March 1, 2018

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

Subject: 2017 Operations & Maintenance Report
Ciba-Geigy Facility EPA ID NYD002069748 / NYSDEC Site No.: 557011

Dear Mr. Jankauskas:

This *Operations and Maintenance* (O&M) report summarizes operations and maintenance activities performed between January 1 and December 31, 2017, at the former Ciba-Geigy Corporation (CIBA) pigments manufacturing facility located at 89 Lower Warren Street in Queensbury, NY, just east of the City of Glens Falls (the Site) (**Figure 1**). Operations and maintenance are performed in accordance with the New York State Department of Environmental Conservation (NYSDEC) Hazardous Waste Management (HWM) Post Closure Permit for the Site (NYSDEC Site No. 557011). A renewal of the Part 373 HWM Permit #5-5234-00008/00096 was issued by the NYSDEC on March 5, 2015.

EHS Support LLC (EHS Support) is submitting this report to the NYSDEC on behalf of Hercules Incorporated (previously acquired by Ashland LLC) and CIBA (previously acquired by BASF Corporation). Hercules and CIBA are the Site permittees and share responsibility for on-going environmental activities.

NYSDEC and City of Glens Falls Site Inspections

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

On September 14, 2017, Lawrence Glasheen, Chief Operator for the City of Glens Falls publicly-owned treatment works (POTW), conducted a yearly Site inspection in accordance with the discharge permit. No issues were identified during the inspection.

GWES Operations Summary

Groundwater extraction system (GWES) operations were performed at the Main Plant Site (MPS) area throughout 2017 in accordance with the *Remedy Optimization Plan* (ROP), which was approved by the NYSDEC and implemented in November 2016. Groundwater was extracted from two sumps (Sumps A and B) in the overburden French Drain System (**Figure 2**). In accordance with the ROP, groundwater is no longer extracted from Sump C or the 20 inactive bedrock extraction wells.

To support the ROP, in December 2016, the Site telemetry system for the GWES instrumentation was repaired and upgraded for Sumps A and B to provide continuous telemetry data, including pump status, pumping rate (when active), and water levels within each sump. The level-float switches in each sump were replaced with transducer control to more accurately control water levels (via pumping) in the sumps.

In April and May of 2017, the pumping level set points in Sumps A and B were refined to achieve maximum drawdown within the sumps (i.e., optimize water extraction), while ensuring pump intakes remain submerged to avoid overheating/damage to the pumps. The pump operations are optimized to maintain water levels in the French Drain at or below the base of the overburden horizon to the extent practicable.

In Sump A, the transducer controlling the pump was calibrated to initiate pumping at a water level elevation of 211.2 feet mean sea level (ft msl) and continue pumping until the water level reaches 209.7 ft msl. The overburden base elevation in the vicinity of Sump A is 215 ft msl or higher, and the invert of the French Drain inlet pipe at Sump A is 210.2 ft msl. In Sump B, the transducer controlling the pump was calibrated to initiate pumping at a water level elevation of 214.0 ft msl and continue pumping until the water level reaches 211.5 ft msl. The overburden base elevation in the vicinity of Sump B is 217 ft msl or higher, and the invert of the French Drain inlet pipe at Sump B is 209.2 ft msl.

Further details related to the ROP implementation were provided to the NYSDEC in the *Remedy Optimization Report* (ROR), dated October 2017.

Extracted groundwater was pumped via force mains to a lift station near the on-Site railroad crossing, then pumped to a 500,000-gallon equalization tank located in the effluent pumping station (EPS) building at the northeastern corner of the Site. The extracted water was then discharged directly from the EPS to the City of Glens Falls POTW in accordance with the City of Glens Falls Industrial User Permit No. 002E, issued in April 2012 (renewed April 2017).

The renewed POTW permit requires discharge sampling and Discharge Monitoring Report (DMR) submittal to the POTW on a quarterly rather than monthly basis, as had been specified in the 2012 permit. Quarterly sampling and DMR reporting has been initiated in 2018.

In February 2018, the POTW provided an updated page 11 for the permit, which specifies a pH range of 6.0-9.0 that is consistent with the site-specific limits indicated on page 3 of the permit. This submittal is included in **Attachment 1,** along with the current permit dated April 2017.

POTW Discharge Monitoring Results

In accordance with the POTW permit (**Attachment 1**), the GWES discharge was monitored for several parameters. DMRs, including the laboratory analytical reports, are included in **Attachment 2**. Under the POTW permit, system discharges must comply with the limits set forth in the POTW permit.

Flow, Chromium, and Cyanide

Permit limits for flow, chromium, and cyanide include:[1]

- Total Flow: 175,000 gallons per day (GPD) (quarterly average)
- Total Flow: 350,000 GPD (instantaneous maximum)
- Total Chromium: 3.1 pounds per day (lb/day) (maximum quarterly discharge, based on quarterly sample result and quarterly average flow)
- Total Cyanide: 3.0 milligrams per liter (mg/L) (maximum, based on quarterly sample result)

[1] In the April 2017 POTW permit renewal, the frequency of sampling and the application of permit limits was revised from monthly to quarterly.

The GWES flow is recorded daily at the permittees' dedicated flow meter, located at the southern end of the Preliminary Treatment Building at the Glens Falls POTW. The GWES discharge is sampled monthly using a composite sampler at the southern end of the Preliminary Treatment Building at the POTW, with samples analyzed for total chromium (United States Environmental Protection Agency [USEPA] Method 200.8) and total cyanide (USEPA Method 335.4).

The 2017 POTW discharge results for flow, cyanide, and chromium measurements are summarized in **Table 1.** The chromium permit limit is a daily mass limit, so the concentration measured in the composite discharge sample is converted to an average daily mass, using the average flow for the period.

For example:

$$Total\ chromium: \left(0.39\ \frac{mg}{L}\right)\left(\frac{g}{10^3\ mg}\right)\left(\frac{lb}{453.59\ g}\right)\left(\frac{1\ L}{0.2642\ gal}\right)\left(\frac{57{,}226\ gal}{day}\right) = 0.19\ \frac{lb}{day}$$

Table 1. Comparison of Measured Values to Permit Values (Flow, Cyanide, Chromium)

	Flow (GPD, Max. Daily)	Flow (GPD, Ave.)	Sample Date	Total Cyanide (mg/L)	Total Chromium (mg/L)	Chromium (lb/day)
Permit Limits	**350,000**	**175,000**		**3.0**	--	**3.1**
January 2017	52,000	41,258	1/4/2017	0.69	0.21	0.07
February 2017	56,000	44,857	2/1/2017	0.90	0.21	0.08
March 2017	74,000	44,355	3/2/2017	0.70	0.29	0.11
April 2017	103,000	62,400	4/10/2017	0.71	0.32	0.17
May 2017	86,000	56,355	5/2/2017	0.52	0.27	0.13
June 2017	93,000	54,100	6/6/2017	0.68	0.25	0.11
July 2017	117,000	65,806	7/3/2017	0.91	0.24	0.13
August 2017	91,000	46,484	8/1/2017	0.80	0.11	0.04
September 2017	57,000	48,467	9/5/2017	0.96	0.20	0.08
October 2017	72,000	43,903	10/4/2017	0.85	0.19	0.07
November 2017	63,000	39,767	11/7/2017	0.69	0.16	0.05
December 2017	40,000	29,097	12/11/2017	1.2	0.20	0.05
Average		**48,071**		**0.80**	**0.22**	**0.09**
Maximum		**65,806**		**1.20**	**0.32**	**0.17**
Minimum		**29,097**		**0.52**	**0.11**	**0.04**

Note:
Ave = average
GPD = gallons per day
Max = maximum
mg/L = milligrams per Liter
lb/day = pounds per day

All results were within the applicable permit limits. A comparison of system flow rates and concentrations to historical ranges was detailed in the *Remedy Optimization Report*.

Other Parameters

The POTW permit also includes limits for several additional parameters. The POTW permit requires continuous sampling for pH; quarterly sampling for lead, mercury, and total phenols (modified from monthly sampling as of April 2017); and annual sampling for 23 additional analytes, chemical oxygen demand, total suspended solids, and oil and grease (frequency and limits provided in **Attachment 1**). GWES operations complied with all additional requirements of the POTW permit (as provided on the DMRs [**Attachment 2**]).

Results from the continuous pH sampling were in compliance with the permit range of 6.0-9.0. Annual discharge sampling for the full suite of analytes listed in the permit was performed on December 11, 2017. Of the other constituents analyzed for permit compliance (i.e., beyond cyanide and chromium, discussed above), only boron, cadmium, calcium, iron, and manganese were detected above respective test method reporting limits, and the results for each of these constituents were one to three orders of magnitude below the applicable permit limits. No mercury, volatile organic compounds (VOCs), or semi-volatile organic compounds (SVOCs) were detected above test method reporting limits.

On-Site GWES Discharge Measurements

Flow totalizers are in place in Sumps A and B, and readings were manually recorded on an approximately weekly basis during 2017 (**Attachment 3**), as well as on a daily basis through the telemetry system beginning in May 2017. Consistent with historical data reviewed for development of the ROP, Sump B had a considerably higher average discharge rate than Sump A. When considering the combined discharge from these two sumps, approximately 70-90 percent of the flow was contributed by Sump B.

After telemetry upgrades were completed for Sumps A and B in December 2016, operational data including pump status and flow rate became available for each location, with data recorded on 15-minute intervals. The data show that pumping typically occurred at Sump A every 2 days for approximately 5 hours, with a pumping rate averaging approximately 14 gallons per minute (gpm) when the pump was active. At Sump B, pumping typically occurred three times a day, for approximately 1.5 to 2-hour intervals. When active, Sump B pumping rates averaged approximately 90 gpm.

GWES and Site Operations and Maintenance

Site inspections were conducted on a weekly, monthly, and quarterly basis to evaluate the condition of multiple Site features, including the Resource Conservation and Recovery Act (RCRA) cap, permeable cover, surface drainage system, and the vegetative cover. Inspection reports are provided in **Attachment 4.**

Fencing and Signage

During weekly inspections, the condition of Site fences was inspected to ensure there were no signs of damage or unauthorized entry. Fence signage was maintained along all fence lines of the MPS, as well as along fence lines of the pre-treatment plant and other off-Site parcels.

Roads and Covers

Access road conditions were assessed during weekly inspections for damage and were plowed during the winter on an as-needed basis. The condition of the cover systems was also assessed. No erosion or disturbance (e.g., by small animals) was discovered. The Site was mowed during the summer months.

GWES, Lift Station, and Discharge Force Main

Preventative maintenance was conducted on the active pumps throughout 2017. The pumps in Sump A and Sump B were pulled, cleaned, and checked for functionality, and probes were cleaned, inspected for continuity, and replaced as necessary. Bio-foul 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 that the pumps and related components were functioning properly and plumbing lines were inspected for leaks. The pump in the EPS was replaced in November 2017. A summary of electrical and mechanical upgrades performed in 2017 is provided in **Table 2**.

Table 2. Summary of Mechanical and Electrical Upgrades

Date	Description
3/29/2017	Replaced the uninterruptible power supply in EPS. The previous one had burned out on 3/25/2017 due to a power surge.
5/23/2017	A new temporary pump-control transducer (increased accuracy) was installed at Sump A. The sump pump was replaced in EPS basement (not associated with the GWES). The old pump had failed on 3/25/2017.
5/24/2017	A new alarm float was installed in the EPS basement in case of future water infiltration. Basement "High High" alarm was added to telemetry system.
5/25/2017	Programming and wiring was completed to add flow totalizer readings to telemetry system. Daily flow totals now recorded by system for Sump A, Sump B and EPS pumps.
7/18/2017	Telemetry upgrades including adding a remote reset button, more selection buttons on certain screens, and updates to data radio alarm parameters were implemented. The USB data storage (thumb drive) port was moved to the front of the MCP, for easier access. New LED lights were installed in the wet well room of the EPS to replace the old malfunctioning light ballast. New fused switch and fuses were added at Sump B in support of arc flash upgrades.
Oct-17	Fixed bent building-mounted electric mast coming off of EPS, and replaced broken guy line so low electric lines running to site trailer could be tightened.
11/7/2017	New fused switch and fuses added at Lift Station in support of arc flash upgrades. Sump B No-Flow Timed Alarm adjusted from 6 to 8 hours to reduce false alarms during dry weather.
11/20/2017	Old EPS pumps in wet well, which had been showing reduced flow, were pulled and replaced with a new pump. The temporary transducer in Sump A was replaced with a new high-accuracy pump-control transducer.
11/21/2017	Arc Flash upgrades were implemented in the EPS.

Note:
EPS = effluent pumping station
GWES = groundwater extraction system
LED = light-emitting diode
MCP = master control panel

Closing

If you have questions or comments regarding this report or the attached documents, please feel free to contact Cassie Reuter at (608) 558-6795 for discussion.

Sincerely,

Cassie R. Reuter
Project Manager

I, Kristin A. VanLandingham, P.E., certify that I am currently a NYS-registered professional engineer and that this *Operations and Maintenance Report* dated March 2018 for the Former Ciba-Geigy Facility located in Queensbury Township, Glens Falls, New York was prepared in accordance with all applicable statutes and regulations, and with DER *Technical Guidance for Site Investigation and Remediation* (DER-10).

Kristin A. VanLandingham, P.E.
NYS License No. 089610

03/01/2018

Date

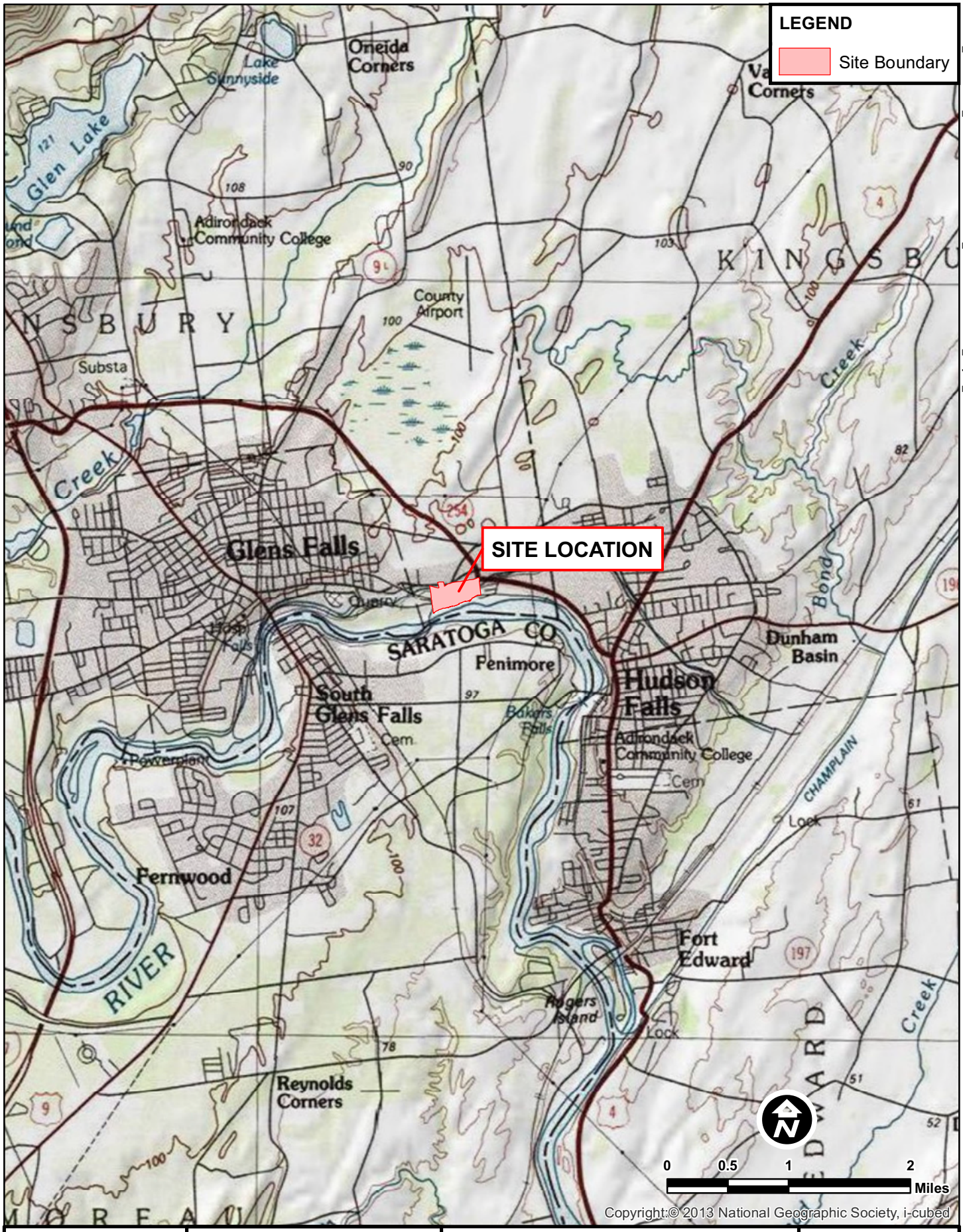
List of Tables:

List of Figures:

List of Attachments:

cc: James Vondracek, Ashland Inc.
Stephen Havlik, BASF Corporation
Christopher Meyer, Antea Group
Kristin VanLandingham, P.E., EHS Support
Arlene Lillie, EHS Support

FIGURES



D:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20160913_July16_GWFIGURE 1 Site Location.mxd

