queensbury, New York. All terms and conditions of the permit remained unchanged. Please feel free to contact me if you have any questions.

Sincerely,



Lawrence Glasheen, Chief Operator  
Glens Falls WWTP  
Telephone: (518) 761-3850 ext 112  
Telefax: (518) 761-3862  
Email: [lglasheen@cityofglensfalls.com](mailto:lglasheen@cityofglensfalls.com)



# City of Glens Falls Water and Sewer Board of Commissioners

2 Shermantown Road  
Glens Falls, NY 12801  
Telephone: (518) 761-3850  
Fax: (518) 761-3862

---

Permit No. 002E

## INDUSTRIAL USER PERMIT

In accordance with the provisions of Chapter 177 of the Code of the City of Glens Falls

Hercules, Incorporated  
Ashland Inc.  
5200 Blazer Parkway  
Dublin, Ohio 43017

and

BASF Corporation  
227 Oak Ridge Parkway  
Toms River, NJ 08754-0071

Are hereby authorized to discharge industrial wastewater from the above identified facility and through the outfall identified herein into the City of Glens Falls sewer system in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all applicable pretreatment regulations, standards or requirements under local, State, and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of Chapter 177 of the Code of the City of Glens Falls.

This permit shall become effective on April 24, 2012 and shall expire at midnight on April 23, 2017.

If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a renewal permit in accordance with the requirements of Chapter 177 of the Code of the City of Glens Falls, a minimum of 180 days prior to the expiration date.

CITY OF GLENS FALLS

By:



John Diamond, Mayor

Issued this 11th day of April, 2012

## **PART 1 - EFFLUENT LIMITATIONS**

- A. During the period of April 24, 2012 through midnight April 23, 2017, the permittees is authorized to discharge process wastewater to the City of Glens Falls sewer system from the outfalls listed below.

Description of outfalls:

<u>Outfall</u>	<u>Descriptions</u>
001	The flow from manhole number 5 located at the Glens Falls WWTP to a dedicated conveyance channel where metering and sampling takes place prior to combining with GFWWTP primary effluent. Said discharge is conveyed by a dedicated pipeline from the permittee's effluent pumping station located on Lower Warren Street.

- B. During the period commencing April 24, 2012 and through April 23, 2017, the discharge from the process wastewater shall not exceed the following effluent limitations. Effluent at this location consists of the discharge from the permittees' effluent pumping station treating groundwater from the Lower Warren Street site that was formerly used by Hercules, Inc. and Ciba-Geigy Inc. for the manufacture of dyes and related chemicals.

#### EFFLUENT LIMITATIONS

<u>Parameter</u>	<u>Instantaneous Maximum (mg/l)</u>	<u>Monthly Average (mg/l unless otherwise noted)</u>
Antimony	10	--
Ammonia	40	--
Arsenic	0.25	--
Benzene	0.1	--
Boron	5.0	--
Cadmium	0.25	--
Calcium	500	--
Chloroform	1.0	--
Chromium, total	see note below *	3.1 lb/day
Copper	1.0	--
Cyanide, total	3.0	--
Ethylbenzene	0.1	--
Iron	50	--
Lead	0.8**	--
Manganese	5.0	--
Mercury	0.025***	0.005
Methylene Chloride	1.0	--
Napthalene	1.0	--
Nickel	2.3	--
Oil & Grease	50	--
pH	6.0-9.0	--
Phenols	5.0	--
Silver	0.2	--
Toluene	0.1	--
1,1,1 - Trichloroethane	1.0	--
Xylene	0.1	--
Zinc	1.5	--
Flow (gallons per day)	350,000	175,000

\*The discharge for total chromium is 3.1 lb/day and will be based on the average of chromium sampling data and the monthly average flow. This limit is based on mass balance calculations as well as the 1999 Wastewater Headworks Analysis Report.

\*\*0.8 mg/l Lead recommended as a local limit in the 1999 Wastewater Headworks Analysis Report.

\*\*\*Variance for Mercury granted by the Water and Sewer Board at the public hearing held June 24, 1991.

- C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in Chapter 177 of the Code of the City of Glens Falls and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

## PART 2 - MONITORING REQUIREMENTS

- A. From the period beginning on the effective date of the permit until the expiration date, the permittee shall monitor outfall 001 for the following parameters, at the indicated frequency:

<u>Sample Parameter (units)</u>	<u>Sample Location</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (gpd)	See note 2	Continuous	Meter
BOD (mg/l)	See note 1,3	1/Year	24 hr. Composite
TSS (mg/l)	See note 1,3	2/Year	24 hr. Composite
Ammonia (mg/l)	See note 1,3	1/Year	24 hr. Composite
Antimony (mg/l)	See note 1,3	1/Year	24 hr. Composite
Arsenic (mg/l)	See note 1,3	1/Year	24 hr. Composite
Benzene (mg/l)	See note 1,4	1/Year	Grab
Boron (mg/l)	See note 1,3	1/Year	24 hr. Composite
Cadmium (mg/l)	See note 1,3	1/Year	24 hr. Composite
Calcium (mg/l)	See note 1,3	1/Year	24 hr. Composite
Chloroform (mg/l)	See note 1,4	1/Year	Grab
Chromium (mg/l)	See note 1,3	Monthly	24 hr. Composite
Copper (mg/l)	See note 1,3	1/Year	24 hr. Composite
Cyanide (mg/l)	See note 1,3	Monthly	24 hr. Composite
Ethylbenzene (mg/l)	See note 1,4	1/Year	Grab
Iron (mg/l)	See note 1,3	1/Year	24 hr. Composite
Lead (mg/l)	See note 1,3	Monthly	24 hr. Composite
Manganese (mg/l)	See note 1,3	1/Year	24 hr. Composite
Mercury (mg/l)	See note 1,3	Monthly	24 hr. Composite
Methylene Chloride (mg/l)	See note 1,4	1/Year	Grab
Napthalene	See note 1,3	1/Year	Grab
Nickel (mg/l)	See note 1,3	1/Year	24 hr. Composite

<u>Sample Parameter (units)</u>	<u>Sample Location</u>	<u>Frequency</u>	<u>Sample Type</u>
Zinc (mg/l)	See note 1,3	1/Year	24 hr. Composite
Trichlorophenol (mg/l)	See note 1,4	1/Year	Grab
Pentachlorophenol (mg/l)	See note 1,4	1/Year	Grab
Oil and Grease (mg/l)	See note 1,4	1/Year	Grab
Phenols, Total (mg/l)	See note 1,3	1/Month	24 hr. Composite
pH	See note 5	Continuous	Meter
Silver (mg/l)	See note 1,3	1/Year	24 hr. Composite
Toluene (mg/l)	See note 1,4	1/Year	Grab
1,1,1-Trichloroethane	See note 1,4	1/Year	Grab
Xylene (mg/l)	See note 1,4	1/Year	Grab

#### Notes

1. Composite sampler is located at the Southern end of the Preliminary Treatment Building at the WWTP.
  2. Daily flows are to be recorded from the permittee's flow meter at the Southern end of the Preliminary Treatment Building at the WWTP
  3. Composite samples shall be taken at the frequency specified above and tested by a State certified laboratory. Permittee's samples shall be 24 hour time composites except as noted above.;
  4. Grab samples shall be taken from the effluent wet well at the Southern end of the Preliminary Treatment Building at the WWTP at the frequency specified above and tested by a State certified laboratory.
  5. pH shall be monitored at the Southern end of the Preliminary Treatment Building at the WWTP.
- B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

### **PART 3 - REPORTING REQUIREMENTS**

#### **A. Monitoring Reports**

Monitoring results obtained shall be summarized and reported on an Industrial User Monitoring Report Form once per month. The reports are due on the 28<sup>th</sup> day of the following month. The report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed including measured maximum and average daily flows.

- B. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136 or amendments thereto, or otherwise approved by EPA or as specified in this permit, the results of such monitoring shall be included in any calculations of actual daily maximum or monthly average pollutant discharge and results shall be reported in the monthly report submitted to the City of Glens Falls. Such increased monitoring frequency shall also be indicated in the monthly report.

C. Automatic Resampling

If the results of the permittee's wastewater analysis indicates that a violation of this permit has occurred, the permittee must:

1. Inform the City of Glens Falls of the violation within 24 hours; and
2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days of the first violation.

D. Accidental Discharge Report

1. The permittee shall notify the City of Glens Falls immediately upon the occurrence of an accidental discharge of substances prohibited by Chapter 177 of the Code of the City of Glens Falls or any slug loads or spills that may enter the public sewer. The City of Glens Falls should be notified by telephone at (518) 761-3850. The notification shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective actions taken. The permittee's notification of accidental releases in accordance with this section does not relieve it of other reporting requirements that arise under local, State, or Federal laws.

Within five days following an accidental discharge, the permittee shall submit to the City of Glens Falls a detailed written report. The report shall specify:

- a. Description and cause of the upset, slug load or accidental discharge, the cause thereof, and the impact on the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.
- b. Duration of noncompliance, including exact dates and times of noncompliance and, if the noncompliance is continuing, the time by which compliance is reasonably expected to occur.
- c. All steps taken or to be taken to reduce, eliminate, and/or prevent recurrence of such an upset, slug load, accidental discharge, or other conditions of noncompliance.

- E. All reports required by this permit shall be submitted to the City of Glens Falls at the following address:

City of Glens Falls  
Attn.: Pretreatment Coordinator  
2 Shermantown Rd.  
Glens Falls, NY 12801

## **PART 4 - SPECIAL CONDITIONS**

### **SECTION 1 - ADDITIONAL/SPECIAL MONITORING REQUIREMENTS.**

- A. No Special Monitoring Requirements are applicable at this time.

### **SECTION 2 - REOPENER CLAUSE**

- A. This permit may be reopened and modified to incorporate any new or revised requirements contained in a National Categorical Pretreatment Standard.
- B. This permit may be reopened and modified to incorporate any new or revised requirements resulting from the City of Glens Falls' reevaluation of its local limits.
- C. This permit may be reopened and modified to incorporate any new or revised requirements developed by the City of Glens Falls as are necessary to ensure POTW compliance with any and all regulatory standards.

## **PART 5 - STANDARD CONDITIONS**

### **SECTION A. GENERAL CONDITIONS AND DEFINITIONS**

#### **1. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### **2. Duty to comply**

The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief, and summary abatements.

#### **3. Duty to mitigate**

The permittee shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

#### **4. Permit Modification**

This permit may be modified for good causes including, but not limited to, the following:

- a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements.
- b. Material or substantial alterations or additions to the discharger's operation processes, or discharge volume or character which were not considered in drafting the effective permit.

- c. A change in any condition in either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- d. Information indicating that the permitted discharge poses a threat to the Control Authority's collection and treatment systems, POTW personnel or the receiving waters.
- e. Violation of any terms or conditions of the permit.
- f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting.
- g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13.
- h. To correct typographical or other errors in the permit.
- i. To reflect transfer of the facility ownership and/or operation to a new/operator.
- j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

#### 5. Permit Termination

This permit may be terminated for the following reasons:

- a. Falsifying self-monitoring reports
- b. Tampering with monitoring equipment
- c. Refusing to allow timely access to the facility premises and records
- d. Failure to meet effluent limitations
- e. Failure to pay fines
- f. Failure to pay sewer charges
- g. Failure to meet compliance schedules

#### 6. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

The petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of the appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.



7. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of Federal, State, or local laws or regulations.

8. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the City of Glens Falls:

- a. The permittee must give at least thirty (30) days advance notice to the City of Glens Falls
- b. The notice must include a written certification by the new owner which:
  - (i) States that the new owner has no immediate intent to change the facility's operations and processes
  - (ii) Identifies the specific date on which the transfer is to occur
  - (iii) Acknowledges full responsibility for complying with the existing permit.

9. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit an application for a new permit at least 180 days before the expiration date of this permit.

10. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

- a) The permittee has submitted a complete permit application at least 180 days prior to the expiration date of the user's existing permit.
- b) The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

11. Dilution

The permittee shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

12. Definitions

- a) Daily Maximum – The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

- b) Composite Sample – A sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a time composite sample: composed of discrete sample aliquots collected in one container at constant time intervals providing representative samples irrespective of stream flow; or as a flow proportional composite sample: collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots.
- c) Grab Sample – An individual sample collected in less than 15 minutes, without regard for flow or time.
- d) Instantaneous Maximum Concentration – The maximum concentration allowed in any single grab sample.
- e) Cooling Water –
  - (1) Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate, or final product and which does not contain a level of contaminants detectably higher than that of the intake water.
  - (2) Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and/or wastewater.
- f) Monthly Average – The arithmetic mean of the values for effluent samples collected during a calendar month .
- g) Weekly Average – The arithmetic mean of the values for effluent samples collected over a period of seven consecutive days.
- h) Bi-Weekly – Once every other week.
- i) Bi- Monthly – Once every other month
- j) Upset – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.
- k) Bypass – Means the intentional diversion of wastes from any portion of a treatment facility.