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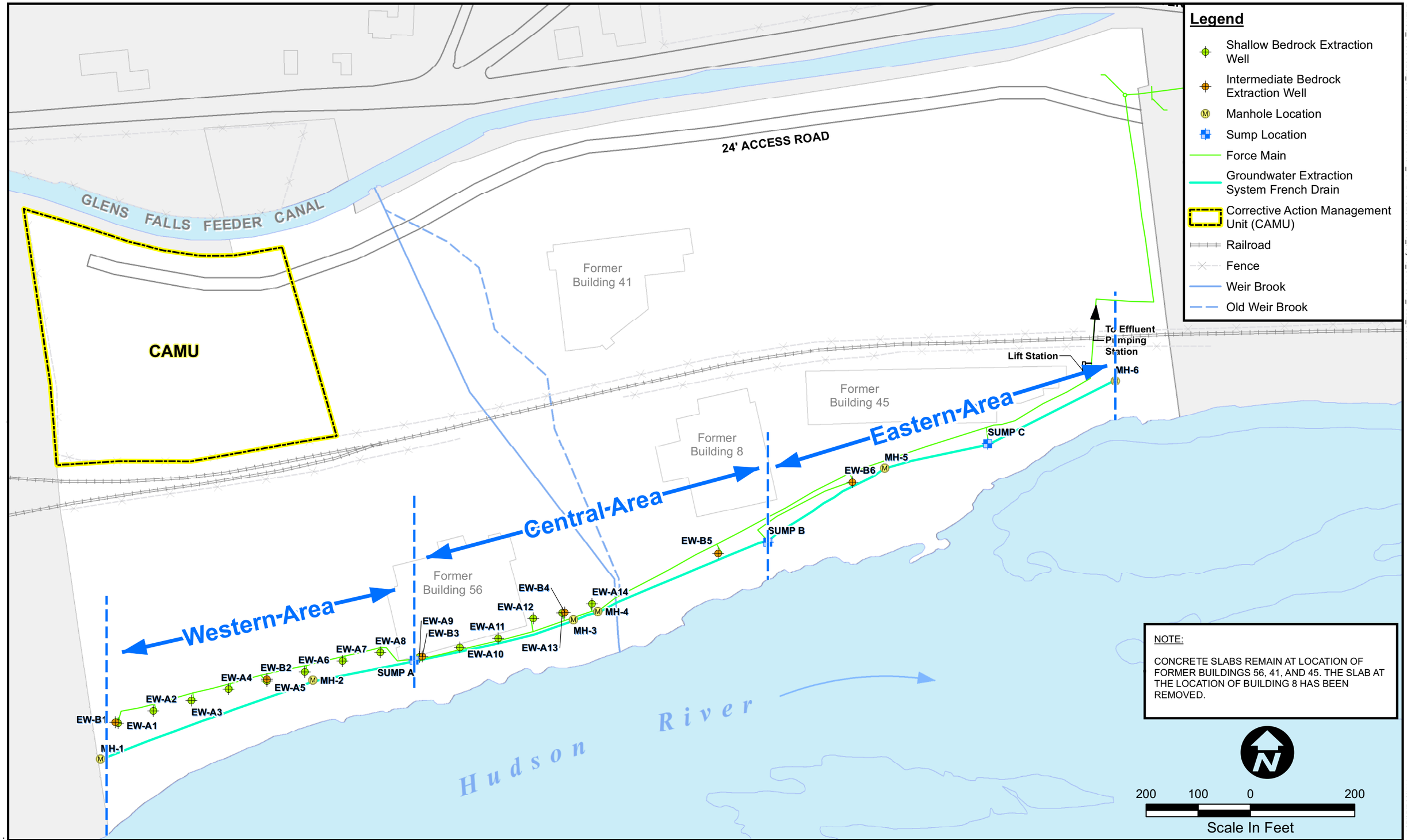
EHS Support consider it done	ASHLAND FORMER CIBA-GEIGY / HERCULES SITE GLENS FALLS, NY	SITE LOCATION	FIGURE 1



Reviewed By:

EHS Support consider it done	ASHLAND FORMER CIBA-GEIGY / HERCULES SITE GLENS FALLS, NY	SITE FEATURES AND GROUNDWATER EXTRACTION SYSTEM COMPONENTS	FIGURE 2

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ATTACHMENT 1 – CITY OF GLENS FALLS INDUSTRIAL USER PERMIT NO. 002E (APRIL 2017)

City of Glens Falls

America's Hometown for the 21st Century ~ a City of Opportunity

Water & Sewer Department Telephone: [518] 761-3850 • Fax: [518] 761-3862
24 Hr. Water & Sewer Emergencies: [518] 761-3857 • www.cityofglensfalls.com

Hercules LLC
Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017

Subject: Updated Permit No. 002F

The City of Glens Falls Wastewater Treatment Plant has requested and been granted a change in our Local Limits for pH by the USEPA. We requested the Local Limit for pH be changed from 6.5-8.5 Standard Units to a new limit of 6.0 to 9.0 Standard Units.

We have updated the pages of your permit for your facility at Lower Warren St., Queensbury, New York to reflect this new pH range and are enclosing a copy of the pages of your permit that outline the pH ranges. These pages should be inserted in your permit in sequence to reflect this change.

This modification will take effect on February 1st, 2018.

Please feel free to contact me with any questions.

Sincerely,

Christopher S. Miller
Assistant Chief Operator Glens Falls WWTP
Telephone: (518) 761-3850 ext 119
Telefax: (518) 761-3862
Email: cmiller@cityofglensfalls.com

B. During the period commencing April 24, 2017 through midnight April 23, 2022, 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

Parameter	Instantaneous Maximum (mg/1)	Quarterly Average (mg/l unless otherwise noted)
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 quarterly 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.

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 zero (6.0) or higher than nine point zero (9.0) 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.)]

City of Glens Falls *America's Hometown for the 21st Century – a City of Opportunity*

Water & Sewer Department Telephone: [518] 761-3850 • Fax: [518] 761-3862
24 Hr. Water & Sewer Emergencies: [518] 761-3857 • www.cityofglensfalls.com

April 22, 2017

Hercules LLC, a wholly owned subsidiary of
Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017

Dear James E. Vondracek,

Please find your renewed Industrial User Permit. Check for any typographical or factual errors. Contact me with any questions or concerns regarding the permit language or sampling/reporting requirements so they can be resolved as soon as possible.

Sincerely,

Lawrence Glasheen

Lawrence Glasheen, Chief Operator
Glens Falls WWTP
2 Shermantown Road
Glens Falls 12801
Telephone: (518) 761-3850 ext 112
Telefax: (518) 761-3862
Email: 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. 002F

INDUSTRIAL USER PERMIT

In accordance with the provisions of Chapter 177 of the Code of the City of Glens Falls

Hercules LLC , a wholly owned subsidiary of 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, 2017 and shall expire at midnight on April 23, 2022.
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: Steve Gurzler

Steven Gurzler, Water & Sewer Superintendent

Issued this 21st day of April, 2017

PART 1 - EFFLUENT LIMITATIONS

A. During the period of April 24, 2017 through midnight April 23, 2022, the permittees is authorized to discharge process wastewater to the City of Glens Falls sewer system from the outfalls listed below.

Description of outfalls:

Outfall	Descriptions
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, 2017 through midnight April 23, 2022, 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

Parameter	Instantaneous Maximum (mg/l)	Quarterly Average (mg/l unless otherwise noted)
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	6.5-8.5	--
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 quarterly 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:

Sample Parameter (units)	Sample Location	Frequency	Sample Type
Flow (gpd)	See note 2	Continuous	Meter
BOD (mg/l)	See note 1,3	1/Year	Grab
TSS (mg/1)	See note 1,3	1/Year	Grab
Ammonia (mg/1)	See note 1,3	1/Year	Grab
Antimony (mg/l)	See note 1,3	1/Year	Grab
Arsenic (mg/1)	See note 1,3	1/Year	Grab
Benzene (mg/l)	See note 1,4	1/Year	Grab
Boron (mg/l)	See note 1,3	1/Year	Grab
Cadmium (mg/1)	See note 1,3	1/Year	Grab
Calcium (mg/l)	See note 1,3	1/Year	Grab
Chloroform (mg/l)	See note 1,4	1/Year	Grab
Chromium (mg/1)	See note 1,3	Quarterly	Grab
Copper (mg/1)	See note 1,3	1/Year	Grab
Cyanide (mg/1)	See note 1,3	Quarterly	Grab
Ethylbenzene (mg/l)	See note 1,4	1/Year	Grab
Iron (mg/l)	See note 1,3	1/Year	Grab
Lead (mg/1)	See note 1,3	Quarterly	Grab
Manganese (mg/l)	See note 1,3	1/Year	Grab
Mercury (mg/1)	See note 1,3	Quarterly	Grab
Methylene Chloride (mg/l)	See note 1,4	1/Year	Grab
Napthalene	See note 1,3	1/Year	Grab
Nickel (mg/1)	See note 1,3	1/Year	Grab

Sample Parameter (units)	Sample Location	Frequency	Sample Type
Zinc (mg/1)	See note 1,3	1/Year	Grab
Trichlorophenol (mg/1)	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	Quarterly	Grab
pH	See note 5	Continuous	Meter
Silver (mg/l)	See note 1,3	1/Year	Grab
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 quarter. The reports are due on the 28th 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 indicate 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) Quarterly – The arithmetic mean of the values for effluent samples collected during a calendar quarter.

k) 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.

l) 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 regulatons 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 standsrd 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, naptha, 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 are 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 REQUIRMENTS

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.

ATTACHMENT 2 – 2017 DISCHARGE MONITORING REPORTS

Hercules LLC
a wholly owned subsidiary of
Ashland, LLC
Ashland LLC. - EH&S - DS4
5200 Blazer Parkway
Dublin, Ohio 43017

February 8, 2017

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 January 2017
Industrial Wastewater - Discharge Permit No. 002E

Dear Mr. Glasheen:

Attached is the January 2017 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on January 4, 2017. 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,

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 2/8/2017

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.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Monthly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Monthly min.	0.21	0.00	0.00	0.69	0.00	6.9	30,000
Monthly ave.	0.21	0.00	0.00	0.69	0.00	7.2	41,258
Monthly max.	0.21	0.00	0.00	0.69	0.00	7.4	52,000
Data points	1	1	1	1	1	31	31
Date:							
01/01/17						7.1	40,000
01/02/17						7.0	38,000
01/03/17						7.1	42,000
01/04/17	0.210	ND	ND	0.69	ND	7.2	30,000
01/05/17						7.3	52,000
01/06/17						7.2	48,000
01/07/17						7.2	37,000
01/08/17						7.1	44,000
01/09/17						7.3	38,000
01/10/17						7.2	31,000
01/11/17						7.3	36,000
01/12/17						7.3	31,000
01/13/17						7.3	38,000
01/14/17						7.3	50,000
01/15/17						7.3	41,000
01/16/17						7.2	41,000
01/17/17						7.2	41,000
01/18/17						7.2	33,000
01/19/17						7.3	39,000
01/20/17						6.9	42,000
01/21/17						7.2	42,000
01/22/17						7.2	42,000
01/23/17						7.2	41,000
01/24/17						7.4	41,000
01/25/17						7.3	42,000
01/26/17						7.2	45,000
01/27/17						7.3	45,000
01/28/17						7.2	46,000
01/29/17						7.2	45,000
01/30/17						7.1	50,000
01/31/17						7.4	48,000

Monthly Average for Chromium	
Concentration	0.21 mg/L
Ave. Flow	41,258 gpd
Ave. Load	0.07 #/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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-134040-1
Client Project/Site: Hercules Glens Falls O&M POTW Monthly

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Kathryn Smith

Authorized for release by:
1/11/2017 3:09:36 PM

Kathryn Smith, Senior Project Manager
(912)354-7858
kathy.smith@testamericainc.com

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

TestAmerica Job ID: 680-134040-1

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.
¤	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 LLC
Project/Site: Hercules Glens Falls O&M POTW Monthly

TestAmerica Job ID: 680-134040-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-134040-1	POTW_01042017	Water	01/04/17 13:50	01/07/17 11:45

Job ID: 680-134040-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC

Project: Hercules Glens Falls O&M POTW Monthly

Report Number: 680-134040-1

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 01/07/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.7 C.

TOTAL METALS (ICPMS)
Sample POTW_01042017 (680-134040-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 01/10/2017.

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

TOTAL MERCURY
Sample POTW_01042017 (680-134040-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 01/10/2017.

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

TOTAL CYANIDE
Sample POTW_01042017 (680-134040-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 01/09/2017.

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

PHENOLS
Sample POTW_01042017 (680-134040-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 01/10/2017.

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

Client Sample Results

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

TestAmerica Job ID: 680-134040-1

Client Sample ID: POTW_01042017
Date Collected: 01/04/17 13:50
Date Received: 01/07/17 11:45

Lab Sample ID: 680-134040-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**210**		5.0	1.6	ug/L		01/10/17 10:13	01/10/17 18:18	1
Lead	2.5	U	2.5	0.98	ug/L		01/10/17 10:13	01/10/17 18:18	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		01/10/17 07:30	01/10/17 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.69**		0.010	0.0025	mg/L		01/09/17 06:31	01/09/17 10:39	1
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		01/10/17 08:28	01/10/17 13:48	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-464686/1-A
Matrix: Water
Analysis Batch: 464822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		01/10/17 10:13	01/10/17 17:53	1
Lead	2.5	U	2.5	0.98	ug/L		01/10/17 10:13	01/10/17 17:53	1

Lab Sample ID: LCS 680-464686/2-A
Matrix: Water
Analysis Batch: 464822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	112		ug/L		112	85 - 115
Lead	500	547		ug/L		109	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-464647/13-A
Matrix: Water
Analysis Batch: 464893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464647

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		01/10/17 07:30	01/10/17 13:17	1

Lab Sample ID: LCS 680-464647/15-A
Matrix: Water
Analysis Batch: 464893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464647

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.50		ug/L		100	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-464499/1-A
Matrix: Water
Analysis Batch: 464572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		01/09/17 06:31	01/09/17 10:55	1

Lab Sample ID: LCS 680-464499/2-A
Matrix: Water
Analysis Batch: 464572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464499

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0501	0.0477		mg/L		95	90 - 110

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

TestAmerica Job ID: 680-134040-1

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-464657/1-A
Matrix: Water
Analysis Batch: 464830

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464657

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		01/10/17 08:28	01/10/17 13:48	1

Lab Sample ID: LCS 680-464657/2-A
Matrix: Water
Analysis Batch: 464830

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.112		mg/L		112	75 - 125

Metals

Prep Batch: 464647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	245.1	
MB 680-464647/13-A	Method Blank	Total/NA	Water	245.1	
LCS 680-464647/15-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 464686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	200.8	
MB 680-464686/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-464686/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 464822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	200.8	464686
MB 680-464686/1-A	Method Blank	Total/NA	Water	200.8	464686
LCS 680-464686/2-A	Lab Control Sample	Total/NA	Water	200.8	464686

Analysis Batch: 464893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	245.1	464647
MB 680-464647/13-A	Method Blank	Total/NA	Water	245.1	464647
LCS 680-464647/15-A	Lab Control Sample	Total/NA	Water	245.1	464647

General Chemistry

Prep Batch: 464499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	Distill/CN	
MB 680-464499/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-464499/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 464572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	335.4	464499
MB 680-464499/1-A	Method Blank	Total/NA	Water	335.4	464499
LCS 680-464499/2-A	Lab Control Sample	Total/NA	Water	335.4	464499

Prep Batch: 464657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	Distill/Phenol	
MB 680-464657/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-464657/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 464830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134040-1	POTW_01042017	Total/NA	Water	420.1	464657
MB 680-464657/1-A	Method Blank	Total/NA	Water	420.1	464657
LCS 680-464657/2-A	Lab Control Sample	Total/NA	Water	420.1	464657

Lab Chronicle

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

TestAmerica Job ID: 680-134040-1

Client Sample ID: POTW_01042017
Date Collected: 01/04/17 13:50
Date Received: 01/07/17 11:45

Lab Sample ID: 680-134040-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			464686	01/10/17 10:13	AJR	TAL SAV
Total/NA	Analysis	200.8		1	464822	01/10/17 18:18	BWR	TAL SAV
Total/NA	Prep	245.1			464647	01/10/17 07:30	JKL	TAL SAV
Total/NA	Analysis	245.1		1	464893	01/10/17 13:43	JKL	TAL SAV
Total/NA	Prep	Distill/CN			464499	01/09/17 06:31	DAM	TAL SAV
Total/NA	Analysis	335.4		1	464572	01/09/17 10:39	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			464657	01/10/17 08:28	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	464830	01/10/17 13:48	CFJ	TAL SAV

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 680-134040-1

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	06-30-17
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	01-31-17
California	State Program	9	2939	07-31-16 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-17
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-17
Georgia	State Program	4	803	06-30-17
Guam	State Program	9	15-005r	04-16-17
Hawaii	State Program	9	N/A	06-30-17
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16 *
Kentucky (UST)	State Program	4	18	06-30-17
Kentucky (WW)	State Program	4	90084	12-31-17
Louisiana	NELAP	6	30690	06-30-17
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17
Michigan	State Program	5	9925	06-30-17
Mississippi	State Program	4	N/A	06-30-16 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17
New Jersey	NELAP	2	GA769	06-30-17
New Mexico	State Program	6	N/A	06-30-17
New York	NELAP	2	10842	03-31-17
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17
Tennessee	State Program	4	TN02961	06-30-17
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-17
Washington	State Program	10	C805	06-10-17
West Virginia (DW)	State Program	3	9950C	12-31-16 *
West Virginia DEP	State Program	3	094	06-30-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-134040-1

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 Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

480501-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katie Angel	Lab PM: Smith, Kathryn E	Carrier Tracking No(s):	COC No: 680-70591-17829.1
Client Contact: ~~Luke Gladue~~ Bryan Reles	Phone: 518-859-4626	E-Mail: kathy.smith@testamericainc.com		Page: Page 1 of 1
Company: Antea USA, Inc.				Job #:

Address: 5788 Widewaters Parkway, 2nd Floor ~~435 New Karner Road, 2nd Floor Franklin St Entrance~~
City: ~~Albany~~ Syracuse
State, Zip: NY, ~~12205~~ 13214
Phone: ~~614-790-6146(Tel)~~ 607-765-1480
Email: bryan.reles ~~luke.gladue~~@anteagroup.com
Project Name: Glens Falls POTW Monthly
Site: Ashland Glens Falls

Due Date Requested:
TAT Requested (days):
PO #: 4502471936
WO #:
Project #: 68000956
SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA, 245.1	420.1 - Phenolics, Total Recoverable	335.4 - Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	S	B		
POTW_01042017	1/4/17	1350	G	Water	N	N	X	X	X		

680-134040 Chain of Custody

TDC
1-6-17

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] ~~Antea Group~~	1/4/17 1570	Antea Group	Tim [signature]	1-6-17 1800	TA Alb
2	Relinquished by:	Date/Time:	Company	Received by: [signature]	1-7-17 1145	SAV
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.7/0.7

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-134040-1

Login Number: 134040

List Source: TestAmerica Savannah

List Number: 1

Creator: Flanagan, Naomi V

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules LLC
A wholly owned subsidiary of
Ashland, LLC
Ashland LLC. - EH&S - DS4
5200 Blazer Parkway
Dublin, Ohio 43017

March 24, 2017

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 2017
Industrial Wastewater - Discharge Permit No. 002E

Dear Mr. Glasheen:

Attached is the February 2017 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on February 1, 2017. 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,

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 3/10/2017

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.	NS	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	0.21	0.00	0.00	0.90	0.03	6.7	38,000
Monthly ave	0.21	0.00	0.00	0.90	0.03	7.2	44,857
Monthly max	0.21	0.00	0.00	0.90	0.03	7.3	56,000
Data points	1	1	1	1	1	28	28
Date:							
02/01/17	0.210	ND	ND	0.90	0.033	7.2	44,000
02/02/17						7.3	42,000
02/03/17						7.3	43,000
02/04/17						7.2	46,000
02/05/17						7.2	43,000
02/06/17						7.1	41,000
02/07/17						7.3	40,000
02/08/17						7.2	39,000
02/09/17						7.3	47,000
02/10/17						7.1	45,000
02/11/17						7.2	51,000
02/12/17						7.2	48,000
02/13/17						7.2	41,000
02/14/17						7.2	43,000
02/15/17						7.3	42,000
02/16/17						7.2	42,000
02/17/17						6.7	43,000
02/18/17						7.2	40,000
02/19/17						7.2	38,000
02/20/17						7.2	41,000
02/21/17						7.3	44,000
02/22/17						7.1	43,000
02/23/17						7.2	49,000
02/24/17						7.2	55,000
02/25/17						7.2	51,000
02/26/17						7.0	48,000
02/27/17						7.0	56,000
02/28/17						7.0	51,000

Monthly Average for Chromium	
Concentration	0.21 mg/L
Ave. Flow	44,857 gpd
Ave. Load	0.08 #/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.

ATTACHMENT 2

ANALYTICAL DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-134897-1
Client Project/Site: Hercules Glens Falls O&M POTW Monthly

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Kathryn Smith

Authorized for release by:
2/9/2017 3:20:42 PM

Kathryn Smith, Senior Project Manager
(912)354-7858
kathy.smith@testamericainc.com

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

TestAmerica Job ID: 680-134897-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
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.
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.
¤	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 LLC
Project/Site: Hercules Glens Falls O&M POTW Monthly

TestAmerica Job ID: 680-134897-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-134897-1	POTW_02012017	Water	02/01/17 15:00	02/02/17 09:15

Job ID: 680-134897-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M POTW Monthly

Report Number: 680-134897-1

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 02/02/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.0 C.

TOTAL METALS (ICPMS)
Sample POTW_02012017 (680-134897-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 02/06/2017 and analyzed on 02/08/2017.

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

TOTAL MERCURY
Sample POTW_02012017 (680-134897-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 02/06/2017.

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

TOTAL CYANIDE
Sample POTW_02012017 (680-134897-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 02/08/2017.

Sample POTW_02012017 (680-134897-1)[10X] 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_02012017 (680-134897-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 02/08/2017.

Phenolics, Total Recoverable was detected in method blank MB 680-468189/1-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.

Phenolics, Total Recoverable recovered low for LCSD 680-468189/3-A. Phenolics, Total Recoverable exceeded the RPD limit.

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

Client Sample Results

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

TestAmerica Job ID: 680-134897-1

Client Sample ID: POTW_02012017
Date Collected: 02/01/17 15:00
Date Received: 02/02/17 09:15

Lab Sample ID: 680-134897-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**210**		5.0	1.6	ug/L		02/06/17 15:57	02/08/17 00:04	1
Lead	2.5	U	2.5	0.98	ug/L		02/06/17 15:57	02/08/17 00:04	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		02/06/17 10:52	02/06/17 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.90**		0.10	0.025	mg/L		02/08/17 06:05	02/08/17 11:44	10
Phenolics, Total Recoverable	**0.033**	**J B ***	0.050	0.025	mg/L		02/08/17 10:57	02/08/17 12:04	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-467920/1-A
Matrix: Water
Analysis Batch: 468238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 467920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		02/06/17 15:57	02/07/17 23:57	1
Lead	2.5	U	2.5	0.98	ug/L		02/06/17 15:57	02/07/17 23:57	1

Lab Sample ID: LCS 680-467920/2-A
Matrix: Water
Analysis Batch: 468238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 467920

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	109		ug/L		109	85 - 115
Lead	500	514		ug/L		103	85 - 115

Lab Sample ID: 680-134897-1 MS
Matrix: Water
Analysis Batch: 468238

Client Sample ID: POTW_02012017
Prep Type: Total/NA
Prep Batch: 467920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	210		100	314		ug/L		101	70 - 130
Lead	2.5	U	500	511		ug/L		102	70 - 130

Lab Sample ID: 680-134897-1 MSD
Matrix: Water
Analysis Batch: 468238

Client Sample ID: POTW_02012017
Prep Type: Total/NA
Prep Batch: 467920

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	210		100	307		ug/L		94	70 - 130	2	20
Lead	2.5	U	500	500		ug/L		100	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-467852/1-A
Matrix: Water
Analysis Batch: 467973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 467852

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		02/06/17 10:41	02/06/17 16:49	1

Lab Sample ID: LCS 680-467852/3-A
Matrix: Water
Analysis Batch: 467973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 467852

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.54		ug/L		102	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-468122/1-A
Matrix: Water
Analysis Batch: 468207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		02/08/17 06:05	02/08/17 11:05	1

Lab Sample ID: LCS 680-468122/2-A
Matrix: Water
Analysis Batch: 468207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0501	0.0488		mg/L		97	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-468189/1-A
Matrix: Water
Analysis Batch: 468268

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.0254	J	0.050	0.025	mg/L		02/08/17 10:57	02/08/17 14:02	1

Lab Sample ID: LCS 680-468189/2-A
Matrix: Water
Analysis Batch: 468268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.113		mg/L		113	75 - 125

Lab Sample ID: LCSD 680-468189/3-A
Matrix: Water
Analysis Batch: 468268

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 468189

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.100	0.0705	*	mg/L		71	75 - 125	46	30

Metals

Prep Batch: 467852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	245.1	
MB 680-467852/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-467852/3-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 467920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	200.8	
MB 680-467920/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-467920/2-A	Lab Control Sample	Total/NA	Water	200.8	
680-134897-1 MS	POTW_02012017	Total/NA	Water	200.8	
680-134897-1 MSD	POTW_02012017	Total/NA	Water	200.8	

Analysis Batch: 467973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	245.1	467852
MB 680-467852/1-A	Method Blank	Total/NA	Water	245.1	467852
LCS 680-467852/3-A	Lab Control Sample	Total/NA	Water	245.1	467852

Analysis Batch: 468238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	200.8	467920
MB 680-467920/1-A	Method Blank	Total/NA	Water	200.8	467920
LCS 680-467920/2-A	Lab Control Sample	Total/NA	Water	200.8	467920
680-134897-1 MS	POTW_02012017	Total/NA	Water	200.8	467920
680-134897-1 MSD	POTW_02012017	Total/NA	Water	200.8	467920

General Chemistry

Prep Batch: 468122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	Distill/CN	
MB 680-468122/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-468122/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Prep Batch: 468189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	Distill/Phenol	
MB 680-468189/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-468189/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
LCSD 680-468189/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/Phenol	

Analysis Batch: 468207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	335.4	468122
MB 680-468122/1-A	Method Blank	Total/NA	Water	335.4	468122
LCS 680-468122/2-A	Lab Control Sample	Total/NA	Water	335.4	468122

Analysis Batch: 468268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-134897-1	POTW_02012017	Total/NA	Water	420.1	468189

General Chemistry (Continued)

Analysis Batch: 468268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-468189/1-A	Method Blank	Total/NA	Water	420.1	468189
LCS 680-468189/2-A	Lab Control Sample	Total/NA	Water	420.1	468189
LCSD 680-468189/3-A	Lab Control Sample Dup	Total/NA	Water	420.1	468189

Lab Chronicle

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

TestAmerica Job ID: 680-134897-1

Client Sample ID: POTW_02012017
Date Collected: 02/01/17 15:00
Date Received: 02/02/17 09:15

Lab Sample ID: 680-134897-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			467920	02/06/17 15:57	AJR	TAL SAV
Total/NA	Analysis	200.8		1	468238	02/08/17 00:04	BWR	TAL SAV
Total/NA	Prep	245.1			467852	02/06/17 10:52	JKL	TAL SAV
Total/NA	Analysis	245.1		1	467973	02/06/17 17:52	JKL	TAL SAV
Total/NA	Prep	Distill/CN			468122	02/08/17 06:05	DAM	TAL SAV
Total/NA	Analysis	335.4		10	468207	02/08/17 11:44	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			468189	02/08/17 10:57	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	468268	02/08/17 12:04	CFJ	TAL SAV

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 680-134897-1

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	06-30-17
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	01-31-17 *
California	State Program	9	2939	07-31-16 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-17
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-17
Georgia	State Program	4	803	06-30-17
Guam	State Program	9	15-005r	04-16-17
Hawaii	State Program	9	N/A	06-30-17
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16 *
Kentucky (UST)	State Program	4	18	06-30-17
Kentucky (WW)	State Program	4	90084	12-31-17
Louisiana	NELAP	6	30690	06-30-17
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17
Michigan	State Program	5	9925	06-30-17
Mississippi	State Program	4	N/A	06-30-16 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17
New Jersey	NELAP	2	GA769	06-30-17
New Mexico	State Program	6	N/A	06-30-17
New York	NELAP	2	10842	03-31-17
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17
Tennessee	State Program	4	TN02961	06-30-17
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-17
Washington	State Program	10	C805	06-10-17
West Virginia (DW)	State Program	3	9950C	12-31-16 *
West Virginia DEP	State Program	3	094	06-30-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-134897-1

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 Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

480501-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katie Angel	Lab PM: Smith, Kathryn E	Carrier Tracking No(s):	COC No: 680-70594-17829.1
Client Contact: ~~Luke Gladue~~ Bryan Reles	Phone: 518-859-4626	E-Mail: kathy.smith@testamericainc.com		Page: Page 1 of 1
Company: Antea USA, Inc.				Job #:

Address: 5788 Widewaters Pkwy, 2nd Floor ~~495 New Karner Road 2nd Floor Franklin St Entrance~~
City: ~~Albany~~ Syracuse
State, Zip: NY, ~~12205~~ 13214
Phone: ~~614-799-6140~~(Tel) 607-765-1480
Email: ~~luke.gladue~~ bryan.reles@anteagroup.com ~~luke.gladue@anteagroup.com~~
Project Name: Glens Falls POTW Monthly
Site: Ashland Glens Falls

Due Date Requested:
TAT Requested (days):
PO #: 257496
WO #:
Project #: 68000956
SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA, 245.1	420.1 - Phenolics, Total Recoverable	335.4 - Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	S	B		
POTW_02012017	2/1/17	1500	G	Water	N	N	X	X	X		

680-134897 Chain of Custody

2-1-17

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	2/1/2017 1638	Antea Group	Received by:	2-1-17 1638	TA
Relinquished by: Tim Kroll	2-1-17 1840	TA	Received by: V. Sackson	2-2-17 915	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.0

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-134897-1

Login Number: 134897

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules LLC
A wholly owned subsidiary of
Ashland, LLC
Ashland LLC. - EH&S - DS4
5200 Blazer Parkway
Dublin, Ohio 43017

April 21, 2017

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 2017
Industrial Wastewater - Discharge Permit No. 002E

Dear Mr. Glasheen:

Attached is the March 2017 Discharge Monitoring Report for the Hercules/Ciba site. The monthly wastewater sample was collected on March 2, 2017. 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,

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 4/14/2017

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.	NS	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	0.29	0.00	0.00	0.70	0.04	7.0	0
Monthly ave	0.29	0.00	0.00	0.70	0.04	7.1	44,355
Monthly max	0.29	0.00	0.00	0.70	0.04	7.2	74,000
Data points	1.00	1.00	1.00	1.00	1.00	31	31
Date:							
03/01/17						7.2	58,000
03/02/17	0.290	ND	ND	0.70	0.035	7.1	57,000
03/03/17						7.0	49,000
03/04/17						7.2	45,000
03/05/17						7.0	55,000
03/06/17						7.0	46,000
03/07/17						7.0	53,000
03/08/17						7.1	44,000
03/09/17						7.2	45,000
03/10/17						7.0	47,000
03/11/17						7.2	46,000
03/12/17						7.0	42,000
03/13/17						7.0	39,000
03/14/17						7.0	39,000
03/15/17						7.1	41,000
03/16/17						7.0	42,000
03/17/17						7.0	40,000
03/18/17						7.0	41,000
03/19/17						7.0	39,000
03/20/17						7.0	34,000
03/21/17						7.0	35,000
03/22/17						7.2	40,000
03/23/17						7.2	40,000
03/24/17						7.1	39,000
03/25/17						7.2	40,000
03/26/17						7.0	42,000
03/27/17						7.1	0
03/28/17						7.2	46,000
03/29/17						7.2	74,000
03/30/17						7.2	61,000
03/31/17						7.2	56,000

Monthly Average for Chromium	
Concentration	0.29 mg/L
Ave. Flow	44,355 gpd
Ave. Load	0.11 #/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.

ATTACHMENT 2

ANALYTICAL DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-136052-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
3/15/2017 12:17:50 PM
Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Designee for

Kathryn Smith, Senior Project Manager
(912)354-7858
kathy.smith@testamericainc.com

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

TestAmerica Job ID: 680-136052-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
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.
¤	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 LLC
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-136052-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-136052-1	POTW_03022017	Water	03/02/17 13:15	03/07/17 10:50

Job ID: 680-136052-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 680-136052-1

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 sample was received on 03/07/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.1 C.

TOTAL METALS (ICPMS)
Sample POTW_03022017 (680-136052-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 03/08/2017 and analyzed on 03/09/2017.

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

TOTAL MERCURY
Sample POTW_03022017 (680-136052-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 03/09/2017.

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

TOTAL CYANIDE
Sample POTW_03022017 (680-136052-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 03/10/2017.

Cyanide, Total recovered high for the MS/MSD of sample POTW_03022017 MS/MSD (680-136052-1) in batch 680-472055.

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.

PHENOLS
Sample POTW_03022017 (680-136052-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 03/14/2017.

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

Client Sample Results

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

TestAmerica Job ID: 680-136052-1

Client Sample ID: POTW_03022017
Date Collected: 03/02/17 13:15
Date Received: 03/07/17 10:50

Lab Sample ID: 680-136052-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**290**		5.0	1.6	ug/L		03/08/17 13:32	03/09/17 22:14	1
Lead	2.5	U	2.5	0.98	ug/L		03/08/17 13:32	03/09/17 22:14	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		03/09/17 08:08	03/09/17 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.70**		0.10	0.025	mg/L		03/10/17 05:56	03/10/17 12:07	10
Phenolics, Total Recoverable	**0.035**	**J**	0.050	0.025	mg/L		03/14/17 09:47	03/14/17 12:55	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-471768/1-A
Matrix: Water
Analysis Batch: 472019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		03/08/17 13:32	03/09/17 21:49	1
Lead	2.5	U	2.5	0.98	ug/L		03/08/17 13:32	03/09/17 21:49	1

Lab Sample ID: LCS 680-471768/2-A
Matrix: Water
Analysis Batch: 472019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	100		ug/L		100	85 - 115
Lead	500	509		ug/L		102	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-471842/13-A
Matrix: Water
Analysis Batch: 472174

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		03/09/17 08:08	03/09/17 15:53	1

Lab Sample ID: LCS 680-471842/15-A
Matrix: Water
Analysis Batch: 472174

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.46		ug/L		99	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: LCS 680-471989/2-A
Matrix: Water
Analysis Batch: 472042

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0501	0.0470		mg/L		94	90 - 110

Lab Sample ID: 680-136052-1 MS
Matrix: Water
Analysis Batch: 472055

Client Sample ID: POTW_03022017
Prep Type: Total/NA
Prep Batch: 471989

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.70		0.0501	0.893	4	mg/L		379	90 - 110

Lab Sample ID: 680-136052-1 MSD
Matrix: Water
Analysis Batch: 472055

Client Sample ID: POTW_03022017
Prep Type: Total/NA
Prep Batch: 471989

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.70		0.0501	0.934	4	mg/L		461	90 - 110	4	20

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

TestAmerica Job ID: 680-136052-1

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-472329/1-A
Matrix: Water
Analysis Batch: 472472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 472329

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		03/14/17 09:47	03/14/17 12:47	1

Lab Sample ID: LCS 680-472329/2-A
Matrix: Water
Analysis Batch: 472472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 472329

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.102		mg/L		102	75 - 125

Metals

Prep Batch: 471768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	200.8	
MB 680-471768/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-471768/2-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 471842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	245.1	
MB 680-471842/13-A	Method Blank	Total/NA	Water	245.1	
LCS 680-471842/15-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 472019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	200.8	471768
MB 680-471768/1-A	Method Blank	Total/NA	Water	200.8	471768
LCS 680-471768/2-A	Lab Control Sample	Total/NA	Water	200.8	471768

Analysis Batch: 472174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	245.1	471842
MB 680-471842/13-A	Method Blank	Total/NA	Water	245.1	471842
LCS 680-471842/15-A	Lab Control Sample	Total/NA	Water	245.1	471842

General Chemistry

Prep Batch: 471989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	Distill/CN	
LCS 680-471989/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
680-136052-1 MS	POTW_03022017	Total/NA	Water	Distill/CN	
680-136052-1 MSD	POTW_03022017	Total/NA	Water	Distill/CN	

Analysis Batch: 472042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-471989/2-A	Lab Control Sample	Total/NA	Water	335.4	471989

Analysis Batch: 472055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	335.4	471989
680-136052-1 MS	POTW_03022017	Total/NA	Water	335.4	471989
680-136052-1 MSD	POTW_03022017	Total/NA	Water	335.4	471989

Prep Batch: 472329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	Distill/Phenol	
MB 680-472329/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-472329/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 472472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-136052-1	POTW_03022017	Total/NA	Water	420.1	472329

General Chemistry (Continued)

Analysis Batch: 472472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-472329/1-A	Method Blank	Total/NA	Water	420.1	472329
LCS 680-472329/2-A	Lab Control Sample	Total/NA	Water	420.1	472329

Lab Chronicle

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

TestAmerica Job ID: 680-136052-1

Client Sample ID: POTW_03022017
Date Collected: 03/02/17 13:15
Date Received: 03/07/17 10:50

Lab Sample ID: 680-136052-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			471768	03/08/17 13:32	AJR	TAL SAV
Total/NA	Analysis	200.8		1	472019	03/09/17 22:14	BJB	TAL SAV
Total/NA	Prep	245.1			471842	03/09/17 08:08	JKL	TAL SAV
Total/NA	Analysis	245.1		1	472174	03/09/17 16:12	JKL	TAL SAV
Total/NA	Prep	Distill/CN			471989	03/10/17 05:56	DAM	TAL SAV
Total/NA	Analysis	335.4		10	472055	03/10/17 12:07	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			472329	03/14/17 09:47	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	472472	03/14/17 12:55	CFJ	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-136052-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

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	
Alabama	State Program	4	41450	06-30-17
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17 *
Florida	NELAP	4	E87052	06-30-17
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-17
Georgia	State Program	4	803	06-30-17
Guam	State Program	9	15-005r	04-16-17 *
Hawaii	State Program	9	N/A	06-30-17
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-17
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
Louisiana	NELAP	6	30690	06-30-17
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17
Michigan	State Program	5	9925	06-30-17
Mississippi	State Program	4	N/A	06-30-16 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17
New Jersey	NELAP	2	GA769	06-30-17
New Mexico	State Program	6	N/A	06-30-17
New York	NELAP	2	10842	03-31-17 *
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17
Tennessee	State Program	4	TN02961	06-30-17
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-17
Washington	State Program	10	C805	06-10-17
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-136052-1

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 109644

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

480501-Albany

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)
Ashland Glens Falls	68000956	NY
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Smith, Kathryn E.	4502471936	
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Chris Mayer, Bryan Reles	607-765-1480	
CLIENT NAME	CLIENT E-MAIL	
Antea Group	bryan.reles@anteagroup.com	
CLIENT ADDRESS		
5788 Widewaters Parkway 2nd Floor		
COMPANY CONTRACTING THIS WORK (if applicable)		

MATRIX TYPE (COMPOSITE (C) OR GRAB (G) INDICATE; AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT, ...))