### 13. General Prohibitive Standards

The permittee shall comply with all the general prohibitive discharge standards in Chapter 177 of the Code of the City of Glens Falls. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant, wastewater, or other material which will inhibit or interfere with the operation or performance of the POTW or the use or disposal of the sludge generated by the POTW or pass through the POTW without adequate treatment in violation of any applicable federal, state, or local environmental regulation into the receiving waters of the Hudson River or into the sludge by-product of the POTW. These general prohibitions apply to all such users of a POTW, whether or not the user is subject to National Categorical Pretreatment Standards or any other national, state, or local pretreatment standards or requirements. Namely, the industrial user shall not discharge wastewater to the sewer system:

- a) Containing any liquid, solid, or gas which, by reason of its nature or quantity, is sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any way to the POTW or to the operation of the POTW. At no time shall two successive readings on an explosion-hazard meter at the point of discharge in the system or at any point in the system, be more than 5% nor any single reading over 10% of the lower explosive limits (LEL) of the meter. Materials prohibited under this subsection include but are not limited to substance(s) which the Board, the DEC or the EPA has notified a user poses a fire or explosion hazard to the POTW;
- b) Containing solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities, such as but not limited to grease, oil or fat in concentrations exceeding 100 parts per million by weight, garbage with particles greater than ½ inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, wastepaper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grindings or polishing wastes;
- c) Having a pH less than six point five (6.5) or higher than eight point five (8.5) or having any other corrosive property capable of causing damage or hazard to structures, equipment or personnel of the POTW;
- d) Containing any toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, so as to potentially inhibit or interfere with the operation or performance of the POTW, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW or exceed a limitation set forth in a National Categorical Pretreatment Standard. A “toxic pollutant” shall include but not be limited to any pollutant identified pursuant to Section 307 (a) of the Federal Act.
- e) Containing any wastes which either singly or by interaction with other wastes, are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewer for its maintenance and repair.
- f) Containing any substance which may cause the POTW’s effluent or any other product of the POTW, such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act or the Toxic Substances Control Act; or state criteria applicable to the sludge management method being used.
- g) Containing any substance which may cause the POTW to violate its State Pollution Discharge Pollution Discharge Elimination System Permit or receiving water quality standard.
- h) Containing any objectionable color not removed in the treatment process, such as but not limited to dye wastes and vegetable tanning solutions.
- i) Having a temperature which may inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds forty degrees centigrade (40 degrees C.) [one hundred four degrees Fahrenheit (104 degrees F.)]

- j) Containing any pollutants, including oxygen-demanding pollutants (BOD, etc.), released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentrations or qualities of pollutants that exceed, for any time period longer than fifteen (15) minutes, more than five (5) times the average twenty-four hour concentration quantities or flow during normal operation.
- k) Containing any radioactive waste or isotopes of such half-life or concentration as may exceed limits established by the Board in compliance with applicable state or federal regulations or limits set forth in any applicable federal, state, or local pollutant discharge regulation.
- l) Containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.
- m) Containing any substance which exceeds a national categorical pretreatment standard promulgated by the EPA or any other applicable federal, state or local pollutant discharge regulation.
- n) Containing any medical or infectious wastes;
- o) Containing any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquids, solids or gases; and in no case pollutants with a closed cup flashpoint of less than one hundred forty (140) degrees Fahrenheit (60 degrees C), or pollutants which cause an exceedance of 10 percent of the Lower Explosive Limit (LEL) at any point within the POTW.

14. Compliance with Applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards and requirements including any such standards or requirements that may become effective during the term of this permit.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation, or loss or failure of all or part of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control its production or discharges (or both) until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

- a) Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury, or severe property damage or no feasible alternatives exist.
- b) The permittee may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.
- c) Notification of bypass:
  - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Glens Falls
  - (2) Unanticipated bypass. The permittee shall immediately notify the City of Glens Falls and submit a written notice to the POTW within 5 days. This report shall specify:
    - (i) A description of the bypass, and its cause, including its duration;
    - (ii) Whether the bypass has been corrected; and
    - (iii) The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act or in accordance with the latest appropriate State and/or Federal requirements.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated, inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Glens Falls.

2. Flow Measurements

If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

All sampling and analysis required by this permit shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, otherwise approved by EPA, or as specified in this permit.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures identified in Section C.3, the results of this monitoring shall be included in the permittee's self-monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Glens Falls, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;
- d) Sample or monitor, for the purposes of assuring permit compliance, any substances or parameters at any location; and
- e) Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

- a) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurements, report or application.

This period may be extended by request of the City of Glens Falls at any time.

- b) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Glens Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents

Records of sampling and analyses shall include:

- a) The date, exact place, time, and methods of sampling or measurements, and sample preservation techniques or procedures;

- b) Who performed the sampling or measurements;
- c) The date(s) analyses were performed;
- d) Who performed the analyses;
- e) The analytical techniques or methods used; and
- f) The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, is a crime and may result in the imposition of criminal sanctions and/or civil penalties.

SECTION D. ADDITIONAL REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the City of Glens Falls 90 days prior to any facility expansion, production increase, or process modifications which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Glens Falls of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Automatic Resampling

If the results of the permittee's wastewater analysis indicates a violation has occurred, the permittee must notify the City of Glens Falls within 24 hours of becoming aware of the violation and repeat the sampling and pollutant analysis and submit, in writing, the results of this repeat analysis within 30 days after becoming aware of the violation.

4. Duty to Provide Information

The permittee shall furnish to the City of Glens Falls within 10 days any information which the City of Glens Falls may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also, upon request, furnish to the City of Glens Falls within 10 days copies of any records required to be kept by this permit.

5. Signatory Requirements

All applications, reports, or information submitted to the City of Glens Falls must contain the following certification statement and be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information,

including the possibility of fine and imprisonment for knowing violations.”

- a) By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:
  - (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;
  - (ii) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b) By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.
- c) The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.
- d) By a duly authorized representative of the individual designated in paragraph (a), (b), or (c);
  - (i) the authorization is made in writing by the individual described in paragraph (a), (b), or (c);
  - (ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
  - (iii) the written authorization is submitted to the City.
- e) If an authorization under paragraph (d) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) of this section must be submitted to the City of Glens Falls prior to or together with any reports to be signed by an authorized representative.

#### 6. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provision of either this permit or with any section of Chapter 177 of the Code of the City of Glens Falls, shall inform the City of Glens Falls within 24 hours of becoming aware of the upset at (518) 761-3850.

A written follow-up report of the upset shall be filed by the permittee with the City of Glens Falls within five days. The report shall specify:

- a) Description of the upset, the cause(s) thereof and the upset’s impact on the permittee’s compliance status;
- b) Duration of noncompliance, including exact dates and times of noncompliance, and if not



corrected, the anticipated time the noncompliance is expected to continue; and

- c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operating in an appropriate manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

7. Annual Publication

A list of all industrial users which were subject to enforcement proceedings during the twelve (12) previous months shall be annually published by the City of Glens Falls in the largest daily newspaper within its service area. Accordingly, the permittee is apprised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

8. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under Chapter 177 of the Code of the City of Glens Falls or State or Federal laws or regulations.

9. Penalties for Violations of Permit Conditions

The City of Glens Falls provides that any person who violates a permit condition is subject to administrative penalties of up to \$5000 per violation per day and civil penalties of up to \$5000 per violation per day. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of \$5000 per violation per day, or imprisonment for six months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

10. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or Chapter 177 of the Code of the City of Glens Falls or causing damage to or otherwise inhibiting the City of Glens Falls wastewater disposal system shall be liable to the City of Glens Falls for any expense, loss, or damage caused by such violation or discharge. The City of Glens Falls shall bill the permittee for the costs incurred by the City of Glens Falls for any cleaning, repair, or replacement work caused by the violation or discharge. Refusal to pay the assessed costs shall constitute a separate violation of Chapter 177 of the Code of the City of Glens Falls.

## ***Appendix C***

2015 Weekly/Monthly/Quarterly Inspection Sheets and Maintenance Notes

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 1/2/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	12/29/14	APJ
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS		
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances	↓	↓

**COMMENTS**

EW-B1: pump running & all 4 float lights on.  
 EW-A1: At first pump was running but the totalizer read 0.0 gpm, after turning the totalizer numbers showed on it.  
 EW-A9: could hear water in well when pump was not running.  
 EW-A10: only far left float light was on, when turned to hand the totalizer read 0.0 gpm.

River gauge - 4.5 ft  
 Quarry gauge - 0.0 ft  
 Canal gauge - 0.0 ft, river too low

Pump house: Net - 689815 gal  
 Gross - 752237 gal

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 1/9/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	1/6/15	LCG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS		
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

Net: 1580610  
Gross: 1642997

\* Replaced battery at lift station

River - 3.4'  
Canal - 0.1'  
Grassy - 0.3'

\* Tree down over stairway leading to canal/road.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 1/16/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	1/16/15	LLG
2	Inspect Pumping room in EPS for standing water		LLG
<b>Site Security</b>			
1	Gates and buildings secured & locked		LLG
2	Access roads clear		LLG
3	Site utilities operational		LLG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS		LLG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		LLG
3	Check wet well pumps and alarms		LLG
4	River staff gauge readings		LLG
5	Inspect all vaults for leaks or standing water		LLG
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		LLG
2	Housekeeping issues		LLG
3	Inspect stormwater basin area for disturbances		LLG

**COMMENTS**

Net - 2567557  
Gross - 2629933

River - 3.2' ice building up around staff gauge  
Canal - 0.2'  
Runway - 0.3'

EW-A1 - Not pumping needs to be pulled  
EW-A133B4 - Full of water clean out

### Routine Weekly Activities - Week ending

## Site Monitoring

## COMMENTS

Net: 3077094

Gross: 3099478

Quarry - 0.3' frozen

Canal - 0.2' frozen

Boxer - 3.4' Frozen

- telemetry down

- large tree removed from stairs to street

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 1/30/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	1/29/15	LLG
2	Inspect Pumping room in EPS for standing water		LLG
			LLG
<b>Site Security</b>			
1	Gates and buildings secured & locked		LLG
2	Access roads clear		LLG
3	Site utilities operational		LLG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	1/29/15	LLG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		LLG
3	Check wet well pumps and alarms		LLG
4	River staff gauge readings		LLG
5	Inspect all vaults for leaks or standing water		LLG
			<del>LLG</del>
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		LLG
2	Housekeeping issues		LLG
3	Inspect stormwater basin area for disturbances		LLG

**COMMENTS**

Pump House -

Net: 3723 698

Gross: 3786 087

Water Levels

River - 3.5' all ice covered

Canal - 0.3 ish - ice covered

Quarry - 0.3 ish - ice covered

EW-B1 - always pumping @ 8 gpm; cant keep up

EW-B5 - still down

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 2/6/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	2/3/15	LLG
2	Inspect Pumping room in EPS for standing water	2/3/15	LLG
<b>Site Security</b>			
1	Gates and buildings secured & locked	2/3/15	LLG
2	Access roads clear	2/3/15	LLG
3	Site utilities operational	2/3/15	LLG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	2/3/15	LLG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms	2/3/15	LLG
4	River staff gauge readings	2/3/15	LLG
5	Inspect all vaults for leaks or standing water	2/3/15	LLG
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	2/3/15	LLG
2	Housekeeping issues	2/3/15	LLG
3	Inspect stormwater basin area for disturbances	2/3/15	LLG

**COMMENTS**

Pump House  
Net: 87419  
Gross: 4200667

\* Site covered with 12+ inches of snow; well vaults will need to be dug out for inspections

canal ~ 0.35h - ice snow covered  
quarry ~ 0.45h - ice covered  
river ~ 3.25h - ice covered



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 2/13/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	2/10/15	CCG
2	Inspect Pumping room in EPS for standing water	↓	↓
<b>Site Security</b>			
1	Gates and buildings secured & locked	↓	↓
2	Access roads clear		
3	Site utilities operational	↓	↓
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	2/10/15	CCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms	↓	↓
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water	↓	↓
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	2/10/15	CCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

**COMMENTS**

Pump House  
Net:  
Gross:

\* Another 1' of snow fall on site; vaults all buried again. Dig out vaults for inspections

canal - All the same      Approx } 0.3  
river - covered with levels } 3.0  
Quarry - ice & snow      } 0.3

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 2/20/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	2/18/15	APJ
2	Inspect Pumping room in EPS for standing water	2/18/15	APJ
<b>Site Security</b>			
1	Gates and buildings secured & locked	2/18/15	APJ
2	Access roads clear	2/18/15	APJ
3	Site utilities operational	2/18/15	APJ
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	2/18/15	APJ
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water	2/18/15	APJ
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	2/18/15	APJ
2	Housekeeping issues	2/18/15	APJ
3	Inspect stormwater basin area for disturbances	2/18/15	APJ

**COMMENTS**

Pump House - NET: 1262336 gal  
Gross: 5375603 gal

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 2/27/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	2/25/15	LCG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	2/25/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	2/25/15	LCG
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

Net: 1747407  
Gross: 5860667

EW-A1 - clean tot; run again  
EW-B1 - constant flow  
EW-B2 - clean out  
EW-B3 - " "  
EW-12 - " "  
EW-13 - " "  
EW-B8 - not running

(0.4) Canal -  
(2.0) River -  
(0.3) Quarry - } Ice covers all hard to get readings  
readings are approximates.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 3/6/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	3/4/15	CCG
2	Inspect Pumping room in EPS for standing water	3/4/15	CCG
<b>Site Security</b>			
1	Gates and buildings secured & locked	3/4/15	CCG
2	Access roads clear		
3	Site utilities operational	3/4/15	CCG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	3/4/15	CCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms		
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water *	↓	↓
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	3/4/15	CCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

snow drifts  
cover roads  
call for  
plow

**COMMENTS**

Net - 2275218  
Gross - 6388741

- Pump house ceiling leaking

river - 3.4  
canal - 0.3  
Quarry - 0.3

> Ice covered

\* unable to clean vaults due to inaccessible roads for field truck

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 3/13/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	3/10/15	LCG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS		
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

EW-A12  
A13/B4  
A7  
A3  
A4  
A2

water in vaults; vac out

net: 272455  
Gross: 6837002

river - 2.2 covered in ice  
Quarry - Ice covered (same as before)  
Canal -

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 3/20/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	3/16/15	LLG
2	Inspect Pumping room in EPS for standing water	3/16/15	LLG
<b>Site Security</b>			
1	Gates and buildings secured & locked	3/16/15	LLG
2	Access roads clear	3/16/15	LLG
3	Site utilities operational	3/16/15	LLG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	3/16/15	LLG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	3/16/15	LLG
3	Check wet well pumps and alarms	3/16/15	LLG
4	River staff gauge readings	3/16/15	LLG
5	Inspect all vaults for leaks or standing water	3/16/15	LLG
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	3/16/15	LLG
2	Housekeeping issues	3/16/15	LLG
3	Inspect stormwater basin area for disturbances	3/16/15	LLG

**COMMENTS**

Net: 3196956  
Gross: 7310198

River - 1.4 ice covered (pipe and gauge beginning to bend  
canal - 0.5 due to ice)  
Quarry - 0.7

EW-142 > Breakers tripped/reset and  
EW-141 > inspect wells

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 3/27/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	3/26/15	LLG
2	Inspect Pumping room in EPS for standing water	3/26/15	LLG
<b>Site Security</b>			
1	Gates and buildings secured & locked	3/26/15	LLG
2	Access roads clear	3/26/15	LLG
3	Site utilities operational	3/26/15	LLG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	3/26/15	LLG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	3/26/15	LLG
3	Check wet well pumps and alarms	3/26/15	LLG
4	River staff gauge readings	3/26/15	LLG
5	Inspect all vaults for leaks or standing water	3/26/15	LLG
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	3/26/15	LLG
2	Housekeeping issues	3/26/15	LLG
3	Inspect stormwater basin area for disturbances	3/26/15	LLG

**COMMENTS**

net - 4069132  
Gross - 8182384

\* Water dripping from roof into pump house.

River - 1.2  
Canal - 0.1  
Quarry - Dry - out of water

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 4/3/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	3/30/15	APJ
2	Inspect Pumping room in EPS for standing water	3/30/15	APJ
<b>Site Security</b>			
1	Gates and buildings secured & locked	3/30/15	APJ
2	Access roads clear	3/30/15	APJ
3	Site utilities operational	3/30/15	APJ
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	3/30/15	LLC
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	3/30/15	LLC
3	Check wet well pumps and alarms	3/30/15	LLC
4	River staff gauge readings	3/30/15	LLC
5	Inspect all vaults for leaks or standing water	3/30/15	LLC
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	3/30/15	APJ
2	Housekeeping issues	3/30/15	APJ
3	Inspect stormwater basin area for disturbances	3/30/15	APJ

**COMMENTS**

Net: 4468999 gal  
Gross: 8582265 gal

Canal - Dry - out of water  
Quarry - Dry - out of water  
River - 0.9

EW-112 - Breaker tripped



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 4/17/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	4/13/15	LCG
2	Inspect Pumping room in EPS for standing water	↓	↓
<b>Site Security</b>			
1	Gates and buildings secured & locked	↓	↓
2	Access roads clear	↓	↓
3	Site utilities operational	↓	↓
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	4/13/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms	↓	↓
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water	↓	↓
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	4/13/15	LCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

**COMMENTS**

Net: 5786878  
Gross: 9900133

River - 2.90  
Canal - 0.5  
Quarry - 1.1

EW-A5 - replace one-way valve; pump needs to be pulled.

### Routine Weekly Activities - Week ending

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	4/21/15	LCG
2	Inspect Pumping room in EPS for standing water	4/21/15	LCG
<b>Site Security</b>			
1	Gates and buildings secured & locked	4/21/15	LCG
2	Access roads clear	↓	↓
3	Site utilities operational	↓	↓
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	4/21/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms	↓	↓
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water	↓	↓
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	4/21/15	LCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

## COMMENTS

- Heavily Raining

Net: 65 69 315  
Gross: 10 68 2564

5/1/15

## COMMENTS

Page 1 of 1

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 5/9/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	5/9/15	LCG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	5/4/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

canal - 0.60'

quarry - 0.85'

river - 2.0'

Net: 7814163

Gross: 10927408

- Inspect all fire extinguishers

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 5/15/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	5/11/15	CAC
2	Inspect Pumping room in EPS for standing water	↓	CAC
		↓	
<b>Site Security</b>			
1	Gates and buildings secured & locked	5/11/15	CAC
2	Access roads clear	↓	CAC
3	Site utilities operational	↓	CAC
		↓	
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	5/11/15	CAC
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	CAC
3	Check wet well pumps and alarms	↓	CAC
4	River staff gauge readings	↓	CAC
5	Inspect all vaults for leaks or standing water	↓	CAC
		↓	
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	5/11/15	CAC
2	Housekeeping issues	↓	CAC
3	Inspect stormwater basin area for disturbances	↓	CAC

**COMMENTS**

Net: 8495972 gal  
Gross: 12609221 gal

Pulled pumps. Replaced float (U) on EW-A5. Turned heat tape off on EWs. Trailer electric (to Air Conditioner) is not working properly.

River: 2.3  
Quarry: ~~1.0~~ (0.8)  
Canal: 2.2

Seep area dry

Do not enter sign looks to have been ripped from pump house door.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 5-22-15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	5-21-15	LCG
2	Inspect Pumping room in EPS for standing water	↓	↓
<b>Site Security</b>			
1	Gates and buildings secured & locked	↓	↓
2	Access roads clear		
3	Site utilities operational	↓	↓
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	5-21-15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms	↓	↓
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water	↓	↓
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	5-21-15	LCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

**COMMENTS**

\* Sump B down - lost pump down  
sump during cleaning

Net: 9339339  
Gross: 13452589

River - 2.46  
Canal - ~~2.0~~ 2.0  
Quarry - 0.9

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 5/29/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	5/26/15	LCG
2	Inspect Pumping room in EPS for standing water	↓	↓
<b>Site Security</b>			
1	Gates and buildings secured & locked	↓	↓
2	Access roads clear		
3	Site utilities operational	↓	↓
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	5/26/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms	↓	↓
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	5/26/15	LCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

**COMMENTS**

Quarry - 1.5'  
 River - 0.7'  
 Canal - 1.0'

\* Sump B down due to tether  
 breaking during cleaning/inspection.

EW-B1 one-way valve broken; shut down repairs

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 6/5/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	6/2/15	2CG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	6/2/15	2CG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

net: 576991  
gross: 14237462

Quarry - 1.2'  
River - 1.75'  
Canal - 1.4'

\* All vaults opened and cleaned out. Pumps inspected and working properly



### Routine Weekly Activities - Week ending

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	6/8/15	LCG
2	Inspect Pumping room in EPS for standing water	6/8/15	LCG
<b>Site Security</b>			
1	Gates and buildings secured & locked	6/8/15	LCG
2	Access roads clear	↓	↓
3	Site utilities operational	↓	↓
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	6/8/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	↓	↓
3	Check wet well pumps and alarms	↓	↓
4	River staff gauge readings	↓	↓
5	Inspect all vaults for leaks or standing water	↓	↓
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	6/9/15	LCG
2	Housekeeping issues	↓	↓
3	Inspect stormwater basin area for disturbances	↓	↓

## COMMENTS

Canal - 1.6'  
River - 2.5'  
Quarry - 1.9'

Net: 1318311  
Gross: 14984837

EW-Q1 totalizer not working; remove clean

6/19/15

6	17	15
6	17	15
6	17	15

### COMMENTS

River - 3.2'  
Canal - 1.45'  
Quarry - 1.75'

Net - 1885091  
Gross - 15551617

6/26/15

## COMMENTS

Gross - 16216366

**Routine Weekly Activities - Week ending** \_\_\_\_\_

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS		
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS		
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

## COMMENTS

[illegible]



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 7/10/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	7/6/15	LLG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	7/6/15	LLG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	7/6/15	LLG
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

River - 3.40'

Quarry - 1.6'

Canal - 1.75'

Net: 3767405

Gross: 254060

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 7/17/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	7/16/15	LCG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	7/16/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	7/16/15	LCG
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

River - 2.65'	- mv-30 cluster near river
Canal - 1.20'	not under water
Quarry - 1.50'	
	- Drum in PTP has 2" left in it.
Net - 351927	
Gross - 1111274	
	- Search for backway to 5G-7; property just recently cleaned.
	Property owner grants access - Nick Deagle
	796-6521
	- skid steer used to clear paths behind RTP property.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 7/24/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	7/20/15	LG
2	Inspect Pumping room in EPS for standing water	7/20/15	LG
<b>Site Security</b>			
1	Gates and buildings secured & locked	7/20/15	LG
2	Access roads clear	7/20/15	BR
3	Site utilities operational	7/20/15	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	7/20/15	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	7/23/15	BR
3	Check wet well pumps and alarms	7/20/15	LG
4	River staff gauge readings	7/20/15	BR/LG
5	Inspect all vaults for leaks or standing water	7/23/15	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	7/23/15	BR
2	Housekeeping issues	7/23/15	BR
3	Inspect stormwater basin area for disturbances	7/23/15	BR

**COMMENTS**

Net Flow: 703088 gal.  
Gross : 1,452,424 gal.

Canal: 1.70'  
River: 2.25'  
Quarry: 2.20'

-Removed Standing water from all vaults  
-EW-BG electrical panel needed screw to be secured - fixed  
-EW-A11, EW-A6 totalizers need to be replaced - cannot be read  
-EW-A7, EW-A3 totalizers not recording flow. need to be cleaned or replaced.  
-Sump A lock mechanism broken. Needs new latch to be installed.  
-EW-B3 - Pump down. Appears wires connected to breaker burnt up/corroded. turned power to B3 off.