REQUIRED ANALYSIS: 300.0_CWA, 345.1; 420.1_Phenolics, Total Recoverable; 335.4 Cyanide, Total

PAGE 1 OF 1

STANDARD REPORT DELIVERY ⊗

DATE DUE

EXPEDITED REPORT DELIVERY (SURCHARGE) ○

DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

PRESERVATIVE: D | S | B

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	NUMBER OF CONTAINERS SUBMITTED: 300.0_CWA, 345.1	420.1_Phenolics, Total Recoverable	335.4 Cyanide, Total	REMARKS
3/2/17	1315	POTW_03022017		X				1	1	1	

680-136052 Chain of Custody

3-2-17

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	3-2-17	16:37	Tim Knollman	3-7-17	1800			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Tim Knollman	3-6-17	1637						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
V. Jackson	3-7-17	1050	YES ○ NO ○			1.1

TAL8240-680 (1008)

Page 13 of 14

3/15/2017

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-136052-1

Login Number: 136052

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules LLC
A wholly owned subsidiary of
Ashland, LLC
Ashland LLC. - EH&S - DS4
5200 Blazer Parkway
Dublin, Ohio 43017

July 28, 2017

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 2nd Quarter 2017
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Glasheen:

Attached is the 2nd Quarter 2017 Discharge Monitoring Report for the Hercules/Ciba site. Monthly wastewater samples were collected on the following dates:

- April 10, 2017
- May 2, 2017
- June 6, 2017

All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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,

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 5/11/2017

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.	NS	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	0.71	0.00	6.9	48,000
Monthly ave	0.32	0.00	0.00	0.71	0.00	7.1	62,400
Monthly max	0.32	0.00	0.00	0.71	0.00	7.3	103,000
Data points	1	1	1	1	1	30	30
Date:							
04/01/17						7.2	52,000
04/02/17						7.3	66,000
04/03/17						7.0	65,000
04/04/17						7.0	63,000
04/05/17						7.0	66,000
04/06/17						7.1	60,000
04/07/17						7.1	103,000
04/08/17						7.1	89,000
04/09/17						7.3	87,000
04/10/17	0.320	ND	ND	0.71	ND	7.2	73,000
04/11/17						7.1	67,000
04/12/17						7.1	66,000
04/13/17						7.1	64,000
04/14/17						7.1	48,000
04/15/17						7.0	68,000
04/16/17						7.1	59,000
04/17/17						7.0	55,000
04/18/17						7.1	59,000
04/19/17						7.0	51,000
04/20/17						7.0	51,000
04/21/17						6.9	61,000
04/22/17						7.0	54,000
04/23/17						7.1	57,000
04/24/17						7.0	57,000
04/25/17						7.0	58,000
04/26/17						7.0	55,000
04/27/17						6.9	55,000
04/28/17						7.0	59,000
04/29/17						6.9	53,000
04/30/17						7.0	51,000

Monthly Average for Chromium	
Concentration	0.32 mg/L
Ave. Flow	62,400 gpd
Ave. Load	0.17 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.

NS: No Standard. No instantaneous maximum for Total Chromium.

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.

GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA 7/13/2017

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.	NS	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	0.27	0.00	0.00	0.52	0.00	6.7	0
Monthly ave	0.27	0.00	0.00	0.52	0.00	7.0	56,355
Monthly max	0.27	0.00	0.00	0.52	0.00	9.0	86,000
Data points	1	1	1	1	1	31	31
Date:							
05/01/17						7.0	54,000
05/02/17	0.270	ND	0.001	0.52	ND	7.0	55,000
05/03/17						7.1	55,000
05/04/17						7.0	54,000
05/05/17						7.0	59,000
05/06/17						7.0	52,000
05/07/17						9.0	59,000
05/08/17						7.0	65,000
05/09/17						7.1	55,000
05/10/17						7.0	68,000
05/11/17						7.0	55,000
05/12/17						7.0	60,000
05/13/17						7.0	48,000
05/14/17						7.0	66,000
05/15/17						7.0	50,000
05/16/17						7.1	65,000
05/17/17						6.9	50,000
05/18/17						6.9	60,000
05/19/17						6.9	50,000
05/20/17						6.8	0
05/21/17						6.9	86,000
05/22/17						6.8	59,000
05/23/17						7.0	61,000
05/24/17						6.8	59,000
05/25/17						6.9	50,000
05/26/17						6.9	59,000
05/27/17						6.9	59,000
05/28/17						7.0	59,000
05/29/17						7.1	58,000
05/30/17						7.0	61,000
05/31/17						6.7	56,000

Monthly Average for Chromium		
Concentration	0.27	mg/L
Ave. Flow	56,355	gpd
Ave. Load	0.13	#/day
PERMIT	3.10	#/day

Notes:

ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.
NS: No Standard. No instantaneous maximum for Total Chromium.
The laboratory Reporting Limit for Lead is 0.0025 mg/L.
The laboratory Reporting Limit for Phenols is 0.05 mg/L.

GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA 7/13/2017

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.	NS	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	0.25	0.00	0.00	0.68	0.00	6.8	0
Monthly ave	0.25	0.00	0.00	0.68	0.00	7.0	54,100
Monthly max	0.25	0.00	0.00	0.68	0.00	7.2	93,000
Data points	1	1	1	1	1	30	30
Date:							
06/01/17						6.8	63,000
06/02/17						7.0	60,000
06/03/17						6.9	60,000
06/04/17						7.0	58,000
06/05/17						7.0	59,000
06/06/17	0.250	ND	ND	0.680	ND	7.2	64,000
06/07/17						7.0	55,000
06/08/17						7.0	70,000
06/09/17						6.9	59,000
06/10/17						7.0	66,000
06/11/17						7.0	56,000
06/12/17						7.0	64,000
06/13/17						7.0	51,000
06/14/17						7.0	65,000
06/15/17						7.0	52,000
06/16/17						6.9	59,000
06/17/17						6.9	57,000
06/18/17						6.9	52,000
06/19/17						6.8	61,000
06/20/17						6.9	34,000
06/21/17						6.9	0
06/22/17						6.9	0
06/23/17						6.9	0
06/24/17						7.0	93,000
06/25/17						6.9	68,000
06/26/17						7.0	65,000
06/27/17						6.9	52,000
06/28/17						7.0	64,000
06/29/17						6.9	52,000
06/30/17						7.0	64,000

Monthly Average for Chromium	
Concentration	0.25 mg/L
Ave. Flow	54,100 gpd
Ave. Load	0.11 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.
NS: No Standard. No instantaneous maximum for Total Chromium.
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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-137364-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
4/17/2017 3:38:15 PM
Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Designee for

Kathryn Smith, Manager of Project Management
(912)354-7858
kathy.smith@testamericainc.com

Definitions/Glossary

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

TestAmerica Job ID: 680-137364-1

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.
¤	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 LLC
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-137364-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-137364-1	POTW_04102017	Water	04/10/17 11:45	04/12/17 09:15

Job ID: 680-137364-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 680-137364-1

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 sample was received on 04/12/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.4 C.

TOTAL METALS (ICPMS)
Sample POTW_04102017 (680-137364-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared and analyzed on 04/13/2017.

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

TOTAL MERCURY
Sample POTW_04102017 (680-137364-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 04/13/2017.

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

TOTAL CYANIDE
Sample POTW_04102017 (680-137364-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 04/13/2017.

Sample POTW_04102017 (680-137364-1)[10X] 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_04102017 (680-137364-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 04/17/2017.

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

Client Sample Results

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

TestAmerica Job ID: 680-137364-1

Client Sample ID: POTW_04102017
Date Collected: 04/10/17 11:45
Date Received: 04/12/17 09:15

Lab Sample ID: 680-137364-1
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		04/13/17 10:59	04/13/17 18:58	1
Lead	2.5	U	2.5	0.98	ug/L		04/13/17 10:59	04/13/17 18:58	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		04/13/17 08:37	04/13/17 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.71**		0.10	0.025	mg/L		04/13/17 06:30	04/13/17 12:14	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		04/17/17 09:47	04/17/17 10:57	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-475884/1-A
Matrix: Water
Analysis Batch: 476022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		04/13/17 10:59	04/13/17 18:17	1
Lead	2.5	U	2.5	0.98	ug/L		04/13/17 10:59	04/13/17 18:17	1

Lab Sample ID: LCS 680-475884/2-A
Matrix: Water
Analysis Batch: 476022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	105		ug/L		105	85 - 115
Lead	500	514		ug/L		103	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-475836/1-A
Matrix: Water
Analysis Batch: 476044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		04/13/17 08:37	04/13/17 16:35	1

Lab Sample ID: LCS 680-475836/3-A
Matrix: Water
Analysis Batch: 476044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.45		ug/L		98	85 - 115

Lab Sample ID: 680-137364-1 MS
Matrix: Water
Analysis Batch: 476044

Client Sample ID: POTW_04102017
Prep Type: Total/NA
Prep Batch: 475836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	0.979		ug/L		98	70 - 130

Lab Sample ID: 680-137364-1 MSD
Matrix: Water
Analysis Batch: 476044

Client Sample ID: POTW_04102017
Prep Type: Total/NA
Prep Batch: 475836

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	0.976		ug/L		98	70 - 130	0	20

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-475822/1-A
Matrix: Water
Analysis Batch: 475914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		04/13/17 06:30	04/13/17 10:56	1

Lab Sample ID: LCS 680-475822/2-A
Matrix: Water
Analysis Batch: 475914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0475		mg/L		95	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-476194/1-A
Matrix: Water
Analysis Batch: 476248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476194

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		04/17/17 09:47	04/17/17 10:45	1

Lab Sample ID: LCS 680-476194/2-A
Matrix: Water
Analysis Batch: 476248

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.115		mg/L		115	75 - 125

QC Association Summary

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

TestAmerica Job ID: 680-137364-1

Metals

Prep Batch: 475836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	245.1	
MB 680-475836/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-475836/3-A	Lab Control Sample	Total/NA	Water	245.1	
680-137364-1 MS	POTW_04102017	Total/NA	Water	245.1	
680-137364-1 MSD	POTW_04102017	Total/NA	Water	245.1	

Prep Batch: 475884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	200.8	
MB 680-475884/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-475884/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 476022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	200.8	475884
MB 680-475884/1-A	Method Blank	Total/NA	Water	200.8	475884
LCS 680-475884/2-A	Lab Control Sample	Total/NA	Water	200.8	475884

Analysis Batch: 476044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	245.1	475836
MB 680-475836/1-A	Method Blank	Total/NA	Water	245.1	475836
LCS 680-475836/3-A	Lab Control Sample	Total/NA	Water	245.1	475836
680-137364-1 MS	POTW_04102017	Total/NA	Water	245.1	475836
680-137364-1 MSD	POTW_04102017	Total/NA	Water	245.1	475836

General Chemistry

Prep Batch: 475822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	Distill/CN	
MB 680-475822/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-475822/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 475914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-475822/1-A	Method Blank	Total/NA	Water	335.4	475822
LCS 680-475822/2-A	Lab Control Sample	Total/NA	Water	335.4	475822

Analysis Batch: 475933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	335.4	475822

Prep Batch: 476194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	Distill/Phenol	
MB 680-476194/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-476194/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

General Chemistry (Continued)

Analysis Batch: 476248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-137364-1	POTW_04102017	Total/NA	Water	420.1	476194
MB 680-476194/1-A	Method Blank	Total/NA	Water	420.1	476194
LCS 680-476194/2-A	Lab Control Sample	Total/NA	Water	420.1	476194

Lab Chronicle

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

TestAmerica Job ID: 680-137364-1

Client Sample ID: POTW_04102017
Date Collected: 04/10/17 11:45
Date Received: 04/12/17 09:15

Lab Sample ID: 680-137364-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			475884	04/13/17 10:59	AJR	TAL SAV
Total/NA	Analysis	200.8		1	476022	04/13/17 18:58	BJB	TAL SAV
Total/NA	Prep	245.1			475836	04/13/17 08:37	JKL	TAL SAV
Total/NA	Analysis	245.1		1	476044	04/13/17 16:52	JKL	TAL SAV
Total/NA	Prep	Distill/CN			475822	04/13/17 06:30	DAM	TAL SAV
Total/NA	Analysis	335.4		10	475933	04/13/17 12:14	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			476194	04/17/17 09:47	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	476248	04/17/17 10:57	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-137364-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-17
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17 *
Florida	NELAP	4	E87052	06-30-17
GA Dept. of Agriculture	State Program	4	N/A	06-12-17 *
Georgia	State Program	4	N/A	06-30-17
Georgia	State Program	4	803	06-30-17
Guam	State Program	9	15-005r	04-16-17 *
Hawaii	State Program	9	N/A	06-30-17
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-17
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
Louisiana	NELAP	6	30690	06-30-17
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17
Michigan	State Program	5	9925	06-30-17
Mississippi	State Program	4	N/A	06-30-17
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17
New Jersey	NELAP	2	GA769	06-30-17 *
New Mexico	State Program	6	N/A	06-30-17
New York	NELAP	2	10842	03-31-17 *
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17
Tennessee	State Program	4	TN02961	06-30-17
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17 *
Virginia	NELAP	3	460161	06-14-17 *
Washington	State Program	10	C805	06-10-17 *
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-137364-1

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 Atlanta
6500 McDonough Drive
Suite C-10
Norcross, GA 30093
Phone: 678.966.9991 Fax:

480501-Albany 680-Albany

Chain of Custody Record

192033

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

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

Client Contact	Project Manager: Bryan Reles	Site Contact: Bryan.Reles@antea group.com Date: 4/10/17	COC No:
Company Name: Antea Group	Tel/Fax: 607-765-1480	Lab Contact: Smith, Kathy Carrier:	1 of 1 COCs
Address: 5788 Widewaters Parkway 2nd Floor	Analysis Turnaround Time		Sampler: Garrett Crowe
City/State/Zip: Syracuse NY 13214	☐ CALENDAR DAYS ☐ WORKING DAYS		For Lab Use Only:
Phone: 607 765-1480	TAT if different from Below		Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab Sampling:
Project Name: Glens Falls POTW Monthly			Job / SDG No.:
Site: Ashland Glens Falls			
PO# 4502471936			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.8_CWA_245.1	420.1 - Phenolics, Total Recoverable	335.4 - Cyanide, Total	Sample Specific Notes:
POTW_04102017	4/10/17	1145	G	Water	3	N	N	X	X	X	

680-137364 Chain of Custody

4-18-17

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 4.6 Corr'd: 3.1 | Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Antea Group	4/10/17 1700	Tim Knollinger	TA	4/11/17 1700
Relinquished by: Tim Knollinger	Company: TA Albany	Date/Time: 4-11-17 1800	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: SAL	Date/Time: 4.12.17 915

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4/17/2017

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-137364-1

Login Number: 137364
List Number: 1
Creator: Flanagan, Naomi V

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-138368-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
5/10/2017 1:49:48 PM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Definitions/Glossary

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

TestAmerica Job ID: 680-138368-1

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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 LLC
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-138368-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-138368-1	POTW_05022017	Water	05/02/17 10:30	05/04/17 09:00

Job ID: 680-138368-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 680-138368-1

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 sample was received on 05/04/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.1° C.

TOTAL METALS (ICPMS)
Sample POTW_05022017 (680-138368-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 05/06/2017 and analyzed on 05/09/2017.

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

TOTAL MERCURY
Sample POTW_05022017 (680-138368-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 05/10/2017.

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

TOTAL CYANIDE
Sample POTW_05022017 (680-138368-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 05/08/2017.

Sample POTW_05022017 (680-138368-1)[10X] 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_05022017 (680-138368-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 05/09/2017.