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 7/31/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	7/27/15	BR
2	Inspect Pumping room in EPS for standing water	7/27/15	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	7/27/15	BR
2	Access roads clear	7/27/15	BR
3	Site utilities operational	7/27/15	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	7/27/15	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	7/27/15	BR
3	Check wet well pumps and alarms	7/27/15	BR
4	River staff gauge readings	7/27/15	BR
5	Inspect all vaults for leaks or standing water	7/27/15	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	7/27/15	BR
2	Housekeeping issues	7/27/15	BR
3	Inspect stormwater basin area for disturbances	7/27/15	BR

**COMMENTS**

(SG-11) Canal Gauge - 1.60'  
(SG-12) River Gauge - 0.90'  
(SG-10) Quarry Gauge - 2.25'

Net: 1264699

Gross: 2024058

- EW-A2 + EW-A11 found tripped at Generator room  
- Remove standing water from EW-A2, EW-A3, EW-A4, EW-A5/B2, EW-A7, EW-A9/B3, EW-A11, EW-A12, EW-A13/B4, EW-B6  
- May want to replace sample port of EW-A5. May have slow leak  
Need to Replace totalizer for: EW-A6, EW-A11



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 8/7/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	8-3-15	LCG
2	Inspect Pumping room in EPS for standing water	8-3-15	LCG
<b>Site Security</b>			
1	Gates and buildings secured & locked	8-3-15	LCG
2	Access roads clear	↓	LCG
3	Site utilities operational	↓	LCG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	8-3-15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	8-3-15	LCG
3	Check wet well pumps and alarms	8-3-15	LCG
4	River staff gauge readings	8-3-15	LCG
5	Inspect all vaults for leaks or standing water	8-3-15	LCG
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	8-3-15	LCG
2	Housekeeping issues	8-3-15	LCG
3	Inspect stormwater basin area for disturbances	8-3-15	LCG

**COMMENTS**

River - 1.25'

Quarry - 2.20'

Canal - 1.25'

Net: 1824991

Gross: 2584338

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 8/14/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	8/10/15	LCG
2	Inspect Pumping room in EPS for standing water	8/10/15	LCG
<b>Site Security</b>			
1	Gates and buildings secured & locked	8/10/15	LCG
2	Access roads clear	8/10/15	LCG
3	Site utilities operational	8/10/15	LCG
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	8/10/15	LCG
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	8/10/15	LCG
3	Check wet well pumps and alarms	8/10/15	LCG
4	River staff gauge readings	8/10/15	LCG
5	Inspect all vaults for leaks or standing water	8/10/15	LCG
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	8/10/15	LCG
2	Housekeeping issues	8/10/15	LCG
3	Inspect stormwater basin area for disturbances	8/10/15	LCG

**COMMENTS**

River - 1.85'	EW-A2 - All breakers tripped; reset
Canal - 2.10'	
Quarry - 1.55'	
Net - 2381728	- Remove water from well vaults
Gross - 3141077	

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 8/21/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	8/17/15	BR
2	Inspect Pumping room in EPS for standing water	8/17/15	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	8/17/15	BR
2	Access roads clear	8/17/15	AJ
3	Site utilities operational	8/17/15	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	8/17/15	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	8/17/15	BR
3	Check wet well pumps and alarms	8/17/15	BR
4	River staff gauge readings	8/17/15	BR
5	Inspect all vaults for leaks or standing water	8/17/15	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	8/17/15	BR
2	Housekeeping issues	8/17/15	BR
3	Inspect stormwater basin area for disturbances	8/17/15	BR

**COMMENTS**

Canal - 1.48'  
 Ring - 1.40  
 Quarry - 2.45

EPS Flow -  
 Net: 2926570  
 Gross: 3685911

Telemetry still down  
 Remove 50-125 gal. from EW-B4/A13  
 EW-A11- Needs new totalizer face

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 8/28/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	8/28/15	AJ
2	Inspect Pumping room in EPS for standing water	8/28/15	AJ
			↑
<b>Site Security</b>			
1	Gates and buildings secured & locked	8/28/15	AJ
2	Access roads clear	8/28/15	AJ
3	Site utilities operational	8/28/15	AJ
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	8/28/15	AJ
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	8/28/15	AJ
3	Check wet well pumps and alarms	8/28/15	AJ
4	River staff gauge readings	8/28/15	AJ
5	Inspect all vaults for leaks or standing water	8/28/15	AJ
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	8/28/15	AJ
2	Housekeeping issues	8/28/15	AJ
3	Inspect stormwater basin area for disturbances	8/28/15	AJ

**COMMENTS**

Canal gauge - 1.4 ft  
River gauge - 1.0 ft  
Quarry gauge - 2.4 ft

EPS Flows: Net - 3463077 gal  
Gross - 4222436 gal

Telemetry still down.

MW-B1: pressure was 80/100, while running.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 8/31/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	8/31/15	UG
2	Inspect Pumping room in EPS for standing water		
<b>Site Security</b>			
1	Gates and buildings secured & locked		
2	Access roads clear		
3	Site utilities operational		
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS		
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings		
3	Check wet well pumps and alarms		
4	River staff gauge readings		
5	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues		
2	Housekeeping issues		
3	Inspect stormwater basin area for disturbances		

**COMMENTS**

Gauges

River - 0.8

Canal - 1.75

Quarry - 2.1

Net: 4012754

Gross: 4772145

Telemetry Down



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 9/11/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	9/8/2015	AJ
2	Inspect Pumping room in EPS for standing water	9/8/2015	AJ
<b>Site Security</b>			
1	Gates and buildings secured & locked	9/8/2015	AJ
2	Access roads clear	9/8/2015	AJ
3	Site utilities operational	9/8/2015	AJ
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	9/8/2015	AJ
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	9/8/2015	AJ
3	Check wet well pumps and alarms	9/8/2015	AJ
4	Canal, River, and Sliver Quarry staff gauge readings	9/8/2015	AJ
5	Inspect all vaults for leaks or standing water	9/8/2015	AJ
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	9/8/2015	AJ
2	Housekeeping issues	9/8/2015	AJ
3	Inspect stormwater basin area for disturbances	9/8/2015	AJ

**COMMENTS**

Net: 401985  
Gross: 5389346

River: 0.95  
Canal: 1.2  
Quarry: 2.3

Collect POTW Sample @ 13:45 (9/8/2015)

Patch hole in EW-A7 side. Concrete worn down from sludge water.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 9-18-15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	9-18-15	CC
2	Inspect Pumping room in EPS for standing water	9-18-15	CC
<b>Site Security</b>			
1	Gates and buildings secured & locked	9-17-15	CC
2	Access roads clear	9-17-15	CC
3	Site utilities operational	9-17-15	CC
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	9-17-15	CC
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	9-17-15	CC
3	Check wet well pumps and alarms	9-17-15	CC
4	River staff gauge readings	9-17-15	CC
5	Inspect all vaults for leaks or standing water	9-17-15	CC
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	9-17-15	CC
2	Housekeeping issues	9-17-15	CC
3	Inspect stormwater basin area for disturbances	9-17-15	CC

**COMMENTS**

River: 1.4 ⇒ Hard to get exact; gauge needs cleaning (gunk on it)  
Quarry: 2.2  
Canal: 1.6

EPS Net: 1076664 gal  
Gross: 6064009 gal

Telemetry not running.

Vacuumed water out of all vaults (where needed)  
Detailed vault notes in monthly inspection log (Sept.)

- EW-A11-tripped breaker in breaker room
- EW-B1-needs piping insulated
- Sump A-lock latch is missing
- North lot gets grown over

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 9/25/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	9/25/2015	BR
2	Inspect Pumping room in EPS for standing water	9/25/2015	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	9/25/2015	BR
2	Access roads clear	9/25/2015	BR
3	Site utilities operational	9/25/2015	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	N/A	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	9/25/2015	BR
3	Check wet well pumps and alarms	9/25/2015	BR
4	River staff gauge readings	9/25/2015	BR
5	Inspect all vaults for leaks or standing water	9/25/2015	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	9/25/2015	BR
2	Housekeeping issues	9/25/2015	BR
3	Inspect stormwater basin area for disturbances	9/25/2015	BR

**COMMENTS**

Net = 1467622  
Gross = 6454951

River - 0.65'  
Quarry - 2.3'  
Feeder Canal - 0.85'

Sump C - Need new light bulb  
EW-B3 - Pressure gauge bushing has small crack



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 10/2/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	9/28/15	CC
2	Inspect Pumping room in EPS for standing water	9/28/15	CC
<b>Site Security</b>			
1	Gates and buildings secured & locked	9/28/15	CC
2	Access roads clear	9/28/15	CC
3	Site utilities operational <i>see below about telemetry</i>	9/28/15	CC
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	9/28/15	CC
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	9/28/15	CC
3	Check wet well pumps and alarms	9/28/15	CC
4	Canal, River, and Sliver Quarry staff gauge readings	9/29/15	CC
5	Inspect all vaults for leaks or standing water	9/29/15	CC
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	9/29/15	CC
2	Housekeeping issues	9/29/15	CC
3	Inspect stormwater basin area for disturbances	9/29/15	CC

**COMMENTS**

EW-A9: Pump running, only 2 lights on.  
EW-A10: Only 1 light on.

Net: 1925159 gal  
Gross: 6912489 gal

River: 1.2  
Canal: 1.95  
Quarry: 2.4

Fence across from canal gauge is down (tree branch fell)  
Telemetry still down.  
River gauge needs to be clean.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 10/9/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	10/6/15	HM
2	Inspect Pumping room in EPS for standing water	10/6/15	HM
<b>Site Security</b>			
1	Gates and buildings secured & locked	10/6/15	HM
2	Access roads clear	10/6/15	HM
3	Site utilities operational	10/6/15	HM
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	10/7/15	HM
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	10/7/15	HM
3	Check wet well pumps and alarms	10/7/15	HM
4	Canal, River, and Sliver Quarry staff gauge readings	10/7/15	HM
5	Inspect all vaults for leaks or standing water	10/7/15	HM
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	10/6/15	HM
2	Housekeeping issues	10/6/15	HM
3	Inspect stormwater basin area for disturbances	10/6/15	HM

**COMMENTS**

Canal: 1.15'      Collected Monthly POTW sample on 10/6/15  
 Quarry: 2.3'  
 River: 0.65'

Net: 2527732 gal - Reser this week-  
 Gross: 7515064 gal

Fence across from canal staff gauge is down due to fallen branches

EW-A13/EW-B4, EW-A11, EW-A7, EW-A6, EW-A5/EW-B2, EW-A4, EW-A3, EW-A2 →  
 standing water removed

EW-A10 low level light off

EW-A4 having issues with flow → pump on w/o low level float being on → potential  
 biofilm on low level float keeping it on when it shouldn't be

EW-B2 flow meter screen broken → replaced

Winterization completed on 10/8/15

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 10/16/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	10/13/15	BR
2	Inspect Pumping room in EPS for standing water	10/13/15	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	10/13/15	BR
2	Access roads clear	10/13/15	BR
3	Site utilities operational	10/13/15	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	N/A	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	10/13/15	BR
3	Check wet well pumps and alarms	10/13/15	BR
4	Canal, River, and Sliver Quarry staff gauge readings	10/13/15	BR
5	Inspect all vaults for leaks or standing water	10/13/15	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	10/13/2015	BR
2	Housekeeping issues	10/13/2015	BR
3	Inspect stormwater basin area for disturbances	10/13/2015	BR

**COMMENTS**

Canal - 1.30  
River 0.8'  
Quarry - 1.85'

EPS flows  
Net = 386759  
Gross = 8015395

Sump B: NO Need insulation on piping  
Sump A: EW-A8 need totalizer base plates



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 10/23/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	10/22/15	HM
2	Inspect Pumping room in EPS for standing water	10/22/15	HM
<b>Site Security</b>			
1	Gates and buildings secured & locked	10/22/15	HM
2	Access roads clear	10/22/15	HM
3	Site utilities operational	10/22/15	HM
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	10/22/15	HM
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	10/22/15	HM
3	Check wet well pumps and alarms	10/22/15	HM
4	River staff gauge readings	10/22/15	HM
5	Inspect all vaults for leaks or standing water	10/22/15	HM
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	10/22/15	HM
2	Housekeeping issues	10/22/15	HM
3	Inspect stormwater basin area for disturbances	10/22/15	HM

**COMMENTS**

Canal: 0.6'

River: 2.28'

Quarry: 2.2'

EPS Flows:

Net: 1064340

Gross: 8692976

AW-A8 Flow Meter screen Replaced

Sump A Flow Meter screen replaced → need to order more

Standing water removed from EW-A2, EW-A3, EW-A4, EW-A5/EW-B2, EW-A6, EW-A7, EW-A11, EW-A12, EW-A13/EW-B4

EW-A13 & EW-B4: All level switch lights illuminated → Both pumps ON w/ no pressure buildup