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

Client Sample Results

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

TestAmerica Job ID: 680-138368-1

Client Sample ID: POTW_05022017
Date Collected: 05/02/17 10:30
Date Received: 05/04/17 09:00

Lab Sample ID: 680-138368-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**270**		5.0	1.6	ug/L		05/06/17 14:06	05/09/17 01:17	1
Lead	2.5	U	2.5	0.98	ug/L		05/06/17 14:06	05/09/17 01:17	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**	**J**	0.20	0.080	ug/L		05/10/17 07:17	05/10/17 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.52**		0.10	0.025	mg/L		05/08/17 06:08	05/08/17 11:44	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		05/09/17 10:27	05/09/17 11:24	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-478847/1-A
Matrix: Water
Analysis Batch: 479072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 478847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		05/06/17 14:06	05/09/17 00:20	1
Lead	2.5	U	2.5	0.98	ug/L		05/06/17 14:06	05/09/17 00:20	1

Lab Sample ID: LCS 680-478847/2-A
Matrix: Water
Analysis Batch: 479072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 478847

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

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-479240/13-A
Matrix: Water
Analysis Batch: 479346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 479240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		05/10/17 07:17	05/10/17 11:40	1

Lab Sample ID: LCS 680-479240/15-A
Matrix: Water
Analysis Batch: 479346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 479240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.41		ug/L		96	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-478895/1-A
Matrix: Water
Analysis Batch: 478971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 478895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		05/08/17 06:08	05/08/17 10:59	1

Lab Sample ID: LCS 680-478895/2-A
Matrix: Water
Analysis Batch: 478971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 478895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0515		mg/L		103	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-479120/1-A
Matrix: Water
Analysis Batch: 479163

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 479120

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		05/09/17 10:27	05/09/17 11:18	1

Lab Sample ID: LCS 680-479120/2-A
Matrix: Water
Analysis Batch: 479163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 479120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.111		mg/L		111	75 - 125

Metals

Prep Batch: 478847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	200.8	
MB 680-478847/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-478847/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 479072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	200.8	478847
MB 680-478847/1-A	Method Blank	Total/NA	Water	200.8	478847
LCS 680-478847/2-A	Lab Control Sample	Total/NA	Water	200.8	478847

Prep Batch: 479240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	245.1	
MB 680-479240/13-A	Method Blank	Total/NA	Water	245.1	
LCS 680-479240/15-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 479346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	245.1	479240
MB 680-479240/13-A	Method Blank	Total/NA	Water	245.1	479240
LCS 680-479240/15-A	Lab Control Sample	Total/NA	Water	245.1	479240

General Chemistry

Prep Batch: 478895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	Distill/CN	
MB 680-478895/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-478895/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 478971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	335.4	478895
MB 680-478895/1-A	Method Blank	Total/NA	Water	335.4	478895
LCS 680-478895/2-A	Lab Control Sample	Total/NA	Water	335.4	478895

Prep Batch: 479120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	Distill/Phenol	
MB 680-479120/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-479120/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 479163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138368-1	POTW_05022017	Total/NA	Water	420.1	479120
MB 680-479120/1-A	Method Blank	Total/NA	Water	420.1	479120
LCS 680-479120/2-A	Lab Control Sample	Total/NA	Water	420.1	479120

Lab Chronicle

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

TestAmerica Job ID: 680-138368-1

Client Sample ID: POTW_05022017
Date Collected: 05/02/17 10:30
Date Received: 05/04/17 09:00

Lab Sample ID: 680-138368-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			478847	05/06/17 14:06	AJR	TAL SAV
Total/NA	Analysis	200.8		1	479072	05/09/17 01:17	BWR	TAL SAV
Total/NA	Prep	245.1			479240	05/10/17 07:17	JKL	TAL SAV
Total/NA	Analysis	245.1		1	479346	05/10/17 12:06	JKL	TAL SAV
Total/NA	Prep	Distill/CN			478895	05/08/17 06:08	DAM	TAL SAV
Total/NA	Analysis	335.4		10	478971	05/08/17 11:44	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			479120	05/09/17 10:27	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	479163	05/09/17 11:24	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-138368-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-17 *
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17 *
Florida	NELAP	4	E87052	06-30-17 *
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	N/A	06-30-17 *
Georgia	State Program	4	803	06-30-17 *
Guam	State Program	9	15-005r	04-16-17 *
Hawaii	State Program	9	N/A	06-30-17 *
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17 *
Iowa	State Program	7	353	06-30-17 *
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-17 *
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
Louisiana	NELAP	6	30690	06-30-17 *
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17 *
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-17 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17 *
New Jersey	NELAP	2	GA769	06-30-17 *
New Mexico	State Program	6	N/A	06-30-17 *
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-17
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17 *
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-17 *
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17 *
Virginia	NELAP	3	460161	06-14-17 *
Washington	State Program	10	C805	06-10-17 *
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-17 *
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-138368-1

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

480501-Albany

Serial Number 108710

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) NY
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM Bryan Reles	CLIENT PHONE 315-949-7033	CLIENT FAX
CLIENT NAME Ashland Antea Group	CLIENT E-MAIL Bryan.Reles@anteagroup.com	
CLIENT ADDRESS 5788 Widewaters Parkway 2nd floor Syracuse NY, 13214		
COMPANY CONTRACTING THIS WORK (if applicable) Ashland		

MATRIX TYPE (COMPOSITE (C) OR GRAB (G) INDICATE; AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT, ...))

REQUIRED ANALYSIS: 200.8-CWA-Chromium and Lead, 12451-Mercury; 420.1-Phenolics Total Recoverable; 335.4-Cyanide, Total

PRESERVATIVE: Nitric acid; Sulfuric acid; Sodium hydroxide

PAGE 1 OF 1

STANDARD REPORT DELIVERY ◯
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G)	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	NUMBER OF CONTAINERS SUBMITTED			REMARKS
5/2/17	1030	POTW_05022017	G	X				1	1	1	

DJB 5-3-17

680-138368 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	5/2/17	1700	~~RELINQUISHED~~ Relinquished Daniel Bubniak DB 5/3/17	5/3/17	1800			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Daniel Bubniak	5/2/17	1700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	5-4-17	900	YES ◯ NO ◯			2.3/1.7

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-138368-1

Login Number: 138368

List Source: TestAmerica Savannah

List Number: 1

Creator: Flanagan, Naomi V

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-139680-1
Client Project/Site: Hercules Glens Falls O&M Quarterly

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
6/14/2017 3:22:12 PM
Jannel Franklin, Project Manager I
(732)593-2551
jannel.franklin@testamericainc.com

Designee for

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Definitions/Glossary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-139680-1

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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 LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-139680-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-139680-1	POTW-20170606	Water	06/06/17 14:30	06/08/17 09:23

Job ID: 680-139680-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Quarterly

Report Number: 680-139680-1

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 sample was received on 6/8/2017 9:23 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

TOTAL METALS (ICPMS)
Sample POTW-20170606 (680-139680-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 06/13/2017.

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

TOTAL MERCURY
Sample POTW-20170606 (680-139680-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/12/2017.

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

TOTAL CYANIDE
Sample POTW-20170606 (680-139680-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The samples were prepared and analyzed on 06/12/2017.

Cyanide, Total exceeded the RPD limit for the duplicate of sample 680-139627-1. Refer to the QC report for details.

Sample POTW-20170606 (680-139680-1)[10X] 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-20170606 (680-139680-1) was analyzed for phenols in accordance with EPA Method 420.1. The samples were prepared and analyzed on 06/12/2017.

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

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-139680-1

Client Sample ID: POTW-20170606
Date Collected: 06/06/17 14:30
Date Received: 06/08/17 09:23

Lab Sample ID: 680-139680-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**250**		5.0	1.6	ug/L		06/13/17 10:17	06/13/17 22:04	1
Lead	2.5	U	2.5	0.98	ug/L		06/13/17 10:17	06/13/17 22:04	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		06/12/17 09:59	06/12/17 17:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.68**		0.10	0.025	mg/L		06/12/17 05:17	06/12/17 11:36	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		06/12/17 12:11	06/12/17 13:52	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-483682/1-A
Matrix: Water
Analysis Batch: 483916

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		06/13/17 10:17	06/13/17 21:06	1
Lead	2.5	U	2.5	0.98	ug/L		06/13/17 10:17	06/13/17 21:06	1

Lab Sample ID: LCS 680-483682/2-A
Matrix: Water
Analysis Batch: 483916

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	107		ug/L		107	85 - 115
Lead	500	498		ug/L		100	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-483464/1-A
Matrix: Water
Analysis Batch: 483684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483464

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		06/12/17 09:59	06/12/17 16:54	1

Lab Sample ID: LCS 680-483464/3-A
Matrix: Water
Analysis Batch: 483684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483464

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.51		ug/L		100	85 - 115

Lab Sample ID: 680-139680-1 MS
Matrix: Water
Analysis Batch: 483684

Client Sample ID: POTW-20170606
Prep Type: Total/NA
Prep Batch: 483464

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	1.03		ug/L		103	70 - 130

Lab Sample ID: 680-139680-1 MSD
Matrix: Water
Analysis Batch: 483684

Client Sample ID: POTW-20170606
Prep Type: Total/NA
Prep Batch: 483464

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.00		ug/L		100	70 - 130	3	20

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-483414/1-A
Matrix: Water
Analysis Batch: 483516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		06/12/17 05:17	06/12/17 10:47	1

Lab Sample ID: LCS 680-483414/2-A
Matrix: Water
Analysis Batch: 483516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0516		mg/L		103	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-483520/1-A
Matrix: Water
Analysis Batch: 483569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483520

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		06/12/17 12:11	06/12/17 13:59	1

Lab Sample ID: LCS 680-483520/2-A
Matrix: Water
Analysis Batch: 483569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.101		mg/L		101	75 - 125

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-139680-1

Metals

Prep Batch: 483464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	245.1	
MB 680-483464/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-483464/3-A	Lab Control Sample	Total/NA	Water	245.1	
680-139680-1 MS	POTW-20170606	Total/NA	Water	245.1	
680-139680-1 MSD	POTW-20170606	Total/NA	Water	245.1	

Prep Batch: 483682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	200.8	
MB 680-483682/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-483682/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 483684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	245.1	483464
MB 680-483464/1-A	Method Blank	Total/NA	Water	245.1	483464
LCS 680-483464/3-A	Lab Control Sample	Total/NA	Water	245.1	483464
680-139680-1 MS	POTW-20170606	Total/NA	Water	245.1	483464
680-139680-1 MSD	POTW-20170606	Total/NA	Water	245.1	483464

Analysis Batch: 483916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	200.8	483682
MB 680-483682/1-A	Method Blank	Total/NA	Water	200.8	483682
LCS 680-483682/2-A	Lab Control Sample	Total/NA	Water	200.8	483682

General Chemistry

Prep Batch: 483414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	Distill/CN	
MB 680-483414/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-483414/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 483516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	335.4	483414
MB 680-483414/1-A	Method Blank	Total/NA	Water	335.4	483414
LCS 680-483414/2-A	Lab Control Sample	Total/NA	Water	335.4	483414

Prep Batch: 483520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	Distill/Phenol	
MB 680-483520/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-483520/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 483569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-139680-1	POTW-20170606	Total/NA	Water	420.1	483520
MB 680-483520/1-A	Method Blank	Total/NA	Water	420.1	483520

General Chemistry (Continued)

Analysis Batch: 483569 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-483520/2-A	Lab Control Sample	Total/NA	Water	420.1	483520

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-139680-1

Client Sample ID: POTW-20170606

Date Collected: 06/06/17 14:30
Date Received: 06/08/17 09:23

Lab Sample ID: 680-139680-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			483682	06/13/17 10:17	AJR	TAL SAV
Total/NA	Analysis	200.8		1	483916	06/13/17 22:04	BJB	TAL SAV
Total/NA	Prep	245.1			483464	06/12/17 09:59	JKL	TAL SAV
Total/NA	Analysis	245.1		1	483684	06/12/17 17:10	JKL	TAL SAV
Total/NA	Prep	Distill/CN			483414	06/12/17 05:17	DAM	TAL SAV
Total/NA	Analysis	335.4		10	483516	06/12/17 11:36	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			483520	06/12/17 12:11	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	483569	06/12/17 13:52	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-139680-1
Project/Site: Hercules Glens Falls O&M Quarterly

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-17 *
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17 *
Florida	NELAP	4	E87052	06-30-17 *
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	N/A	06-30-17 *
Georgia	State Program	4	803	06-30-17 *
Guam	State Program	9	15-005r	04-16-17 *
Hawaii	State Program	9	N/A	06-30-17 *
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17 *
Iowa	State Program	7	353	06-30-17 *
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-17 *
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
Louisiana	NELAP	6	30690	06-30-17 *
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17 *
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-17 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17 *
New Jersey	NELAP	2	GA769	06-30-17 *
New Mexico	State Program	6	N/A	06-30-17 *
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-17 *
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17 *
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-17 *
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17 *
Virginia	NELAP	3	460161	06-14-17 *
Washington	State Program	10	C805	06-10-17 *
West Virginia (DW)	State Program	3	9950C	12-31-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-139680-1

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 Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912.354.7858 Fax:

Chain of Custody Record

193870

480501-Albany

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

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

Client Contact	Project Manager: Bryan Reles	Site Contact: Bryan Reles Date: 6/6/17	COC No:
Company Name: Antea Group	Tel/Fax: 315-949-7033	Lab Contact: Smith, Kathryne Carrier:	1 of 1 COCs
Address: 8755 Willowaters Pkwy,	Analysis Turnaround Time		Sampler: Garrett Crowe
City/State/Zip: Syracuse, NY, 13214	☐ CALENDAR DAYS ☐ WORKING DAYS		For Lab Use Only:
Phone: 315-949-7033	TAT if different from Below		Walk-in Client:
Fax:	☐ 2 weeks		Lab Sampling:
Project Name: Glens Falls POTW Monthly	☐ 1 week		
Site: Ashland Glens Falls	☐ 2 days		Job / SDG No.:
P O #	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	300.0, CWA, 245.1	420.1-Phenolics, Total Recoverable	335.4-Cyanide, Total	Sample Specific Notes:
POTW_20170606	6/6/17	1430	G	Water	3	N	N	X	X	X	

680-139680 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Antea Group	6/6/17 1757	Tim Knoll	TA	6-6-17 1757
Relinquished by: Tim Knollinger	Company: TA	Date/Time: 6-7-17 1800	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 6/8/17 0923

6/14/2017

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-139680-1

Login Number: 139680
List Number: 1
Creator: Chamberlain, Kim A

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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.	N/A	
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 (excluding tests with immediate HTs)	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules LLC
A wholly owned subsidiary of
Ashland, LLC
Ashland LLC. - EH&S - DS4
5200 Blazer Parkway
Dublin, Ohio 43017

October 12, 2017

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 3rd Quarter 2017
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Glasheen:

Attached is the 3rd Quarter 2017 Discharge Monitoring Report for the Hercules/Ciba site. Monthly wastewater samples were collected on the following dates:

- July 3, 2017
- August 1, 2017
- September 5, 2017

All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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,

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 10/12/2017

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.	NS	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	0.24	0.00	0.00	#N/A	#N/A	6.7	52,000
Monthly ave	0.24	0.00	0.00	0.91	0.00	6.9	65,968
Monthly max	0.24	0.00	0.00	0.91	0.00	7.1	117,000
Data points	1	1	1	1	1	31	31
Date:							
07/01/17						6.8	62,000
07/02/17						7.1	117,000
07/03/17	0.240	ND	ND	0.91	ND	7.0	102,000
07/04/17						7.0	92,000
07/05/17						6.9	76,000
07/06/17						6.9	71,000
07/07/17						7.0	72,000
07/08/17						6.9	69,000
07/09/17						6.9	66,000
07/10/17						7.0	66,000
07/11/17						6.9	65,000
07/12/17						6.8	62,000
07/13/17						6.8	63,000
07/14/17						6.9	64,000
07/15/17						6.9	61,000
07/16/17						6.9	65,000
07/17/17						6.9	54,000
07/18/17						6.9	63,000
07/19/17						6.9	59,000
07/20/17						7.0	63,000
07/21/17						6.9	54,000
07/22/17						6.9	62,000
07/23/17						6.8	60,000
07/24/17						6.9	54,000
07/25/17						7.0	62,000
07/26/17						7.0	56,000
07/27/17						6.8	57,000
07/28/17						6.7	63,000
07/29/17						6.8	53,000
07/30/17						6.8	52,000
07/31/17						6.9	60,000

Monthly Average for Chromium	
Concentration	0.24 mg/L
Ave. Flow	65,968 gpd
Ave. Load	0.13 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.
NS: No Standard. No instantaneous maximum for Total Chromium.
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.

GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA 10/12/2017

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.	NS	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	0.11	0.00	0.00	0.80	0.00	6.6	0
Monthly ave	0.11	0.00	0.00	0.80	0.00	6.8	46,129
Monthly max	0.11	0.00	0.00	0.80	0.00	7.0	91,000
Data points	1	1	1	1	1	31	31
Date:							
08/01/17	0.110	ND	ND	0.80	ND	6.9	55,000
08/02/17						6.9	51,000
08/03/17						6.8	53,000
08/04/17						6.8	55,000
08/05/17						6.6	58,000
08/06/17						6.9	50,000
08/07/17						6.9	50,000
08/08/17						7.0	52,000
08/09/17						6.9	56,000
08/10/17						6.8	36,000
08/11/17						6.8	0
08/12/17						6.8	0
08/13/17						6.8	0
08/14/17						6.8	28,000
08/15/17						6.8	91,000
08/16/17						6.8	67,000
08/17/17						6.8	46,000
08/18/17						6.7	47,000
08/19/17						6.7	48,000
08/20/17						6.8	48,000
08/21/17						6.8	49,000
08/22/17						6.9	55,000
08/23/17						6.7	47,000
08/24/17						6.8	49,000
08/25/17						6.8	44,000
08/26/17						6.9	52,000
08/27/17						7.0	52,000
08/28/17						6.9	46,000
08/29/17						6.9	46,000
08/30/17						6.8	50,000
08/31/17						6.8	49,000

Monthly Average for Chromium	
Concentration	0.11 mg/L
Ave. Flow	46,129 gpd
Ave. Load	0.04 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.
NS: No Standard. No instantaneous maximum for Total Chromium.
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.

GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA 10/12/2017

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.	NS	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	0.20	0.00	0.00	0.96	0.00	6.6	40,000
Monthly ave	0.20	0.00	0.00	0.96	0.00	6.9	48,467
Monthly max	0.20	0.00	0.00	0.96	0.00	7.1	57,000
Data points	1	1	1	1	1	30	30
Date:							
09/01/17						6.8	53,000
09/02/17						6.8	43,000
09/03/17						6.6	46,000
09/04/17						7.0	46,000
09/05/17	0.200	ND	ND	0.96	ND	7.0	48,000
09/06/17						6.8	53,000
09/07/17						6.8	50,000
09/08/17						7.0	46,000
09/09/17						6.9	48,000
09/10/17						6.9	52,000
09/11/17						7.1	47,000
09/12/17						7.1	45,000
09/13/17						6.8	50,000
09/14/17						6.9	56,000
09/15/17						6.8	46,000
09/16/17						6.7	45,000
09/17/17						6.8	54,000
09/18/17						6.9	51,000
09/19/17						7.0	46,000
09/20/17						6.8	45,000
09/21/17						7.0	49,000
09/22/17						7.0	57,000
09/23/17						6.8	43,000
09/24/17						6.8	40,000
09/25/17						6.7	57,000
09/26/17						6.8	49,000
09/27/17						6.9	50,000
09/28/17						7.0	47,000
09/29/17						7.0	44,000
09/30/17						6.8	48,000

Monthly Average for Chromium	
Concentration	0.20 mg/L
Ave. Flow	48,467 gpd
Ave. Load	0.08 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.

NS: No Standard. No instantaneous maximum for Total Chromium.