EW-A10: only low-low light illuminated

EW-B4: bushing under pressure gauge is cracked & leaking → replaced

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 10/30/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	10/27/15	HM
2	Inspect Pumping room in EPS for standing water	10/27/15	HM
<b>Site Security</b>			
1	Gates and buildings secured & locked	10/27/15	HM
2	Access roads clear	10/27/15	HM
3	Site utilities operational	10/27/15	HM
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	10/27/15	HM
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	10/27/15	HM
3	Check wet well pumps and alarms	10/27/15	HM
4	River staff gauge readings	10/27/15	HM
5	Inspect all vaults for leaks or standing water	10/27/15	HM
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	10/27/15	HM
2	Housekeeping issues	10/27/15	HM
3	Inspect stormwater basin area for disturbances	10/27/15	HM

**COMMENTS**

Canal: 0.42'

Quarry: 2.25'

River: 0.68'

Net: 1439455 gal

Gross: 9063114 gal

Standing water removed from EW-A13/EW-B4, EW-A11, EW-A7, EW-A6, EW-A4, EW-A3

EW-A10 low level light off

EW-B3 pressure gauge bushing is broken + leaking - replaced

EW-A5/EW-B2 vault doors jammed - will not open

EW-A4 needs insulation - insulated

EW-B1 needs insulation - insulated



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 11/6/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	11/4/2015	BR
2	Inspect Pumping room in EPS for standing water	11/4/2015	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	11/4/2015	BR
2	Access roads clear	11/4/2015	BR
3	Site utilities operational	11/4/2015	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	11/4/2015	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	11/4/2015	BR
3	Check wet well pumps and alarms	11/4/2015	BR
4	River staff gauge readings	11/4/2015	BR
5	Inspect all vaults for leaks or standing water	11/4/2015	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	11/4/2015	BR
2	Housekeeping issues	11/4/2015	BR
3	Inspect stormwater basin area for disturbances	11/4/2015	BR

**COMMENTS**

Net: 2118577

Gross: 9747211

Quarry - below gauge

River - 3.32'

Canal - 0.22'

EW-A2 breaker tripped twice and EW-A11 once at generator building

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 11/13/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	11/12/2015	BR
2	Inspect Pumping room in EPS for standing water	11/12/2015	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	11/12/2015	BR
2	Access roads clear	11/12/2015	BR
3	Site utilities operational	11/12/2015	
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	11/12/2015	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	11/12/2015	BR
3	Check wet well pumps and alarms	11/12/2015	BR
4	River staff gauge readings	11/12/2015	BR
5	Inspect all vaults for leaks or standing water	11/12/2015	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	11/12/2015	BR
2	Housekeeping issues	11/12/2015	BR
3	Inspect stormwater basin area for disturbances	11/12/2015	BR

**COMMENTS**

River - 2.4'

Quarry - Dry, out of water

Canal - 0.18'

Net flow: 2814085

Gross flow: 10442736

- All Extraction wells + Sumps working correctly. Water in only 2 vaults, however due to rain, cannot pump out.

- All site locks were sprayed with WD-40 to assist in opening/closing them.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 11/20/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	11/18/2015	BR
2	Inspect Pumping room in EPS for standing water	11/18/2015	BR
<b>Site Security</b>			
1	Gates and buildings secured & locked	11/18/2015	BR
2	Access roads clear	11/18/2015	BR
3	Site utilities operational	11/18/2015	BR
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	11/18/2015	BR
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	11/18/2015	BR
3	Check wet well pumps and alarms	11/18/2015	BR
4	River staff gauge readings	11/18/2015	BR
5	Inspect all vaults for leaks or standing water	11/18/2015	BR
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	11/18/2015	BR
2	Housekeeping issues	11/18/2015	BR
3	Inspect stormwater basin area for disturbances	11/18/2015	BR

**COMMENTS**

Gross 10957623

Net: 3328987

710 gal water removed: EW-A13/B4

~~710~~ 55 gal of water removed: EW-A11

River - 2.36

Quarry - Dry

Canal - Dry

Feeder Canal was drained the afternoon of ~~Wed~~ 11/16 (Monday)

5-10 gal of water removed: EW-A7

All vaults operating correctly.



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 11/27/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	11/24/15	CH
2	Inspect Pumping room in EPS for standing water	11/24/15	CH
<b>Site Security</b>			
1	Gates and buildings secured & locked	11/24/15	CH
2	Access roads clear	11/24/15	CH
3	Site utilities operational	11/24/15	CH
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	11/24/15	CH
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	11/24/15	CH
3	Check wet well pumps and alarms	11/24/15	CH
4	River staff gauge readings	11/24/15	CH
5	Inspect all vaults for leaks or standing water	11/24/15	CH
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	11/24/15	CH
2	Housekeeping issues	11/24/15	CH
3	Inspect stormwater basin area for disturbances	11/24/15	CH

**COMMENTS**

Gross: 11320599  
Net: 362980  
~~Net~~

Quarry: Dry  
Canal: Dry  
River: 1.90

- All extraction wells and sumps working properly,  
no water in 2 vaults, vacuumed out.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 12/4/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	12/4/2015	HM
2	Inspect Pumping room in EPS for standing water	12/4/2015	HM
<b>Site Security</b>			
1	Gates and buildings secured & locked	12/4/2015	HM
2	Access roads clear	12/4/2015	HM
3	Site utilities operational	12/4/2015	HM
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	12/4/2015	HM
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	12/4/2015	HM
3	Check wet well pumps and alarms	12/4/2015	HM
4	River staff gauge readings	12/4/2015	HM
5	Inspect all vaults for leaks or standing water	12/4/2015	HM
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	12/4/2015	HM
2	Housekeeping issues	12/4/2015	HM
3	Inspect stormwater basin area for disturbances	12/4/2015	HM

**COMMENTS**

Gross: 11963996

Net: 1006348

Canal: Dry

Quarry: Dry - some water in quarry but gauge is on elevated ground

River 2.60'

Remove standing water from EW-A3/EW-B4, EW-A11, EW-A7, EW-A5/  
EW-B2, EW-A9, EW-A3, & EW-A2

All pumps working properly



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 12/11/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	12/11/15	CC
2	Inspect Pumping room in EPS for standing water	12/11/15	CC
<b>Site Security</b>			
1	Gates and buildings secured & locked	12/11/15	CC
2	Access roads clear	12/11/15	CC
3	Site utilities operational	12/11/15	CC
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	12/11/15	CC
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	12/11/15	CC
3	Check wet well pumps and alarms	12/11/15	CC
4	River staff gauge readings	12/11/15	CC
5	Inspect all vaults for leaks or standing water	12/11/15	CC
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	12/11/15	CC
2	Housekeeping issues	12/11/15	CC
3	Inspect stormwater basin area for disturbances	12/11/15	CC

**COMMENTS**

River: 3.2  
Canal: empty - dry  
Quarry: dry - some water  
but gauge on high ground

Net: 1548210  
GROSS: 10505832

Remove standing water from: EW-A3, EW-A7, EW-A13; EW-B4

Also did monthly inspections - see monthly notes for detail

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 12/18/15

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	12/14/15	KA
2	Inspect Pumping room in EPS for standing water	12/14/15	KA
<b>Site Security</b>			
1	Gates and buildings secured & locked	12/14/15	KA
2	Access roads clear	12/14/15	KA
3	Site utilities operational	12/14/15	KA
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	12/14/15	KA
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	12/14/15	KA
3	Check wet well pumps and alarms	12/14/15	KA
4	River staff gauge readings	12/14/15	KA
5	Inspect all vaults for leaks or standing water	12/14/15	KA
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	12/14/15	KA
2	Housekeeping issues	12/14/15	KA
3	Inspect stormwater basin area for disturbances	12/14/15	KA

**COMMENTS**

Quarry: dry - some water but gauge on high ground  
 Canal: empty - dry  
 River: 3.02

Net: 1853103  
 Gross: 12810725

Some damage to fence line in North area (N side) from fence line vegetation clearing / replacement  
 Fence line repair at Pretreatment Plant continue

Cracked reducer at EW-34. Replaced

Removed standing water from EW-34, EW-A12. Cleaned all well vaults

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 12/25/2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	12/22/15	KA
2	Inspect Pumping room in EPS for standing water	12/22/15	KA
<b>Site Security</b>			
1	Gates and buildings secured & locked	12/22/15	KA
2	Access roads clear	12/22/15	KA
3	Site utilities operational	12/22/15	KA
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	12/22/15	KA
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	12/22/15	KA
3	Check wet well pumps and alarms	12/22/15	KA
4	River staff gauge readings	12/22/15	KA
5	Inspect all vaults for leaks or standing water	12/22/15	KA
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	12/22/15	KA
2	Housekeeping issues	12/22/15	KA
3	Inspect stormwater basin area for disturbances	12/22/15	KA

**COMMENTS**

Canal : empty -dry  
 Quarry : dry ; some water but gauge on high ground  
 River : 2.9  
 Net : 2416537  
 Gross : 13374185  
 Some damage to fence line in North area (N side) from fence line vegetation clearing/replacement

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Weekly Activities - Week ending 1/1/2016

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Record flow meter readings in EPS	12/28/15	KA
2	Inspect Pumping room in EPS for standing water	12/28/15	KA
<b>Site Security</b>			
1	Gates and buildings secured & locked	12/28/15	KA
2	Access roads clear	12/28/15	KA
3	Site utilities operational	12/28/15	KA
<b>Groundwater Extraction System</b>			
1	Review extraction well and sump operation in the EPS	12/28/15	KA
2	Inspect extraction wells and sumps that indicate an issue to confirm operation, record pressure and flow readings	12/28/15	KA
3	Check wet well pumps and alarms	12/28/15	KA
4	River staff gauge readings	12/28/15	KA
5	Inspect all vaults for leaks or standing water	12/28/15	KA
<b>Site Monitoring</b>			
1	Visually inspect site for erosion issues	12/28/15	KA
2	Housekeeping issues	12/28/15	KA
3	Inspect stormwater basin area for disturbances	12/28/15	KA

**COMMENTS**

Canal: empty - dry  
 Quarry: some water - gauge on high ground  
 River: 3.15

Net: 2943399  
 Gross: 13901046

Some damage to fence in North area (N side) from fence line clearing/replacement  
 Fence line work being done in South area (S side)

Removed standing water from: A3, A4, B2/A5, A6, A7, A11, A12, B5/A13, A14 & B6  
 EW-A2 had a tripped breaker  
 EW-A8 had a broken starter → Replaced

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year Jan 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		1/6/15	LCG
2	Record pH and flow meter readings in EPS		1/6/15	LCG
3	Record pH and flow readings at POTW		1/6/15	LCG
4	Submit samples to laboratry for analysis		1/6/15	LCG
<b>Site Security</b>				
1	Gates secured & locked		1/6/15	LCG
2	Access roads		1/6/15	LCG
3	Site utilities operational		1/6/15	LCG
4	Inspect fire extinguishers and sign tag		1/6/15	LCG
5	Inspect all fence lines for holes or breaks		1/6/15	LCG
6	Inspect all buildings for security		1/6/15	LCG
<b>Site Monitoring</b>				
1	Inspect landfill cap		1/6/15	LCG
2	Vegitative cover		1/6/15	LCG
3	Cement company pond (Geotextile & stone)		1/6/15	LCG
4	Inspect rip-rap		1/6/15	LCG
5	Inspect ditches/swales and catch basins		1/6/15	LCG
6	Hudson River bank		1/6/15	LCG

**COMMENTS**

- Some trees down over fence lines and stairwell. Remove and photo document.

- telemetry still down

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year JAN 15'

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS	telemetry still down				1/21/15	CCG
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1 suspected paddlewheel seized	0.0	40	Y	Y	1/21/15	CCG
	EW-B1 all floats on/pumping too slow	6.6	40	Y	Y	1/21/15	CCG
	EW-A2	0.0	35	Y	Y	1/22/15	APJ
	EW-A3	0.0	0	Y	Y	1/22/15	APJ
	EW-A4 check outlet box	0.0	30	Y	Y	1/22/15	APJ
	EW-A5	0.0	0	Y	Y	1/22/15	APJ
	EW-B2	0.0	0	Y	Y	1/22/15	APJ
	EW-A6 heat tape tripped, fixed.	0.0	0	Y	Y	1/22/15	APJ
	EW-A7	0.0	10	Y	Y	1/22/15	APJ
	EW-A8	0.0	15	Y	Y	1/22/15	APJ
	Sump A system lift station showed it was working properly.	0.0	—	—	—	1/22/15	APJ
	EW-A9	0.0	20	Y	Y	1/22/15	APJ
	EW-B3	0.0	5	Y	Y	1/22/15	APJ
	EW-A10 only left most float light on, no uptake on hand.	0.0	15	Y	Y	1/22/15	APJ
	EW-A11	0.0	20	Y	Y	1/22/15	APJ
	EW-A12	0.0	15	Y	Y	1/22/15	APJ
	EW-A13	0.0	20	Y	Y	1/22/15	APJ
	EW-B4	13.1	20	Y	Y	1/22/15	APJ
	EW-A14	0.0	15	Y	Y	1/22/15	APJ
	EW-B5	0.0	20	Y	Y	1/22/15	APJ
	Sump B pump display showed it was working properly.	—	—	—	—	1/22/15	APJ
	Sump B1	—	—	—	—	1/22/15	APJ
	EW-B6 for left & 2 right floats on, pump not running	0.0	0	Y	Y	1/22/15	APJ
	Sump C lift station showed it was working properly.	0.0	—	Y	—	1/22/15	APJ
3	River staff gauge readings					1/21/15	CCG



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year February 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		2/19/15	APJ
2	Record pH and flow meter readings in EPS		↓	↓
3	Record pH and flow readings at POTW		↓	↓
4	Submit samples to laboratry for analysis		↓	↓
<b>Site Security</b>				
1	Gates secured & locked		2/18/15	APJ
2	Access roads		↓	↓
3	Site utilities operational		↓	↓
4	Inspect fire extinguishers and sign tag		↓	↓
5	Inspect all fence lines for holes or breaks		↓	↓
6	Inspect all buildings for security		↓	↓
<b>Site Monitoring</b>				
1	Inspect landfill cap		2/18/15	APJ
2	Vegitative cover		↓	↓
3	Cement company pond (Geotextile & stone)		↓	↓
4	Inspect rip-rap		↓	↓
5	Inspect ditches/swales and catch basins		↓	↓
6	Hudson River bank		↓	↓

**COMMENTS**

1-2' of snow throughout site.  
 pump House Readings - NET: 1262336 gal  
 Gross: 5375603 gal

## Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

## O&amp;M Completion Log

Routine Monthly Activities - Month/Year February 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS	Some <del>All</del> PSI gauges were frozen.					
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0.0	1	Y	Y	2/18/15	APJ
	EW-B1	7.8		Y	Y	2/18/15	APJ
	EW-A2 only far right light on after restart	0.0		Y	Y	2/18/15	APJ
	EW-A3	0.0		Y	Y	2/18/15	APJ
	EW-A4	0.0		Y	Y	2/18/15	APJ
	EW-A5	0.0		Y	Y	2/18/15	APJ
	EW-B2	0.0		Y	Y	2/18/15	APJ
	EW-A6	0.0		Y	Y	2/18/15	APJ
	EW-A7	0.0		Y	Y	2/19/15	APJ
	EW-A8 only far left light on after restart		35		Y	2/19/15	APJ
	Sump A	0.0	—	Y	Y	2/18/15	APJ
	EW-A9	0.0	0.0	Y	Y	2/19/15	APJ
	EW-B3	0.0	0.6	Y	Y	2/19/15	APJ
	EW-A10 far right light was off after pump stopped after restart	0.0	0.0	Y	Y	2/19/15	APJ
	EW-A11	0.0	60.0	Y	Y	2/19/15	APJ
	EW-A12	0.0		Y	Y	2/14/15	APJ
	EW-A13	0.0		Y	Y	2/14/15	APJ
	EW-B4	0.0		Y	Y	2/14/15	APJ
	EW-A14	0.0		Y	Y	2/14/15	APJ
	EW-B5	0.0		Y	Y	2/14/15	APJ
	Sump B	0.0	—	Y	Y	2/18/15	APJ
	Sump B1						
	EW-B6		1				
	Sump C	0.0	—	Y	Y	2/18/15	APJ
3	River staff gauge readings						

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year March 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		3-1-15	CCG
2	Record pH and flow meter readings in EPS		↓	↓
3	Record pH and flow readings at POTW		↓	↓
4	Submit samples to laboratry for analysis		↓	↓
<b>Site Security</b>				
1	Gates secured & locked		3-1-15	CCG
2	Access roads		↓	↓
3	Site utilities operational		↓	↓
4	Inspect fire extinguishers and sign tag		↓	↓
5	Inspect all fence lines for holes or breaks		↓	↓
6	Inspect all buildings for security		↓	↓
<b>Site Monitoring</b>				
1	Inspect landfill cap		3-1-15	CCG
2	Vegitative cover		↓	↓
3	Cement company pond (Geotextile & stone)		↓	↓
4	Inspect rip-rap		↓	↓
5	Inspect ditches/swales and catch basins		↓	↓
6	Hudson River bank		↓	↓

**COMMENTS**

\* See notes on weekly inspection sheet

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## Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

## O&amp;M Completion Log

Routine Monthly Activities - Month/Year March 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS					3-1-15	LLG
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves	3-1-15	LLG
	EW-A1						
	EW-B1						
	EW-A2						
	EW-A3						
	EW-A4						
	EW-A5						
	EW-B2						
	EW-A6						
	EW-A7						
	EW-A8						
	Sump A						
	EW-A9						
	EW-B3						
	EW-A10						
	EW-A11						
	EW-A12						
	EW-A13						
	EW-B4						
	EW-A14						
	EW-B5						
	Sump B						
	Sump B1						
	EW-B6						
	Sump C						
3	River staff gauge readings					3-1-15	LLG

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year April 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		4-1-15	LLG
2	Record pH and flow meter readings in EPS		3/30/15	LLG
3	Record pH and flow readings at POTW		4-1-15	LLG
4	Submit samples to laboratry for analysis		4-1-15	LLG
<b>Site Security</b>				
1	Gates secured & locked		3/30/15	LLG
2	Access roads		3/30/15	LLG
3	Site utilities operational		3/30/15	LLG
4	Inspect fire extinguishers and sign tag		3/30/15	LLG
5	Inspect all fence lines for holes or breaks		3/30/15	LLG
6	Inspect all buildings for security		3/30/15	LLG
<b>Site Monitoring</b>				
1	Inspect landfill cap		3/30/15	LLG
2	Vegitative cover		3/30/15	LLG
3	Cement company pond (Geotextile & stone)		3/30/15	LLG
4	Inspect rip-rap		3/30/15	LLG
5	Inspect ditches/swales and catch basins		3/30/15	LLG
6	Hudson River bank		3/30/15	LLG

## COMMENTS

[illegible]

## Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

## O&amp;M Completion Log

Routine Monthly Activities - Month/Year April 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS					3/30/15	LCG
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves	4-1-15	LCG
	EW-A1	0.0	20	✓	✓		
	EW-B1	8.0	70	✓	✓		
	EW-A2 <i>needs new totalizer</i>	2.0	20	✓	✓		
	EW-A3	0.0	0	✓	✓		
	EW-A4 <i>needs new pressure gauge</i>	0.0	0	✓	✓		
	EW-A5	0.0	0	✓	✓		
	EW-B2 <i>needs new back pressure gauge</i>	0.0	20	✓	✓		
	EW-A6 <i>totalizer face is faded</i>	0.0	50	✓	✓		
	EW-A7	0.0	0	✓	✓		
	EW-A8	0.0	25	✓	✓		
	Sump A	0.0	0	✓	✓		
	EW-A9	0.0	20	✓	✓		
	EW-B3	9	20	✓	✓		
	EW-A10	0.0	0	✓	✓		
	EW-A11	0.0	0	✓	✓		
	EW-A12	0.0	0	✓	✓		
	EW-A13	0.0	0	✓	✓		
	EW-B4	0.0	0	✓	✓		
	EW-A14	0.0	0	✓	✓		
	EW-B5	0.0	20	✓	✓		
	Sump B	—	—	✓	✓		
	Sump B1						
	EW-B6 <i>Needs new warwick band</i>	0	0	✓	✓		
	Sump C	17	20	✓	✓		
3	River staff gauge readings					3/30/15	LCG

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year MAY 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		5-4-15	LLG
2	Record pH and flow meter readings in EPS		↓	↓
3	Record pH and flow readings at POTW			
4	Submit samples to laboratory for analysis		↓	↓
<b>Site Security</b>				
1	Gates secured & locked		5-4-15	LLG
2	Access roads		↓	↓
3	Site utilities operational			
4	Inspect fire extinguishers and sign tag			
5	Inspect all fence lines for holes or breaks		↓	↓
6	Inspect all buildings for security		↓	↓
<b>Site Monitoring</b>				
1	Inspect landfill cap		5-4-15	LLG
2	Vegitative cover		↓	↓
3	Cement company pond (Geotextile & stone)			
4	Inspect rip-rap			
5	Inspect ditches/swales and catch basins		↓	↓
6	Hudson River bank			

## COMMENTS

[illegible]

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year MAY 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS	* still down				5-4-15	LCG
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0	25	✓	✓		
	EW-B1	8.5	10	✓	✓		
	EW-A2	0	10	✓	✓		
	EW-A3	0	0	✓	✓		
	EW-A4	0	0	✓	✓		
	EW-A5	0	0	✓	✓		
	EW-B2	0	0	✓	✓		
	EW-A6	0	0	✓	✓		
	EW-A7	0	20	✓	✓		
	EW-A8	0	20	✓	✓		
	Sump A	0	0	✓	✓		
	EW-A9	0	0	✓	✓		
	EW-B3	0	0	✓	✓		
	EW-A10	0	20	✓	✓		
	EW-A11	5.5	15	✓	✓		
	EW-A12	0	0	✓	✓		
	EW-A13	0	0	✓	✓		
	EW-B4	0	0	✓	✓		
	EW-A14	0	0	✓	✓		
	EW-B5	0	0	✓	✓		
	Sump B	0	0	✓	✓		
	Sump B1	<del>0</del>	<del>0</del>	✓	✓		
	EW-B6	<del>0</del>	<del>0</del>	✓	✓		
	Sump C	0	0	✓	✓		
3	River staff gauge readings						



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year June 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		6/3/15	LCG
2	Record pH and flow meter readings in EPS		↓	↓
3	Record pH and flow readings at POTW			
4	Submit samples to laboratry for analysis		↓	↓
<b>Site Security</b>				
1	Gates secured & locked		6/17/15	LCG
2	Access roads		↓	↓
3	Site utilities operational			
4	Inspect fire extinguishers and sign tag			
5	Inspect all fence lines for holes or breaks			
6	Inspect all buildings for security		↓	↓
<b>Site Monitoring</b>				
1	Inspect landfill cap		6/17/15	LCG
2	Vegitative cover		↓	↓
3	Cement company pond (Geotextile & stone)			
4	Inspect rip-rap			
5	Inspect ditches/swales and catch basins			
6	Hudson River bank		↓	↓

**COMMENTS**

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Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year June 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS					6/17/15	LLG
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves	✓	✓
	EW-A1	0.0	0	OFF	✓	6/17/15	LLG
	EW-B1	8.5	30		✓		
	EW-A2 - vault filled w/ water	0.0	15		✓		
	EW-A3	0.0	0		✓		
	EW-A4	0.0	0		✓		
	EW-A5	0.0	0		✓		
	EW-B2	0.0	15		✓		
	EW-A6	0.0	5		✓		
	EW-A7	0.0	0		✓		
	EW-A8	0.0	0		✓		
	Sump A	0.0	0		✓		
	EW-A9	8.0	25		✓		
	EW-B3	0.0	0		✓		
	EW-A10	0.0	15		✓		
	EW-A11	0.0	0		✓		
	EW-A12	0.0	0		✓		
	EW-A13	0.0	0		✓		
	EW-B4	0.0	0		✓		
	EW-A14	0.0	0		✓		
	EW-B5	0.0	0		✓		
	Sump B	0.0	0		✓		
	Sump B1				✓		
	EW-B6	0.0	0		✓		
	Sump C	0.0	0		✓		
3	River staff gauge readings	3-2'				6/17/15	LLG

### Routine Monthly Activities - Month/Year

July 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		7/6/15	LG
2	Record pH and flow meter readings in EPS		7/20/15	BR
3	Record pH and flow readings at POTW		7/6/15	LG
4	Submit samples to laboratory for analysis		7/6/15	LG
<b>Site Security</b>				
1	Gates secured & locked		7/23/15	BR
2	Access roads		7/23/15	BR
3	Site utilities operational		7/23/15	BR
4	Inspect fire extinguishers and sign tag		7/23/15 7/6/15	BR LG
5	Inspect all fence lines for holes or breaks		7/23/15	BR
6	Inspect all buildings for security		7/23/15	BR
<b>Site Monitoring</b>				
1	Inspect landfill cap		7/23/15	BR
2	Vegitative cover		7/23/15	BR
3	Cement company pond (Geotextile & stone)		7/23/15	BR
4	Inspect rip-rap		7/23/15	BR
5	Inspect ditches/swales and catch basins		7/23/15	BR
6	Hudson River bank		7/23/15	BR