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-140631-1
Client Project/Site: Hercules Glens Falls O&M Quarterly

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
7/13/2017 11:41:40 AM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Definitions/Glossary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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 LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-140631-1	POTW-20170703	Water	07/03/17 08:55	07/06/17 09:05

Job ID: 680-140631-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Quarterly

Report Number: 680-140631-1

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 sample was received on 07/06/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.0º C.

TOTAL METALS (ICPMS)
Sample POTW-20170703 (680-140631-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 07/11/2017 and analyzed on 07/12/2017.

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

TOTAL MERCURY
Sample POTW-20170703 (680-140631-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 07/10/2017.

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

TOTAL CYANIDE
Sample POTW-20170703 (680-140631-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 07/12/2017.

Sample POTW-20170703 (680-140631-1)[10X] 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-20170703 (680-140631-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared on 07/12/2017 and analyzed on 07/13/2017.

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

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

Client Sample ID: POTW-20170703
Date Collected: 07/03/17 08:55
Date Received: 07/06/17 09:05

Lab Sample ID: 680-140631-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**240**		5.0	1.6	ug/L		07/11/17 11:10	07/12/17 18:22	1
Lead	2.5	U	2.5	0.98	ug/L		07/11/17 11:10	07/12/17 18:22	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		07/10/17 08:24	07/10/17 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.91**		0.10	0.025	mg/L		07/12/17 05:00	07/12/17 11:29	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		07/12/17 11:59	07/13/17 09:52	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-487310/1-A
Matrix: Water
Analysis Batch: 487598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		07/11/17 11:10	07/12/17 16:47	1
Lead	2.5	U	2.5	0.98	ug/L		07/11/17 11:10	07/12/17 16:47	1

Lab Sample ID: LCS 680-487310/2-A
Matrix: Water
Analysis Batch: 487598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	104		ug/L		104	85 - 115
Lead	500	493		ug/L		99	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-487121/13-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487121

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		07/10/17 08:24	07/10/17 16:00	1

Lab Sample ID: LCS 680-487121/15-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.49		ug/L		100	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-487391/1-A
Matrix: Water
Analysis Batch: 487447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487391

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		07/12/17 05:00	07/12/17 10:41	1

Lab Sample ID: LCS 680-487391/2-A
Matrix: Water
Analysis Batch: 487447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0507		mg/L		101	90 - 110

Lab Sample ID: 680-140631-1 DU
Matrix: Water
Analysis Batch: 487447

Client Sample ID: POTW-20170703
Prep Type: Total/NA
Prep Batch: 487391

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.91		0.975		mg/L		7	20

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-487453/1-A
Matrix: Water
Analysis Batch: 487591

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487453

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		07/12/17 11:59	07/13/17 09:52	1

Lab Sample ID: LCS 680-487453/2-A
Matrix: Water
Analysis Batch: 487591

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0834		mg/L		83	75 - 125

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

Metals

Prep Batch: 487121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	245.1	
MB 680-487121/13-A	Method Blank	Total/NA	Water	245.1	
LCS 680-487121/15-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 487260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	245.1	487121
MB 680-487121/13-A	Method Blank	Total/NA	Water	245.1	487121
LCS 680-487121/15-A	Lab Control Sample	Total/NA	Water	245.1	487121

Prep Batch: 487310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	200.8	
MB 680-487310/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-487310/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 487598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	200.8	487310
MB 680-487310/1-A	Method Blank	Total/NA	Water	200.8	487310
LCS 680-487310/2-A	Lab Control Sample	Total/NA	Water	200.8	487310

General Chemistry

Prep Batch: 487391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	Distill/CN	
MB 680-487391/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-487391/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
680-140631-1 DU	POTW-20170703	Total/NA	Water	Distill/CN	

Analysis Batch: 487447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	335.4	487391
MB 680-487391/1-A	Method Blank	Total/NA	Water	335.4	487391
LCS 680-487391/2-A	Lab Control Sample	Total/NA	Water	335.4	487391
680-140631-1 DU	POTW-20170703	Total/NA	Water	335.4	487391

Prep Batch: 487453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	Distill/Phenol	
MB 680-487453/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-487453/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 487591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-140631-1	POTW-20170703	Total/NA	Water	420.1	487453
MB 680-487453/1-A	Method Blank	Total/NA	Water	420.1	487453
LCS 680-487453/2-A	Lab Control Sample	Total/NA	Water	420.1	487453

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

Client Sample ID: POTW-20170703

Date Collected: 07/03/17 08:55
Date Received: 07/06/17 09:05

Lab Sample ID: 680-140631-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			487310	07/11/17 11:10	AJR	TAL SAV
Total/NA	Analysis	200.8		1	487598	07/12/17 18:22	BWR	TAL SAV
Total/NA	Prep	245.1			487121	07/10/17 08:24	JKL	TAL SAV
Total/NA	Analysis	245.1		1	487260	07/10/17 16:57	JKL	TAL SAV
Total/NA	Prep	Distill/CN			487391	07/12/17 05:00	DAM	TAL SAV
Total/NA	Analysis	335.4		10	487447	07/12/17 11:29	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			487453	07/12/17 11:59	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	487591	07/13/17 09:52	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	07-31-17 *
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	N/A	06-30-17 *
Georgia	State Program	4	803	06-30-17 *
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-17 *
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17 *
Iowa	State Program	7	353	06-30-17 *
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17 *
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-17 *
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-17 *
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17 *
Pennsylvania	NELAP	3	68-00474	06-30-17 *
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-17 *
Washington	State Program	10	C805	06-10-17 *
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-17 *
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls O&M Quarterly

TestAmerica Job ID: 680-140631-1

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 Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912.354.7858 Fax:

681-Atlanta

Chain of Custody Record

194177

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

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

Client Contact	Project Manager: Bryan Reks	Site Contact:	Date: 7/3/17	COC No:
Company Name: Anter Group	Tel/Fax: 315-949-7033	Lab Contact:	Carrier:	1 of 1 COCs
Address: 8755 W. Seneca Pkwy	Analysis Turnaround Time			Sampler: Garrett Crowe
City/State/Zip: Syracuse NY 13214	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 315-949-7033	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Glens Falls POTW Monthly	☒ 1 week			
Site: Glens Falls	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.8 (WA - chromium, Lead)	245.1 - Mercury	420.1 Phenolics, Total Recoverable	335.4 - Cyanide, Total	Sample Specific Notes:
POTW-20170703	7/3/17	855	G	GW		N	N	X	X	X	X	

680-140631 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

4 4 3 5

Possible Hazard Identification:
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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

1.7 (CF) 1.0°C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____			
Relinquished by:	Company: Anter Group	Date/Time: 7/3/17 1230	Received by: Tim Knollmyer	Company: TA	Date/Time: 7-5-17 1730
Relinquished by:	Company: TA	Date/Time: 7-5-17 1800	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 07-06-17 0905

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7/13/2017

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-140631-1

Login Number: 140631
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-122115-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
8/9/2017 3:56:21 PM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Table of Contents

Definitions/Glossary

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

TestAmerica Job ID: 480-122115-1

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Job ID: 480-122115-1

Laboratory: TestAmerica Buffalo

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 480-122115-1

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 sample was received on 08/03/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.8º C.

TOTAL METALS (ICPMS)
Sample POTW_20170801 (480-122115-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 08/08/2017 and analyzed on 08/09/2017.

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

TOTAL MERCURY
Sample POTW_20170801 (480-122115-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 08/07/2017.

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

TOTAL CYANIDE
Sample POTW_20170801 (480-122115-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 08/08/2017.

Sample POTW_20170801 (480-122115-1)[10X] 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_20170801 (480-122115-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 08/09/2017.

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

Detection Summary

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

TestAmerica Job ID: 480-122115-1

Client Sample ID: POTW_20170801 **Lab Sample ID: 480-122115-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	110		5.0	1.6	ug/L	1		200.8	Total/NA
Cyanide, Total	0.80		0.10	0.025	mg/L	10		335.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

TestAmerica Job ID: 480-122115-1

Client Sample ID: POTW_20170801
Date Collected: 08/01/17 09:15
Date Received: 08/03/17 02:00

Lab Sample ID: 480-122115-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**110**		5.0	1.6	ug/L		08/08/17 09:56	08/09/17 10:27	1
Lead	2.5	U	2.5	0.98	ug/L		08/08/17 09:56	08/09/17 10:27	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		08/07/17 11:18	08/07/17 17:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.80**		0.10	0.025	mg/L		08/08/17 05:30	08/08/17 11:35	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		08/09/17 09:02	08/09/17 12:27	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-490636/1-A
Matrix: Water
Analysis Batch: 490910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		08/08/17 09:56	08/09/17 09:48	1
Lead	2.5	U	2.5	0.98	ug/L		08/08/17 09:56	08/09/17 09:48	1

Lab Sample ID: LCS 680-490636/2-A
Matrix: Water
Analysis Batch: 490910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	109		ug/L		109	85 - 115
Lead	500	485		ug/L		97	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-490520/1-A
Matrix: Water
Analysis Batch: 490719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		08/07/17 11:18	08/07/17 17:16	1

Lab Sample ID: LCS 680-490520/2-A
Matrix: Water
Analysis Batch: 490719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.51		ug/L		100	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-490592/1-A
Matrix: Water
Analysis Batch: 490661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		08/08/17 05:30	08/08/17 11:07	1

Lab Sample ID: LCS 680-490592/2-A
Matrix: Water
Analysis Batch: 490661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0540		mg/L		108	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-490808/1-A
Matrix: Water
Analysis Batch: 490878

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490808

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		08/09/17 09:02	08/09/17 12:22	1

Lab Sample ID: LCS 680-490808/2-A
Matrix: Water
Analysis Batch: 490878

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0964		mg/L		96	75 - 125

QC Association Summary

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

TestAmerica Job ID: 480-122115-1

Metals

Prep Batch: 490520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	245.1	
MB 680-490520/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-490520/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 490636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	200.8	
MB 680-490636/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-490636/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 490719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	245.1	490520
MB 680-490520/1-A	Method Blank	Total/NA	Water	245.1	490520
LCS 680-490520/2-A	Lab Control Sample	Total/NA	Water	245.1	490520

Analysis Batch: 490910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	200.8	490636
MB 680-490636/1-A	Method Blank	Total/NA	Water	200.8	490636
LCS 680-490636/2-A	Lab Control Sample	Total/NA	Water	200.8	490636

General Chemistry

Prep Batch: 490592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	Distill/CN	
MB 680-490592/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-490592/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 490661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	335.4	490592
MB 680-490592/1-A	Method Blank	Total/NA	Water	335.4	490592
LCS 680-490592/2-A	Lab Control Sample	Total/NA	Water	335.4	490592

Prep Batch: 490808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	Distill/Phenol	
MB 680-490808/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-490808/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 490878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122115-1	POTW_20170801	Total/NA	Water	420.1	490808
MB 680-490808/1-A	Method Blank	Total/NA	Water	420.1	490808
LCS 680-490808/2-A	Lab Control Sample	Total/NA	Water	420.1	490808

Lab Chronicle

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

TestAmerica Job ID: 480-122115-1

Client Sample ID: POTW_20170801
Date Collected: 08/01/17 09:15
Date Received: 08/03/17 02:00

Lab Sample ID: 480-122115-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			490636	08/08/17 09:56	AJR	TAL SAV
Total/NA	Analysis	200.8		1	490910	08/09/17 10:27	BJB	TAL SAV
Total/NA	Prep	245.1			490520	08/07/17 11:18	NVF	TAL SAV
Total/NA	Analysis	245.1		1	490719	08/07/17 17:46	NVF	TAL SAV
Total/NA	Prep	Distill/CN			490592	08/08/17 05:30	DAM	TAL SAV
Total/NA	Analysis	335.4		10	490661	08/08/17 11:35	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			490808	08/09/17 09:02	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	490878	08/09/17 12:27	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 480-122115-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-18
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-18
Georgia	State Program	4	10026 (NY)	03-31-18
Georgia	State Program	4	956	03-31-18
Illinois	NELAP	5	200003	09-30-17
Iowa	State Program	7	374	03-01-19
Kansas	NELAP	7	E-10187	01-31-18
Kentucky (DW)	State Program	4	90029	12-31-17
Kentucky (UST)	State Program	4	30	03-31-18
Kentucky (WW)	State Program	4	90029	12-31-17
Louisiana	NELAP	6	02031	06-30-18
Maine	State Program	1	NY00044	12-04-18
Maryland	State Program	3	294	03-31-18
Massachusetts	State Program	1	M-NY044	06-30-18
Michigan	State Program	5	9937	04-01-09 *
Minnesota	NELAP	5	036-999-337	12-31-17
New Hampshire	NELAP	1	2337	11-17-17
New Jersey	NELAP	2	NY455	06-30-18
New York	NELAP	2	10026	03-31-18
North Dakota	State Program	8	R-176	03-31-18
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-18
Pennsylvania	NELAP	3	68-00281	07-31-18
Rhode Island	State Program	1	LAO00328	12-30-17
Tennessee	State Program	4	TN02970	03-31-18
Texas	NELAP	6	T104704412-15-6	07-31-18
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-18
Wisconsin	State Program	5	998310390	08-31-17

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 480-122115-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Savannah (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17 *
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-17 *
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

TestAmerica Job ID: 480-122115-1

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

Sample Summary

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

TestAmerica Job ID: 480-122115-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-122115-1	POTW_20170801	Water	08/01/17 09:15	08/03/17 02:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

480501-Albany

Chain of Custody Record

189411

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

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

Client Contact	Project Manager: Bryan Reks	Site Contact:	Date: 8/1/17	COC No:
Company Name: Antea Group	Tel/Fax: 315-949-7033	Lab Contact:	Carrier:	1 of 1 COCs
Address: 8755 Unidundilla Pkwy., Syracuse	Analysis Turnaround Time			Sampler: Garrett Crowe
City/State/Zip: Syracuse, NY 13214	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 661 315 949 7033	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Glens Falls POTW Monthly	☒ 1 week		480-122115 COC	
Site: Ashland Glens Falls	☐ 2 days			Job / SDG No.:
PO# 4502471936	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.8 - CWA 245.1	420.1 - Phenolics, Total Recoverable	335.4 - Cyanide, Total	Sample Specific Notes:
POTW-20170801 POTW_20170801	8/1/17	915	G	WW	3	N	N	X	X	X	

8-2-17

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 4 3 5

Possible Hazard Identification:
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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

	Company	Date/Time		Company	Date/Time
Relinquished by:	Antea Group	8/2/17 1000	Received by:	TA	8-2-17 1000
Relinquished by: Tim Fraley	TA	8-2-17 1800	Received by:	TAS	8-3-17 0200
Relinquished by	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

0.8 #1

Page 15 of 18

8/9/2017

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 480-36407.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eddie.barnett@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 480-122115-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 8/10/2017			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Hercules Glens Falls O&M Monthly POTW	Project #: 68000956			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT Chromium & Lead	245.1/245.1_Prep Mercury (CVAA)	335.4/Distill_CN Cyanide, Total	420.1/Distill_Phenol Phenolics, Total Recoverable	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
POTW_20170801 (480-122115-1)	8/1/17	09:15 Eastern		Water			X	X	X	X	3	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	8/3/17 1600	TAB	MSH	8/4/17 910	TA SAL
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.5°C (CF) 3.8°C

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 480-122115-1

Login Number: 122115
List Number: 2
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
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 LLC

Job Number: 480-122115-1

Login Number: 122115
List Number: 3
Creator: Tyler, Matthew M

List Source: TestAmerica Savannah
List Creation: 08/04/17 02:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-142936-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
9/15/2017 12:22:19 PM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Definitions/Glossary

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

TestAmerica Job ID: 680-142936-1

Qualifiers

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.

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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 LLC
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-142936-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-142936-1	POTW_20170905	Water	09/05/17 12:45	09/07/17 09:10

Job ID: 680-142936-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 680-142936-1

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 sample was received on 09/07/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.0º C.

TOTAL METALS (ICPMS)
Sample POTW_20170905 (680-142936-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 09/07/2017 and analyzed on 09/14/2017.

Chromium was detected in method blank MB 680-494401/1-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 MERCURY
Sample POTW_20170905 (680-142936-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared on 09/13/2017 and analyzed on 09/14/2017.

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

TOTAL CYANIDE
Sample POTW_20170905 (680-142936-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 09/15/2017.

Sample POTW_20170905 (680-142936-1)[10X] 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_20170905 (680-142936-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 09/14/2017.

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

Client Sample Results

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

TestAmerica Job ID: 680-142936-1

Client Sample ID: POTW_20170905
Date Collected: 09/05/17 12:45
Date Received: 09/07/17 09:10

Lab Sample ID: 680-142936-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**200**	**B**	5.0	1.6	ug/L		09/07/17 14:07	09/14/17 17:33	1
Lead	2.5	U	2.5	0.98	ug/L		09/07/17 14:07	09/14/17 17:33	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		09/13/17 11:01	09/14/17 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.96**		0.10	0.025	mg/L		09/15/17 04:30	09/15/17 11:34	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		09/14/17 09:42	09/14/17 10:49	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-494401/1-A
Matrix: Water
Analysis Batch: 494857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.63	J	5.0	1.6	ug/L		09/07/17 14:07	09/14/17 17:03	1
Lead	2.5	U	2.5	0.98	ug/L		09/07/17 14:07	09/14/17 17:03	1

Lab Sample ID: LCS 680-494401/2-A
Matrix: Water
Analysis Batch: 494857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	107		ug/L		107	85 - 115
Lead	500	524		ug/L		105	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-494596/1-A
Matrix: Water
Analysis Batch: 494757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494596

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		09/13/17 11:01	09/14/17 13:26	1

Lab Sample ID: LCS 680-494596/2-A
Matrix: Water
Analysis Batch: 494757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494596

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 680-494791/1-A
Matrix: Water
Analysis Batch: 494883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		09/15/17 04:30	09/15/17 10:39	1

Lab Sample ID: LCS 680-494791/2-A
Matrix: Water
Analysis Batch: 494883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0533		mg/L		107	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-494691/1-A
Matrix: Water
Analysis Batch: 494728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494691

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		09/14/17 09:42	09/14/17 10:42	1

Lab Sample ID: LCS 680-494691/2-A
Matrix: Water
Analysis Batch: 494728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0982		mg/L		98	75 - 125

QC Association Summary

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

TestAmerica Job ID: 680-142936-1

Metals

Prep Batch: 494401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	200.8	
MB 680-494401/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-494401/2-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 494596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	245.1	
MB 680-494596/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-494596/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 494757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	245.1	494596
MB 680-494596/1-A	Method Blank	Total/NA	Water	245.1	494596
LCS 680-494596/2-A	Lab Control Sample	Total/NA	Water	245.1	494596

Analysis Batch: 494857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	200.8	494401
MB 680-494401/1-A	Method Blank	Total/NA	Water	200.8	494401
LCS 680-494401/2-A	Lab Control Sample	Total/NA	Water	200.8	494401

General Chemistry

Prep Batch: 494691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	Distill/Phenol	
MB 680-494691/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-494691/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 494728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	420.1	494691
MB 680-494691/1-A	Method Blank	Total/NA	Water	420.1	494691
LCS 680-494691/2-A	Lab Control Sample	Total/NA	Water	420.1	494691

Prep Batch: 494791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	Distill/CN	
MB 680-494791/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-494791/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 494883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-142936-1	POTW_20170905	Total/NA	Water	335.4	494791
MB 680-494791/1-A	Method Blank	Total/NA	Water	335.4	494791
LCS 680-494791/2-A	Lab Control Sample	Total/NA	Water	335.4	494791

Lab Chronicle

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

TestAmerica Job ID: 680-142936-1

Client Sample ID: POTW_20170905
Date Collected: 09/05/17 12:45
Date Received: 09/07/17 09:10

Lab Sample ID: 680-142936-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			494401	09/07/17 14:07	AJR	TAL SAV
Total/NA	Analysis	200.8		1	494857	09/14/17 17:33	BJB	TAL SAV
Total/NA	Prep	245.1			494596	09/13/17 11:01	NVF	TAL SAV
Total/NA	Analysis	245.1		1	494757	09/14/17 13:45	BCB	TAL SAV
Total/NA	Prep	Distill/CN			494791	09/15/17 04:30	DAM	TAL SAV
Total/NA	Analysis	335.4		10	494883	09/15/17 11:34	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			494691	09/14/17 09:42	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	494728	09/14/17 10:49	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-142936-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-17 *
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-142936-1

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 Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912.354.7858 Fax:

681-Atlanta

Chain of Custody Record

204177

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

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

Client Contact	Project Manager: Bryan Reles	Site Contact:	Date:	COC No:
Company Name: Antea Group	Tel/Fax: 315-749-7033	Lab Contact:	Carrier:	1 of 1 COCs
Address: 8755 Widewaters Pkwy	Analysis Turnaround Time			Sampler:
City/State/Zip: Syracuse, NY 13214	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 315 949 7033	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Glens Falls POTW Monthly	☒ 1 week			
Site: Ashland Glens Falls	☐ 2 days			Job / SDG No.:
PO# 4502471936	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	200.8-CWA, 245.1	420.1-Phenolics, Total Recoverable	335.4-Cyanide, total	Sample Specific Notes:
POTW_20170905	9/5/17	1245	G	GW	3	N	N	X	X	X	

680-142936 Chain of Custody

4 3 5

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by:	Antea Group	9/6/17 1000	Received by:	TA	9/6/17 1030
Relinquished by:	TA	9/6/17 1800	Received by:	Sas.	09-07-17 0910
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 1.8/(CF) 2.0°

9/15/2017

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-142936-1

Login Number: 142936
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules LLC
A wholly owned subsidiary of
Ashland, LLC
Ashland LLC. - EH&S - DS4
5200 Blazer Parkway
Dublin, Ohio 43017

February 15, 2018

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 4th Quarter 2017
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Glasheen:

Attached is the 4th Quarter 2017 Discharge Monitoring Report for the Hercules/Ciba site. Monthly wastewater samples were collected on the following dates:

- October 4, 2017
- November 7, 2017

The extended list annual wastewater was collected on December 11, 2017.

All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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,

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 2/15/2018

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.	NS	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	0.19	0.00	0.00	0.85	0.00	6.3	0
Monthly ave	0.19	0.00	0.00	0.85	0.00	6.9	43,903
Monthly max	0.19	0.00	0.00	0.85	0.00	7.1	72,000
Data points	1	1	1	1	1	31	31
Date:							
10/01/17						6.8	51,000
10/02/17						6.9	45,000
10/03/17						7.0	43,000
10/04/17	0.190	ND	ND	0.85	ND	6.8	44,000
10/05/17						6.9	46,000
10/06/17						6.9	46,000
10/07/17						6.8	49,000
10/08/17						6.6	46,000
10/09/17						6.5	43,000
10/10/17						7.0	0
10/11/17						7.0	72,000
10/12/17						7.0	50,000
10/13/17						7.0	53,000
10/14/17						6.8	44,000
10/15/17						6.9	45,000
10/16/17						7.0	43,000
10/17/17						6.5	42,000
10/18/17						7.0	43,000
10/19/17						6.3	44,000
10/20/17						6.8	42,000
10/21/17						6.9	42,000
10/22/17						6.9	42,000
10/23/17						7.0	44,000
10/24/17						7.1	44,000
10/25/17						7.0	44,000
10/26/17						6.8	46,000
10/27/17						7.0	38,000
10/28/17						7.0	43,000
10/29/17						6.9	43,000
10/30/17						6.6	43,000
10/31/17						7.0	41,000

Monthly Average for Chromium	
Concentration	0.19 mg/L
Ave. Flow	43,903 gpd
Ave. Load	0.07 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.

NS: No Standard. No instantaneous maximum for Total Chromium.

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.

GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA 2/15/2018

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.	NS	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	0.16	0.00	0.00	0.69	0.00	6.7	16,000
Monthly ave	0.16	0.00	0.00	0.69	0.00	6.9	39,767
Monthly max	0.16	0.00	0.00	0.69	0.00	7.1	63,000
Data points	1	1	1	1	1	30	30
Date:							
11/01/17						7.0	41,000
11/02/17						6.8	42,000
11/03/17						7.0	41,000
11/04/17						6.7	39,000
11/05/17						6.8	44,000
11/06/17						7.0	39,000
11/07/17	0.160	ND	ND	0.69	ND	7.1	38,000
11/08/17						7.0	42,000
11/09/17						7.0	43,000
11/10/17						6.9	42,000
11/11/17						6.9	42,000
11/12/17						6.8	40,000
11/13/17						7.0	41,000
11/14/17						7.0	41,000
11/15/17						7.0	39,000
11/16/17						6.9	35,000
11/17/17						6.9	38,000
11/18/17						6.8	41,000
11/19/17						6.7	16,000
11/20/17						6.9	63,000
11/21/17						6.9	41,000
11/22/17						6.7	37,000
11/23/17						6.8	37,000
11/24/17						6.8	41,000
11/25/17						6.7	41,000
11/26/17						6.7	37,000
11/27/17						6.8	32,000
11/28/17						6.9	40,000
11/29/17						6.8	41,000
11/30/17						6.9	39,000

Monthly Average for Chromium	
Concentration	0.16 mg/L
Ave. Flow	39,767 gpd
Ave. Load	0.05 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.

NS: No Standard. No instantaneous maximum for Total Chromium.

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.

GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA 2/15/2018

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.	NS	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	0.20	0.00	0.00	1.20	0.00	6.7	21,000
Monthly ave	0.20	0.00	0.00	1.20	0.00	6.9	29,097
Monthly max	0.20	0.00	0.00	1.20	0.00	7.0	40,000
Data points	1	1	1	1	1	31	31
12/01/17						7.0	34,000
12/02/17						6.7	31,000
12/03/17						6.8	40,000
12/04/17						6.8	38,000
12/05/17						6.9	39,000
12/06/17						7.0	32,000
12/07/17						6.8	37,000
12/08/17						6.9	39,000
12/09/17						6.7	26,000
12/10/17						6.7	25,000
12/11/17	0.200 B F	0.002 J	ND	1.200	ND	6.9	27,000
12/12/17						6.8	27,000
12/13/17						6.8	27,000
12/14/17						6.8	28,000
12/15/17						7.0	24,000
12/16/17						6.8	21,000
12/17/17						6.8	21,000
12/18/17						6.9	26,000
12/19/17						6.9	25,000
12/20/17						7.0	24,000
12/21/17						6.8	25,000
12/22/17						6.8	23,000
12/23/17						6.7	25,000
12/24/17						6.9	25,000
12/25/17						7.0	37,000
12/26/17						6.9	24,000
12/27/17						7.0	25,000
12/28/17						6.7	29,000
12/29/17						6.8	34,000
12/30/17						6.8	26,000
12/31/11						6.9	38,000

Monthly Average for Chromium	
Concentration	0.20 mg/L
Ave. Flow	29,097 gpd
Ave. Load	0.05 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.

NS: No Standard. No instantaneous maximum for Total Chromium.

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144028-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
10/17/2017 1:41:43 PM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Definitions/Glossary

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

TestAmerica Job ID: 680-144028-1

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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 LLC
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-144028-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144028-1	POTW_20171004	Water	10/04/17 11:45	10/06/17 09:00

Job ID: 680-144028-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 680-144028-1

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 sample was received on 10/06/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.9º C.

TOTAL METALS (ICPMS)
Sample POTW_20171004 (680-144028-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 10/09/2017 and analyzed on 10/12/2017.

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

TOTAL MERCURY
Sample POTW_20171004 (680-144028-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 10/09/2017.

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

TOTAL CYANIDE
Sample POTW_20171004 (680-144028-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 10/12/2017.

Sample POTW_20171004 (680-144028-1)[10X] 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_20171004 (680-144028-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 10/17/2017.

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

Client Sample Results

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

TestAmerica Job ID: 680-144028-1

Client Sample ID: POTW_20171004
Date Collected: 10/04/17 11:45
Date Received: 10/06/17 09:00

Lab Sample ID: 680-144028-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**190**		5.0	1.6	ug/L		10/09/17 16:36	10/12/17 04:03	1
Lead	2.5	U	2.5	0.98	ug/L		10/09/17 16:36	10/12/17 04:03	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		10/09/17 11:10	10/09/17 20:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.85**		0.10	0.025	mg/L		10/12/17 05:49	10/12/17 11:19	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		10/17/17 09:45	10/17/17 10:45	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-497804/1-A
Matrix: Water
Analysis Batch: 498265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497804

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		10/09/17 16:36	10/12/17 02:02	1
Lead	2.5	U	2.5	0.98	ug/L		10/09/17 16:36	10/12/17 02:02	1

Lab Sample ID: LCS 680-497804/2-A
Matrix: Water
Analysis Batch: 498265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497804

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	103		ug/L		103	85 - 115
Lead	500	535		ug/L		107	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-497760/1-A
Matrix: Water
Analysis Batch: 497886

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		10/09/17 11:10	10/09/17 19:56	1

Lab Sample ID: LCS 680-497760/2-A
Matrix: Water
Analysis Batch: 497886

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.49		ug/L		100	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-498207/1-A
Matrix: Water
Analysis Batch: 498277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498207

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		10/12/17 05:49	10/12/17 11:20	1

Lab Sample ID: LCS 680-498207/2-A
Matrix: Water
Analysis Batch: 498277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498207

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0525		mg/L		105	90 - 110

QC Sample Results

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

TestAmerica Job ID: 680-144028-1

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-498782/1-A
Matrix: Water
Analysis Batch: 498817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498782

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		10/17/17 09:45	10/17/17 10:38	1

Lab Sample ID: LCS 680-498782/2-A
Matrix: Water
Analysis Batch: 498817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498782

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0945		mg/L		95	75 - 125

QC Association Summary

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

TestAmerica Job ID: 680-144028-1

Metals

Prep Batch: 497760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	245.1	
MB 680-497760/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-497760/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 497804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	200.8	
MB 680-497804/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-497804/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 497886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	245.1	497760
MB 680-497760/1-A	Method Blank	Total/NA	Water	245.1	497760
LCS 680-497760/2-A	Lab Control Sample	Total/NA	Water	245.1	497760

Analysis Batch: 498265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	200.8	497804
MB 680-497804/1-A	Method Blank	Total/NA	Water	200.8	497804
LCS 680-497804/2-A	Lab Control Sample	Total/NA	Water	200.8	497804

General Chemistry

Prep Batch: 498207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	Distill/CN	
MB 680-498207/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-498207/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 498277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	335.4	498207
MB 680-498207/1-A	Method Blank	Total/NA	Water	335.4	498207
LCS 680-498207/2-A	Lab Control Sample	Total/NA	Water	335.4	498207

Prep Batch: 498782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	Distill/Phenol	
MB 680-498782/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-498782/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 498817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144028-1	POTW_20171004	Total/NA	Water	420.1	498782
MB 680-498782/1-A	Method Blank	Total/NA	Water	420.1	498782
LCS 680-498782/2-A	Lab Control Sample	Total/NA	Water	420.1	498782

Lab Chronicle

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

TestAmerica Job ID: 680-144028-1

Client Sample ID: POTW_20171004
Date Collected: 10/04/17 11:45
Date Received: 10/06/17 09:00

Lab Sample ID: 680-144028-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			497804	10/09/17 16:36	BCB	TAL SAV
Total/NA	Analysis	200.8		1	498265	10/12/17 04:03	BWR	TAL SAV
Total/NA	Prep	245.1			497760	10/09/17 11:10	NVF	TAL SAV
Total/NA	Analysis	245.1		1	497886	10/09/17 20:57	NVF	TAL SAV
Total/NA	Prep	Distill/CN			498207	10/12/17 05:49	DAM	TAL SAV
Total/NA	Analysis	335.4		10	498277	10/12/17 11:19	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			498782	10/17/17 09:45	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	498817	10/17/17 10:45	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-144028-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

TestAmerica Job ID: 680-144028-1

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 Savannah

5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912.354.7858 Fax:

681-Atlanta

Chain of Custody Record

205023

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

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

Client Contact	Project Manager: Bryan Kelly	Site Contact:	Date: 10/4/17	COC No:
Company Name: Antea Group	Tel/Fax: 315-749-7035	Lab Contact:	Carrier:	1 of 1 COCs
Address: 8755 Willowbrook Pkwy.	Analysis Turnaround Time			Sampler: Brian Crowl
City/State/Zip: Syracuse, NY 13214	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 315-449-7633	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Glens Falls Monthly POTW	☒ 1 week			
Site: Ashland Glens Falls	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.8 - CLP ICP-MS	420.1 - Phenol, Total Recov.	335.4 - Cyanide, total	Sample Specific Notes:
POTW_20171004	10/4/17	1145	G	GW	3	N	N	X	X	X	

680-144028 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 4 3 5

Possible Hazard Identification:
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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.60 Corr'd: 1.90 | Therm ID No.:

	Company	Date/Time		Company	Date/Time
Relinquished by:	Antea Group	10/5/17 1200	Received by:	TA	10/5/17 1320
Relinquished by:	TA	10/5/17 1800	Received by:		
Relinquished by:			Received in Laboratory by:	TASAV	10-6-17/900

10/17/2017

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-144028-1

Login Number: 144028
List Number: 1
Creator: Anderson, Jordan K

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-145295-1
Client Project/Site: Hercules Glens Falls O&M Monthly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
11/21/2017 7:56:07 AM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Definitions/Glossary

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

TestAmerica Job ID: 680-145295-1

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.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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 LLC
Project/Site: Hercules Glens Falls O&M Monthly POTW

TestAmerica Job ID: 680-145295-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-145295-1	POTW_20171107	Water	11/07/17 11:00	11/08/17 09:00

Job ID: 680-145295-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Monthly POTW

Report Number: 680-145295-1

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 sample was received on 11/08/2017; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.6º C.

TOTAL METALS (ICPMS)
Sample POTW_20171107 (680-145295-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared and analyzed on 11/13/2017.

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

TOTAL MERCURY
Sample POTW_20171107 (680-145295-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared on 11/09/2017 and analyzed on 11/17/2017.

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

TOTAL CYANIDE
Sample POTW_20171107 (680-145295-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 11/15/2017.

Sample POTW_20171107 (680-145295-1)[10X] 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_20171107 (680-145295-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 11/17/2017. .