## COMMENTS

[illegible]



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year July 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS						
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	-0.0	0/0	off	ok	7/23/15	BR
	EW-B1	6.4/6.7	55/65	off	ok	7/23/15	BR
	EW-A2	-0.0	35/0	off	ok	7/23/15	BR
	EW-A3	-0.0	0/40	off	ok	7/23/15	BR
	EW-A4	-0.0	0/0	off	ok	7/23/15	BR
	EW-A5	-0.0	25/20	off	ok	7/23/15	BR
	EW-B2	-0.0	35/30	off	ok	7/23/15	BR
	EW-A6	-0.0	0/28	off	ok	7/23/15	BR
	EW-A7	-0.0	0/0	off	ok	7/23/15	BR
	EW-A8	10.1/0.0	0/0	off	ok	7/23/15	BR
	Sump A	-0.0	5/5	off	ok	7/23/15	BR
	EW-A9	-0	25/25	off	ok	7/23/15	BR
	EW-B3	Down	0/25	off	ok	7/23/15	BR
	EW-A10	-0.0	0/0	off	ok	7/23/15	BR
	EW-A11	-0.0	15/60	off	ok	7/22/15	BR
	EW-A12	-0.0	0/0	off	ok	7/22/15	BR
	EW-A13	10.1/0.0	0/0	off	ok	7/22/15	BR
	EW-B4	8.7/13.9	15/15	off	ok	7/22/15	BR
	EW-A14	-0.0	0/0	off	ok	7/22/15	BR
	EW-B5	-0.0	10/10	off	ok	7/22/15	BR
	Sump B	-NA	NA	off	ok	7/22/15	BR
	Sump B1	N/A		off	ok		
	EW-B6	-0.0	0/0	off	ok	7/22/15	BR
	Sump C	-0	5/5	off	ok	7/22/15	BR
3	River staff gauge readings	See weekly notes				7/23/15	BR

7/27/15



Routine Monthly Activities - Month/Year August 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		8/3/2015	LG
2	Record pH and flow meter readings in EPS		8/17/15	BR
3	Record pH and flow readings at POTW		8/17/15	BR
4	Submit samples to laboratory for analysis		8/17/15	BR
<b>Site Security</b>				
1	Gates secured & locked		8/17/15	AJ
2	Access roads		↓	↓
3	Site utilities operational			
4	Inspect fire extinguishers and sign tag			
5	Inspect all fence lines for holes or breaks			
6	Inspect all buildings for security		↓	↓
<b>Site Monitoring</b>				
1	Inspect landfill cap		8/17/15	AJ
2	Vegitative cover		↓	↓
3	Cement company pond (Geotextile & stone)			
4	Inspect rip-rap			
5	Inspect ditches/swales and catch basins			
6	Hudson River bank		↓	↓

## COMMENTS

[illegible]



## Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

## O&amp;M Completion Log

Routine Monthly Activities - Month/Year August 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS					8/17/15	AJ
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0	0/0	OFF	OK	8/19/15	AJ
	EW-B1 <i>all 4 floats on</i>	6.8	35/65	OFF	OK	8/19/15	AJ
	EW-A2	0	40/25	OFF	OK	8/19/15	AJ
	EW-A3	0	0/0	OFF	OK	8/19/15	AJ
	EW-A4	0	0/0	OFF	OK	8/19/15	AJ
	EW-A5	0	10/10	OFF	OK	8/19/15	AJ
	EW-B2	10.2	35/25	OFF	OK	8/19/15	AJ
	EW-A6 <i>totalizer not working, replace?</i>	0	0/25	OFF	OK	8/19/15	AJ
	EW-A7 <i>totalizer not working, replace?</i>	0	0/0	OFF	OK	8/19/15	AJ
	EW-A8	0	0/0	OFF	OK	8/19/15	AJ
	Sump A	0	0/0	OFF	OK	8/19/15	AJ
	EW-A9	0	10/10	OFF	OK	8/19/15	AJ
	EW-B3 <i>Pump down, off</i>	0	0/10	OFF	OK	8/19/15	AJ
	EW-A10	0	20/20	OFF	OK	8/19/15	AJ
	EW-A11	0	10/50	OFF	OK	8/19/15	AJ
	EW-A12	0	0/0	OFF	OK	8/19/15	AJ
	EW-A13	0	0/45	OFF	OK	8/19/15	AJ
	EW-B4	11	45/45	OFF	OK	8/19/15	AJ
	EW-A14	0	0/0	OFF	OK	8/19/15	AJ
	EW-B5	0	0/0	OFF	OK	8/19/15	AJ
	Sump B <i>Electrical Box is exposed</i>			OFF	OK	8/19/15	AJ
NA	<del>Sump B1</del>						
	EW-B6	0	0/2.5	OFF	OK	8/19/15	AJ
	Sump C	0	0/0	OFF	OK	8/19/15	AJ
3	River staff gauge readings	Canal - 1.48', River - 1.40', Quarry - 2.45'				8/19/15	AJ

running good.

8/19/15  
Jas all

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year Sept. 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples			AJ + BR
2	Record pH and flow meter readings in EPS		9.17.15	CC
3	Record pH and flow readings at POTW			AJ + BR
4	Submit samples to laboratry for analysis			AJ + BR
<b>Site Security</b>				
1	Gates secured & locked		9.17.15	CC
2	Access roads		9.17.15	CC
3	Site utilities operational		9.17.15	CC
4	Inspect fire extinguishers and sign tag			AJ + BR
5	Inspect all fence lines for holes or breaks		9.17.15	CC
6	Inspect all buildings for security		9.17.15	CC
<b>Site Monitoring</b>				
1	Inspect landfill cap		9.17.15	CC
2	Vegitative cover		9.17.15	CC
3	Cement company pond (Geotextile & stone)		9.17.15	CC
4	Inspect rip-rap		9.17.15	CC
5	Inspect ditches/swales and catch basins		9.17.15	CC
6	Hudson River bank		9.17.15	CC

Adam i  
Bryan

Adam i Bryan

Adam i Bryan

Adam did  
for Sept.

**COMMENTS**

Fence along Feeder Canal path (across from Pipe Bridge) is cut open - looks to  
line up w/ ground markings from earlier.

Vegetation overgrowing upper area fence line and north lot gate.

## Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

## O&amp;M Completion Log

Routine Monthly Activities - Month/Year

Sept. 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS					9.17.15	CC
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0.0	0/15	off	✓	9.17.15	CC
	EW-B1	6.4	0/80	off	✓	9.17.15	CC
	EW-A2	0.0	0/20	off	✓	9.17.15	CC
	EW-A3	0.0	0/0	off	✓	9.17.15	CC
	EW-A4	0.0	10/10	off	✓	9.17.15	CC
	EW-A5	0.0	15/20	off	✓	9.17.15	CC
	EW-B2	0.0	20/0	off	✓	9.17.15	CC
	EW-A6	0.0	0/30	off	✓	9.17.15	CC
	EW-A7	0.0	10/10	off	✓	9.17.15	CC
	EW-A8	0.0	0/0	off	✓	9.17.15	CC
	Sump A	0.0	0/10	off	✓	9.17.15	CC
	EW-A9	11.7	20/30	off	✓	9.17.15	CC
	EW-B3	0.0	0/15	off	✓	9.17.15	CC
	EW-A10	0.0	0/0	off	✓	9.17.15	CC
	EW-A11	12.1	30/70	off	✓	9.17.15	CC
	EW-A12	0.0	0/0	off	✓	9.17.15	CC
	EW-A13	0.0	0/0	off	✓	9.17.15	CC
	EW-B4	13.1	0/5	off	✓	9.17.15	CC
	EW-A14	0.0	0/0	off	✓	9.17.15	CC
	EW-B5	0.0	0/5	off	✓	9.17.15	CC
	Sump B	—	—	—	✓	9.17.15	CC
	Sump B1	—	—	—	—	—	—
	EW-B6	0.0	0/0	off	✓	9.17.15	CC
	Sump C	0.0	0/0	off	✓	9.17.15	CC
3	River staff gauge readings	1.4 (see weekly report)					

vacuumed ~ 50 gal.

Need to insulate pipes

vacuumed

vault doors not flush; water gets in to each other

vacuumed

vacuumed

vacuumed

vacuumed

vacuumed

vacuumed

vacuumed

latch lock is missing

on. Lights 4 &amp; 1 only when pumping

vault doors not flush to sides

vacuumed power to vault off; tripped in breaker rm.

vacuumed

vacuumed Pressure gauge reading less than "0", I may need to replace

lights Ch1 &amp; Ch4 on with pump running

vacuumed

vacuumed vault doors not flush. Pressure gauge reads less than zero.

vacuumed electrical box open

vacuumed

vacuumed water appears to come in from vault sides

vacuumed

water appears to be leaking in from sides/cracks in vault box. ants eating it away.



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year October 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples	Completed	10/6/2015	BR/HM
2	Record pH and flow meter readings in EPS	Completed	10/6/2015	BR/HM
3	Record pH and flow readings at POTW	Completed	10/13/2015 10/6/2015	BR/HM
4	Submit samples to laboratory for analysis	Completed	10/7/2015	BR/HM
<b>Site Security</b>				
1	Gates secured & locked	No issues	10/13/15	BR
2	Access roads	Clear	10/13/15	BR
3	Site utilities operational	Yes	10/13/15	BR
4	Inspect fire extinguishers and sign tag	Yes - fire extinguishers due for insp.	10/13/15	BR
5	Inspect chemical storage cabinets	Yes - No issues	10/13/15	BR
6	Inspect all fence lines for holes or breaks	Yes - All good.	10/13/15	BR
7	Inspect all buildings for security	Yes - No issues	10/13/15	BR
<b>Site Monitoring</b>				
1	Inspect landfill cap	Yes - No issues	10/13/15	BR
2	Vegitative cover	Yes - No issues	10/13/15	BR
3	Cement company pond (Geotextile & stone)	Yes - No issues	10/13/15	BR
4	Inspect rip-rap	Yes - No issues	10/13/15	BR
5	Inspect ditches/swales and catch basins	Yes - No issues	10/13/15	BR
6	Hudson River bank	Yes - No issues	10/13/15	BR

**COMMENTS**

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Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS						
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0	0/40	ON	Good	10/13/15	BR
	EW-B1	6.4	80/90	ON	Good	10/13/15	BR
	EW-A2	0	0/0	ON	Good	10/13/15	BR
	EW-A3	0	0/0	ON	Good	10/13/15	BR
	EW-A4	0	0/0	ON	Good	10/13/15	BR
	EW-A5	0	30/30	ON	Good	10/13/15	BR
	EW-B2	0	30/30	ON	Good	10/13/15	BR
	EW-A6	0	20/0	ON	Good	10/13/15	BR
	EW-A7	0	30/30	ON	Good	10/13/15	BR
	EW-A8	0	0/0	ON	Good	10/13/15	BR
	Sump A	0	<del>20</del> 0/0	ON	Good	10/13/15	BR
	EW-A9	12.6	35/35	ON	Good	10/13/15	BR
	EW-B3	0	10/30	ON	Good	10/13/15	BR
	EW-A10	0	0/35	ON	Good	10/13/15	BR
	EW-A11	0	0/50	ON	Good	10/13/15	BR
	EW-A12	0	0/0	ON	Good	10/13/15	BR
	EW-A13	9.5	50/50	ON	Good	10/13/15	BR
	EW-B4	11.5	35/35	ON	Good	10/13/15	BR
	EW-A14	0	0/10	ON	Good	10/13/15	BR
	EW-B5	0	0/5	ON	Good	10/13/15	BR
	Sump B	-	-	-	Good	10/13/15	BR
	EW-B6	0	0/0	ON	Good	10/13/15	BR
	Sump C	18.9	10/10	ON	Good	10/13/15	BR
	Temporary Lift Station	-	-	-	Good	10/13/15	BR
3	River staff gauge reading					10/13/15	BR
4	Sliver Quarry staff gauge reading					10/13/15	BR
5	Canal staff gauge reading					10/13/15	BR



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year November 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples		11/4/2015	BR
2	Record pH and flow meter readings in EPS		11/4/2015	BR
3	Record pH and flow readings at POTW		11/4/2015	BR
4	Submit samples to laboratory for analysis		11/5/2015	BR
<b>Site Security</b>				
1	Gates secured & locked	Many locks need to be oiled	11/4/2015	BR
2	Access roads		11/4/2015	BR
3	Site utilities operational		11/4/2015	BR
4	Inspect fire extinguishers and sign tag	Need to be professionally inspected	11/4/2015	BR
5	Inspect chemical storage cabinets		11/4/2015	BR
6	Inspect all fence lines for holes or breaks		11/4/2015	BR
7	Inspect all buildings for security		11/4/2015	BR
<b>Site Monitoring</b>				
1	Inspect landfill cap		11/4/2015	BR
2	Vegitative cover		11/4/2015	BR
3	Cement company pond (Geotextile & stone)		11/4/2015	BR
4	Inspect rip-rap		11/4/2015	BR
5	Inspect ditches/swales and catch basins		11/4/2015	BR
6	Hudson River bank		11/4/2015	

**COMMENTS**

2-3" water removed from EW-A2 vault, EW-A3 vault, EW-A13/B4  
 small amounts of water (<5 gallons) removed from: EW-A4, EW-A6, EW-A11, EW-A12, EW-A14, EW-B6  
 medium amounts of water (~5-10 gal.) removed from: EW-A5/B2, B7, ~~A13/B4~~ BR

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year November 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS	Down - under repair				11/4/2015	BR
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0	0/0	on	good	11/4/2015	BR
	EW-B1	7.3	55/68	on	good	11/4/2015	BR
	EW-A2	0	35/0	on	good	11/4/2015	BR
	EW-A3	0	0/10	on	good	11/4/2015	BR
	EW-A4	0	0/0	on	good	11/4/2015	BR
	EW-A5	0	25/25	on	good	11/4/2015	BR
	EW-B2	11.8	35/25	on	good	11/4/2015	BR
	EW-A6	0	15/0	on	good	11/4/2015	BR
	EW-A7	0	0/5	on	good	11/4/2015	BR
	EW-A8	0	15/15	on	good	11/4/2015	BR
	Sump A	0	0/5	on	good	11/4/2015	BR
	EW-A9	0	15/15	on	good	11/4/2015	BR
	EW-B3	0	15/15	on	good	11/4/2015	BR
	EW-A10	0	20/30	on	good	11/4/2015	BR
	EW-A11	13.5	16.5/65	on	good	11/4/2015	BR
	EW-A12	0	40/45	on	good	11/4/2015	BR
	EW-A13	0	0/0	on	good	11/4/2015	BR
	EW-B4	0	0/0	on	good	11/4/2015	BR
	EW-A14	0	0/0	on	good	11/4/2015	BR
	EW-B5	0	15/20	on	good	11/4/2015	BR
	Sump B	PE Control Board Working		N/A	N/A	Good	11/4/2015
	EW-B6	0	0/0	on	good	11/4/2015	BR
	Sump C	0	0/0	on	good	11/4/2015	BR
	Temporary Lift Station	Good -		N/A	N/A	N/A	11/4/2015
3	River staff gauge reading	3.32				11/4/2015	BR
4	Sliver Quarry staff gauge reading	Dry - below gauge				11/4/2015	BR
5	Canal staff gauge reading	0.22'				11/4/2015	BR



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Monthly Activities - Month/Year Dec 2015

Item No.	Action	Remarks & Observations	Date	Initials
<b>Discharge Monitoring</b>				
1	Collect monthly discharge samples	Have to recollect BOD due to lab error	12/3/15	CC
2	Record pH and flow meter readings in EPS		12/10/15	
3	Record pH and flow readings at POTW		12/10/15	CC
4	Submit samples to laboratory for analysis		12/13/15	CC
<b>Site Security</b>				
1	Gates secured & locked	See note below	12/10/15	CC
2	Access roads		12/10/15	CC
3	Site utilities operational		12/10/15	CC
4	Inspect fire extinguishers and sign tag		12/10/15	CC
5	Inspect chemical storage cabinets			
6	Inspect all fence lines for holes or breaks	See note below	12/10/15	CC
7	Inspect all buildings for security		12/10/15	CC
<b>Site Monitoring</b>				
1	Inspect landfill cap		12/10/15	CC
2	Vegitative cover		12/10/15	CC
3	Cement company pond (Geotextile & stone)		12/10/15	CC
4	Inspect rip-rap		12/10/15	CC
5	Inspect ditches/swales and catch basins		12/10/15	CC
6	Hudson River bank	installed 5 wells in Nov.	12/10/15	CC

**COMMENTS**

Fences are being repaired & cleared so site is not 100% fenced currently.

BAF has land remediation crews clearing brush from fence lines & replacing fencing.

EPS: Net 1548210

Gross 12505832

## Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

## O&amp;M Completion Log

Routine Monthly Activities - Month/Year

Dec. 2015

Item No.	Action	Remarks & Observations				Date	Initials
1	Review extraction well and sump operation in the EPS					12/10/15	CC
2	Visually inspect extraction wells and sumps, record pressure and flow readings, inspect heat trace (winter), inspect check valves	GPM	PSI	Heat Tape	Valves		
	EW-A1	0.0	45/45	on	good	12/10/15	CC
	EW-B1 GPM low - pull pump later o/m	4.0	95/105	on	good	12/10/15	CC
	EW-A2	0.0	20/0	on	good	12/10/15	CC
vacuumed	EW-A3	0.0	0/0	on	good	12/10/15	CC
	EW-A4	0.0	0/5	on	good	12/10/15	CC
	EW-A5	0.0	30/35	on	good	12/10/15	CC
	EW-B2	0.0	40/30	on	good	12/10/15	CC
	EW-A6	0.0	20/0	on	good	12/10/15	CC
vacuumed	EW-A7	0.0	0/0	on	good	12/10/15	CC
	EW-A8	0.0	0/0	on	good	12/10/15	CC
	Sump A no lock - piece broken off	0.0	0/0	on	good	12/10/15	CC
	EW-A9	0.0	30/30	on	good	12/10/15	CC
	EW-B3	0.0	15/20	on	good	12/10/15	CC
	EW-A10	0.0	10/10	on	good	12/10/15	CC
	EW-A11	0.0	15/70	on	good	12/10/15	CC
	EW-A12	0.0	0/0	on	good	12/10/15	CC
vacuumed	EW-A13 ~ 100 gal. water in vault	0.0	0/5	on	good	12/10/15	CC
vacuumed	EW-B4 ~ 100 gal. water in vault	14.8	70/10	on	good	12/10/15	CC
	EW-A14	0.0	0/0	on	good	12/10/15	CC
	EW-B5	0.0	0/0	on	good	12/10/15	CC
	Sump B	0.0	0/0 (N/A)	N/A	good	12/10/15	CC
	EW-B6	0.0	0/0	on	good	12/10/15	CC
	Sump C	0.0	0/0	on	good	12/10/15	CC
	Temporary Lift Station some water in vault	NA	NA	NA	NA	12/10/15	CC
3	River staff gauge reading	3.2				12/10/15	CC
4	Sliver Quarry staff gauge reading	empty - some water but not on high gauge				12/10/15	CC
5	Canal staff gauge reading	dry/gauge is elevated but not in water - canal emptied				12/10/15	CC

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Quarterly Activities - Quarter/Year Mar 2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Calibrate discharge flow meters	3-1-15	LLG
2	Inspect discharge monitoring program for conformity		
<b>Site Security</b>			
1	Inspect access roads for damage		
2	Inspect entire fence line and repair if necessary		
3	Inspect all locks and gates in upper and lower area		
4	Inspect all locks and gates across street		
5	Inspect old remediation building and fence line		
6	Inspect offsite wells and for proper security		
<b>Groundwater Extraction System</b>			
1	Electrical connection inspection in EPS and generator station	3-1-15	LLG
2	Discharge piping in EPS		
3	Inspect vegetation for uncovered electrical lines		
4	Inspect all vaults for leaks or standing water		
<b>Site Monitoring</b>			
1	Inspect outfall structures along Hudson River		
2	Inspect all roadways		
3	Inspect all ditches/swales, catch basins and rip-rap		

**COMMENTS**

\* Vault to Vault inspections logged on monthly inspections worksheet.



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Quarterly Activities - Quarter/Year June 2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Calibrate discharge flow meters	6/17/15	LCG
2	Inspect discharge monitoring program for conformity	6/17/15	LCG
<b>Site Security</b>			
1	Inspect access roads for damage	6/17/15	LCG
2	Inspect entire fence line and repair if necessary	↓	↓
3	Inspect all locks and gates in upper and lower area	↓	↓
4	Inspect all locks and gates across street	↓	↓
5	Inspect old remediation building and fence line	↓	↓
6	Inspect offsite wells and for proper security	↓	↓
<b>Groundwater Extraction System</b>			
1	Electrical connection inspection in EPS and generator station	6/17/15	LCG
2	Discharge piping in EPS	6/17/15	LCG
3	Inspect vegetation for uncovered electrical lines	6/17/15	LCG
4	Inspect all vaults for leaks or standing water	6/17/15	LCG
<b>Site Monitoring</b>			
1	Inspect outfall structures along Hudson River	6/17/15	LCG
2	Inspect all roadways	↓	↓
3	Inspect all ditches/swales, catch basins and rip-rap	↓	↓

**COMMENTS**

- Large pot holes in upper field road will have repaired with next mowing event.
- All well info is recorded on June 2015 monthly inspection worksheet



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Quarterly Activities - Quarter/Year Sept. 2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Calibrate discharge flow meters	9.17.15	CC
2	Inspect discharge monitoring program for conformity	9.17.15	CC
<b>Site Security</b>			
1	Inspect access roads for damage	9.17.15	CC
2	Inspect entire fence line and repair if necessary	9.17.15	CC
3	Inspect all locks and gates in upper and lower area	9.17.15	CC
4	Inspect all locks and gates across street	9.17.15	CC
5	Inspect old remediation building and fence line	9.17.15	CC
6	Inspect offsite wells and for proper security	9.17.15	CC
<b>Groundwater Extraction System</b>			
1	Electrical connection inspection in EPS and generator station	9.17.15	CC
2	Discharge piping in EPS	9.17.15	CC
3	Inspect vegetation for uncovered electrical lines	9.17.15	CC
4	Inspect all vaults for leaks or standing water	9.17.15	CC
<b>Site Monitoring</b>			
1	Inspect outfall structures along Hudson River	9.17.15	CC
2	Inspect all roadways	9.17.15	CC
3	Inspect all ditches/swales, catch basins and rip-rap	9.17.15	CC

**COMMENTS**

Vegetation growing heavily along upper area fence line & road.

Detailed notes about BWES can be found on monthly/weekly logs.

Larry Glasheen on site for annual review of discharge and site.

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY  
O&M Completion Log  
Routine Quarterly Activities - Quarter/Year October 2015

Item No.	Action	Date	Initials
<b>Discharge Monitoring</b>			
1	Calibrate discharge flow meters	10/13/15	BR
2	Inspect discharge monitoring program for conformity	10/13/15	BR
<b>Site Security</b>			
1	Inspect access roads for damage	10/13/15	BR
2	Inspect entire fence line and repair if necessary	10/13/15	BR
3	Inspect all locks and gates in upper and lower area	10/13/15	BR
4	Inspect all locks and gates across street	10/13/15	BR
5	Inspect old remediation building and fence line	10/13/15	BR
6	Inspect offsite wells and properties for proper security	10/13/15	BR
<b>Groundwater Extraction System</b>			
1	Electrical connection inspection in EPS and generator station	10/13/15	BR
2	Discharge piping in EPS	10/13/15	BR
3	Inspect vegetation for uncovered electrical lines	10/13/15	BR
4	Inspect all vaults for leaks or standing water	10/13/15	BR
<b>Site Monitoring</b>			
1	Inspect outfall structures along Hudson River	10/13/15	BR
2	Inspect all roadways	10/13/15	BR
3	Inspect all ditches/swales, catch basins and rip-rap	10/13/15	BR
4	Inspect Former Storm Water Impoundment Basin Cover	10/13/15	BR
5	Inspect Ponded & Backwater Area	10/13/15	BR

**COMMENTS**

- AST cleanings <sup>beginning</sup> ~~starting~~ this week at Pretreatment Plant - 10/13/15 - BR

## ***Appendix D***

Groundwater Elevation Contour Maps – July 2015 and December 2015