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

Client Sample Results

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

TestAmerica Job ID: 680-145295-1

Client Sample ID: POTW_20171107
Date Collected: 11/07/17 11:00
Date Received: 11/08/17 09:00

Lab Sample ID: 680-145295-1
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**160**		5.0	1.6	ug/L		11/13/17 11:40	11/13/17 18:13	1
Lead	2.5	U	2.5	0.98	ug/L		11/13/17 11:40	11/13/17 18:13	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		11/09/17 13:07	11/17/17 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.69**		0.10	0.025	mg/L		11/15/17 06:00	11/15/17 11:46	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		11/17/17 09:07	11/17/17 10:43	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-502361/1-A
Matrix: Water
Analysis Batch: 502495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 502361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		11/13/17 11:40	11/13/17 16:56	1
Lead	2.5	U	2.5	0.98	ug/L		11/13/17 11:40	11/13/17 16:56	1

Lab Sample ID: LCS 680-502361/2-A
Matrix: Water
Analysis Batch: 502495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	105		ug/L		105	85 - 115
Lead	500	501		ug/L		100	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-501982/1-A
Matrix: Water
Analysis Batch: 503154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 501982

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		11/09/17 13:07	11/17/17 16:18	1

Lab Sample ID: LCS 680-501982/2-A
Matrix: Water
Analysis Batch: 503154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 501982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.47		ug/L		99	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-502634/1-A
Matrix: Water
Analysis Batch: 502704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 502634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		11/15/17 06:00	11/15/17 11:03	1

Lab Sample ID: LCS 680-502634/2-A
Matrix: Water
Analysis Batch: 502704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0486		mg/L		97	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-503015/1-A
Matrix: Water
Analysis Batch: 503097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 503015

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		11/17/17 09:07	11/17/17 10:36	1

Lab Sample ID: LCS 680-503015/2-A
Matrix: Water
Analysis Batch: 503097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 503015

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0935		mg/L		94	75 - 125

QC Association Summary

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

TestAmerica Job ID: 680-145295-1

Metals

Prep Batch: 501982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	245.1	
MB 680-501982/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-501982/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 502361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	200.8	
MB 680-502361/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-502361/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 502495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	200.8	502361
MB 680-502361/1-A	Method Blank	Total/NA	Water	200.8	502361
LCS 680-502361/2-A	Lab Control Sample	Total/NA	Water	200.8	502361

Analysis Batch: 503154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	245.1	501982
MB 680-501982/1-A	Method Blank	Total/NA	Water	245.1	501982
LCS 680-501982/2-A	Lab Control Sample	Total/NA	Water	245.1	501982

General Chemistry

Prep Batch: 502634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	Distill/CN	
MB 680-502634/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-502634/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 502704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	335.4	502634
MB 680-502634/1-A	Method Blank	Total/NA	Water	335.4	502634
LCS 680-502634/2-A	Lab Control Sample	Total/NA	Water	335.4	502634

Prep Batch: 503015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	Distill/Phenol	
MB 680-503015/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-503015/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 503097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-145295-1	POTW_20171107	Total/NA	Water	420.1	503015
MB 680-503015/1-A	Method Blank	Total/NA	Water	420.1	503015
LCS 680-503015/2-A	Lab Control Sample	Total/NA	Water	420.1	503015

Lab Chronicle

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

TestAmerica Job ID: 680-145295-1

Client Sample ID: POTW_20171107
Date Collected: 11/07/17 11:00
Date Received: 11/08/17 09:00

Lab Sample ID: 680-145295-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			502361	11/13/17 11:40	BJB	TAL SAV
Total/NA	Analysis	200.8		1	502495	11/13/17 18:13	BJB	TAL SAV
Total/NA	Prep	245.1			501982	11/09/17 13:07	BCB	TAL SAV
Total/NA	Analysis	245.1		1	503154	11/17/17 16:51	BCB	TAL SAV
Total/NA	Prep	Distill/CN			502634	11/15/17 06:00	DAM	TAL SAV
Total/NA	Analysis	335.4		10	502704	11/15/17 11:46	DAM	TAL SAV
Total/NA	Prep	Distill/Phenol			503015	11/17/17 09:07	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	503097	11/17/17 10:43	CFJ	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 680-145295-1
Project/Site: Hercules Glens Falls O&M Monthly POTW

Laboratory: TestAmerica Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10842	03-31-18

Method Summary

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

TestAmerica Job ID: 680-145295-1

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

Chain of Custody Record

480501-Albany

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Ashland LLC	Jim Vondracek	11/7/17	296349
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
5200 Blazer Parkway	614-790-6146		
City / **State** / **Zip Code**	**Site Contact** / **Lab Contact**	**Analysis (Attach list if more space is needed)**	
Dublin / OH / 43017	Bryan Reles 315-949-7033		
Project Name and Location (State)	**Carrier/Waybill Number**		
Glens Falls Monthly POTW			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	GW	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	200.8, CWA - Chromium, Lead	245.1 - Mercury	4120.1 - Phenolics, Total Recoverable	335.4 - Cyanide, total	Special Instructions/ Conditions of Receipt
POTW_20171107	11/7/17	1100					X		1	1		1		X	X	X	X	

680-145295 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	11/7/17	1315	1. Received By	11-7-17	1315
2. Relinquished By	11-7-17	1800	2. Received By	11-8-17	900
3. Relinquished By			3. Received By		

Comments

1.3/1.6

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-145295-1

Login Number: 145295
List Number: 1
Creator: Flanagan, Naomi V

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-128768-1
Client Project/Site: Hercules Glens Falls Annual POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
12/27/2017 3:50:18 PM

Eddie Barnett, Project Manager I
(912)354-7858
eddie.barnett@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

Qualifiers

GC/MS VOA

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.

GC/MS Semi VOA

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

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.
B	Compound was found in the blank and sample.
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.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Job ID: 480-128768-1

Laboratory: TestAmerica Buffalo

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls Annual POTW

Report Number: 480-128768-1

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 12/12/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.4º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples POTW_20171211 (480-128768-1) and TRIP BLANK (480-128768-2) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 12/18/2017.

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_20171211 (480-128768-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The sample was prepared on 12/15/2017 and analyzed on 12/19/2017.

The following samples contained residual chlorine upon receipt: POTW_20171211 (480-128768-1), (480-128768-C-1 MS) and (480-128768-C-1 MSD).

2,4,5-Trichlorophenol recovered low for the MS of sample POTW_20171211MS (480-128768-1) in batch 680-507074.
2,4,5-Trichlorophenol recovered low for the MSD of sample POTW_20171211MSD (480-128768-1) in batch 680-507074. Refer to the QC report for details.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

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

METALS (ICP)
Sample POTW_20171211 (480-128768-1) was analyzed for Metals (ICP) in accordance with EPA Method 200.7. The sample was prepared on 12/21/2017 and analyzed on 12/22/2017.

Calcium recovered high for the MS of sample POTW_20171211MS (480-128768-1) in batch 680-507501. Calcium recovered low for the MSD of sample POTW_20171211MSD (480-128768-1) in batch 680-507501. 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_20171211 (480-128768-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 12/21/2017 and analyzed on 12/22/2017.

Chromium was detected in method blank MB 680-507396/1-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

Job ID: 480-128768-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

and/or RL, the result has been flagged. Refer to the QC report for details.

Chromium recovered high for the MS of sample POTW_20171211MS (480-128768-1) in batch 680-507519. Chromium recovered high for the MSD of sample POTW_20171211MSD (480-128768-1) in batch 680-507519. 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 MERCURY
Sample POTW_20171211 (480-128768-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared on 12/14/2017 and analyzed on 12/19/2017.

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_20171211 (480-128768-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The sample was prepared and analyzed on 12/26/2017.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 680-507654.

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

TOTAL SUSPENDED SOLIDS
Sample POTW_20171211 (480-128768-1) was analyzed for total suspended solids in accordance with SM 2540D. The sample was analyzed on 12/14/2017.

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

TOTAL CYANIDE
Sample POTW_20171211 (480-128768-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 12/15/2017.

Sample POTW_20171211 (480-128768-1)[10X] 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_20171211 (480-128768-1) was analyzed for ammonia in accordance with EPA Method 350.1. The sample was analyzed on 12/20/2017.

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

PHENOLS
Sample POTW_20171211 (480-128768-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 12/20/2017.

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

BIOCHEMICAL OXYGEN DEMAND
Sample POTW_20171211 (480-128768-1) was analyzed for Biochemical Oxygen Demand in accordance with SM 5210B. The sample was analyzed on 12/13/2017.

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

CORROSIVITY (PH)

Job ID: 480-128768-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Sample POTW_20171211 (480-128768-1) was analyzed for corrosivity (pH) in accordance with SM 4500 H+ B. The sample was analyzed on 12/27/2017.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample was analyzed in the laboratory outside the 15 minute timeframe.

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

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

Client Sample ID: POTW_20171211 — Lab Sample ID: 480-128768-1

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
pH	8.2	HF			SU	1		SM 4500 H+ B	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.77	J	1.0	0.48	ug/L	1		624	Total/NA
Boron	120		100	36	ug/L	1		200.7 Rev 4.4	Total/NA
Calcium	46000		500	25	ug/L	1		200.7 Rev 4.4	Total/NA
Antimony	2.7	J	5.0	0.50	ug/L	1		200.8	Total/NA
Cadmium	0.89		0.50	0.15	ug/L	1		200.8	Total/NA
Chromium	200	B F1	5.0	1.6	ug/L	1		200.8	Total/NA
Copper	2.0	J	5.0	1.7	ug/L	1		200.8	Total/NA
Iron	370		100	25	ug/L	1		200.8	Total/NA
Lead	2.3	J	2.5	0.98	ug/L	1		200.8	Total/NA
Manganese	8.8		5.0	1.8	ug/L	1		200.8	Total/NA
Nickel	2.6	J	5.0	1.9	ug/L	1		200.8	Total/NA
Zinc	9.9	J	20	9.6	ug/L	1		200.8	Total/NA
Cyanide, Total	1.2		0.10	0.025	mg/L	10		335.4	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-128768-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: POTW_20171211

Date Collected: 12/11/17 15:15
Date Received: 12/12/17 03:10

Lab Sample ID: 480-128768-1

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			12/18/17 21:54	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/18/17 21:54	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/18/17 21:54	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/18/17 21:54	1
Toluene	**0.77**	**J**	1.0	0.48	ug/L			12/18/17 21:54	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/18/17 21:54	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/18/17 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*79 - 119*		*12/18/17 21:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*12/18/17 21:54*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 121*		*12/18/17 21:54*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 129*		*12/18/17 21:54*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	9.7	U	9.7	0.68	ug/L		12/15/17 08:30	12/19/17 22:50	1
Pentachlorophenol	49	U	49	1.7	ug/L		12/15/17 08:30	12/19/17 22:50	1
2,4,6-Trichlorophenol	9.7	U	9.7	0.80	ug/L		12/15/17 08:30	12/19/17 22:50	1
2,4,5-Trichlorophenol	9.7	U F1	9.7	9.7	ug/L		12/15/17 08:30	12/19/17 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*38 - 121*	*12/15/17 08:30*	*12/19/17 22:50*	*1*
2-Fluorophenol	*47*		*35 - 110*	*12/15/17 08:30*	*12/19/17 22:50*	*1*
Nitrobenzene-d5	*57*		*44 - 119*	*12/15/17 08:30*	*12/19/17 22:50*	*1*
Phenol-d5	*51*		*27 - 119*	*12/15/17 08:30*	*12/19/17 22:50*	*1*
Terphenyl-d14	*39*		*10 - 165*	*12/15/17 08:30*	*12/19/17 22:50*	*1*
2,4,6-Tribromophenol	*65*		*34 - 132*	*12/15/17 08:30*	*12/19/17 22:50*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**120**		100	36	ug/L		12/21/17 12:58	12/22/17 02:10	1
Calcium	**46000**		500	25	ug/L		12/21/17 12:58	12/22/17 02:10	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.7**	**J**	5.0	0.50	ug/L		12/21/17 12:58	12/22/17 08:38	1
Arsenic	3.0	U	3.0	1.5	ug/L		12/21/17 12:58	12/22/17 08:38	1
Cadmium	**0.89**		0.50	0.15	ug/L		12/21/17 12:58	12/22/17 08:38	1
Chromium	**200**	**B F1**	5.0	1.6	ug/L		12/21/17 12:58	12/22/17 08:38	1
Copper	**2.0**	**J**	5.0	1.7	ug/L		12/21/17 12:58	12/22/17 08:38	1
Iron	**370**		100	25	ug/L		12/21/17 12:58	12/22/17 12:11	1
Lead	**2.3**	**J**	2.5	0.98	ug/L		12/21/17 12:58	12/22/17 08:38	1
Manganese	**8.8**		5.0	1.8	ug/L		12/21/17 12:58	12/22/17 12:11	1
Nickel	**2.6**	**J**	5.0	1.9	ug/L		12/21/17 12:58	12/22/17 08:38	1
Silver	1.0	U	1.0	0.10	ug/L		12/21/17 12:58	12/22/17 08:38	1
Zinc	**9.9**	**J**	20	9.6	ug/L		12/21/17 12:58	12/22/17 08:38	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		12/14/17 17:20	12/19/17 13:18	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.2**	**HF**			SU			12/27/17 09:36	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	4.7	U	4.7	1.3	mg/L		12/26/17 08:58	12/26/17 11:19	1
Cyanide, Total	**1.2**		0.10	0.025	mg/L		12/15/17 04:18	12/15/17 09:45	10
Ammonia	0.25	U	0.25	0.10	mg/L			12/20/17 10:56	1
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		12/20/17 09:33	12/20/17 10:28	1
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/13/17 05:26	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			12/14/17 06:42	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-128768-2

Date Collected: 12/11/17 00:00

Matrix: Water

Date Received: 12/12/17 03:10

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			12/18/17 19:19	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/18/17 19:19	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/18/17 19:19	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/18/17 19:19	1
Toluene	1.0	U	1.0	0.48	ug/L			12/18/17 19:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/18/17 19:19	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/18/17 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*79 - 119*		*12/18/17 19:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*12/18/17 19:19*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 121*		*12/18/17 19:19*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 129*		*12/18/17 19:19*	*1*

Surrogate Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(79-119)	(70-130)	(71-121)	(77-129)
480-128768-1	POTW_20171211	98	83	91	103
480-128768-2	TRIP BLANK	95	93	91	105
LCS 680-506838/3	Lab Control Sample	94	95	90	106
LCSD 680-506838/4	Lab Control Sample Dup	98	105	93	109
MB 680-506838/7	Method Blank	95	89	88	105

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(38-121)	(35-110)	(44-119)	(27-119)	(10-165)	(34-132)
480-128768-1	POTW_20171211	58	47	57	51	39	65
480-128768-1 MS	POTW_20171211	50	36	46	41	60	64
480-128768-1 MSD	POTW_20171211	47	38	46	43	49	59
LCS 680-506524/4-A	Lab Control Sample	62	56	61	60	61	67
MB 680-506524/3-A	Method Blank	55	50	57	55	64	69

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-506838/7
Matrix: Water
Analysis Batch: 506838

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			12/18/17 18:57	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/18/17 18:57	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/18/17 18:57	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/18/17 18:57	1
Toluene	1.0	U	1.0	0.48	ug/L			12/18/17 18:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/18/17 18:57	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/18/17 18:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*79 - 119*		*12/18/17 18:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*12/18/17 18:57*	*1*
4-Bromofluorobenzene (Surr)	*88*		*71 - 121*		*12/18/17 18:57*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 129*		*12/18/17 18:57*	*1*

Lab Sample ID: LCS 680-506838/3
Matrix: Water
Analysis Batch: 506838

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	19.6		ug/L		98	37 - 151
Chloroform	20.0	21.8		ug/L		109	51 - 138
Ethylbenzene	20.0	19.6		ug/L		98	37 - 162
Methylene Chloride	20.0	19.6		ug/L		98	1 - 221
Toluene	20.0	19.3		ug/L		97	47 - 150
1,1,1-Trichloroethane	20.0	21.6		ug/L		108	52 - 162
Xylenes, Total	40.0	39.0		ug/L		98	78 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*79 - 119*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*90*		*71 - 121*
Dibromofluoromethane (Surr)	*106*		*77 - 129*

Lab Sample ID: LCSD 680-506838/4
Matrix: Water
Analysis Batch: 506838

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	20.2		ug/L		101	37 - 151	3	30
Chloroform	20.0	22.9		ug/L		115	51 - 138	5	30
Ethylbenzene	20.0	20.5		ug/L		102	37 - 162	5	30
Methylene Chloride	20.0	20.2		ug/L		101	1 - 221	3	30
Toluene	20.0	20.1		ug/L		101	47 - 150	4	30
1,1,1-Trichloroethane	20.0	22.8		ug/L		114	52 - 162	5	30
Xylenes, Total	40.0	40.7		ug/L		102	78 - 119	4	30

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-506838/4
Matrix: Water
Analysis Batch: 506838

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		79 - 119
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	93		71 - 121
Dibromofluoromethane (Surr)	109		77 - 129

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-506524/3-A
Matrix: Water
Analysis Batch: 507074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506524

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	10	U	10	0.70	ug/L		12/15/17 08:30	12/19/17 21:12	1
Pentachlorophenol	50	U	50	1.8	ug/L		12/15/17 08:30	12/19/17 21:12	1
2,4,6-Trichlorophenol	10	U	10	0.82	ug/L		12/15/17 08:30	12/19/17 21:12	1
2,4,5-Trichlorophenol	10	U	10	10	ug/L		12/15/17 08:30	12/19/17 21:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	55		38 - 121	12/15/17 08:30	12/19/17 21:12	1
2-Fluorophenol	50		35 - 110	12/15/17 08:30	12/19/17 21:12	1
Nitrobenzene-d5	57		44 - 119	12/15/17 08:30	12/19/17 21:12	1
Phenol-d5	55		27 - 119	12/15/17 08:30	12/19/17 21:12	1
Terphenyl-d14	64		10 - 165	12/15/17 08:30	12/19/17 21:12	1
2,4,6-Tribromophenol	69		34 - 132	12/15/17 08:30	12/19/17 21:12	1

Lab Sample ID: LCS 680-506524/4-A
Matrix: Water
Analysis Batch: 507074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506524

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	100	64.8		ug/L		65	21 - 133
Pentachlorophenol	200	127		ug/L		63	14 - 176
2,4,6-Trichlorophenol	100	69.2		ug/L		69	37 - 144
2,4,5-Trichlorophenol	100	69.3		ug/L		69	62 - 119

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	62		38 - 121
2-Fluorophenol	56		35 - 110
Nitrobenzene-d5	61		44 - 119
Phenol-d5	60		27 - 119
Terphenyl-d14	61		10 - 165
2,4,6-Tribromophenol	67		34 - 132

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-128768-1 MS
Matrix: Water
Analysis Batch: 507074

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 506524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	9.7	U	99.9	47.8		ug/L		48	21 - 133
Pentachlorophenol	49	U	200	133		ug/L		67	14 - 176
2,4,6-Trichlorophenol	9.7	U	99.9	57.2		ug/L		57	37 - 144
2,4,5-Trichlorophenol	9.7	U F1	99.9	59.8	F1	ug/L		60	62 - 119

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*38 - 121*
2-Fluorophenol	*36*		*35 - 110*
Nitrobenzene-d5	*46*		*44 - 119*
Phenol-d5	*41*		*27 - 119*
Terphenyl-d14	*60*		*10 - 165*
2,4,6-Tribromophenol	*64*		*34 - 132*

Lab Sample ID: 480-128768-1 MSD
Matrix: Water
Analysis Batch: 507074

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 506524

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	9.7	U	94.4	43.9		ug/L		47	21 - 133	8	40
Pentachlorophenol	49	U	189	106		ug/L		56	14 - 176	23	40
2,4,6-Trichlorophenol	9.7	U	94.4	51.5		ug/L		55	37 - 144	11	40
2,4,5-Trichlorophenol	9.7	U F1	94.4	53.2	F1	ug/L		56	62 - 119	12	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*47*		*38 - 121*
2-Fluorophenol	*38*		*35 - 110*
Nitrobenzene-d5	*46*		*44 - 119*
Phenol-d5	*43*		*27 - 119*
Terphenyl-d14	*49*		*10 - 165*
2,4,6-Tribromophenol	*59*		*34 - 132*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 680-507397/1-A
Matrix: Water
Analysis Batch: 507501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	36	ug/L		12/21/17 12:58	12/22/17 02:00	1
Calcium	500	U	500	25	ug/L		12/21/17 12:58	12/22/17 02:00	1

Lab Sample ID: LCS 680-507397/2-A
Matrix: Water
Analysis Batch: 507501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	200	199		ug/L		100	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-507397/2-A
Matrix: Water
Analysis Batch: 507501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507397

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			5000	5210		ug/L		104	85 - 115		

Lab Sample ID: 480-128768-1 MS
Matrix: Water
Analysis Batch: 507501

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507397

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	120		200	322		ug/L		102	75 - 125		
Calcium	46000		5000	52500	4	ug/L		129	75 - 125		

Lab Sample ID: 480-128768-1 MSD
Matrix: Water
Analysis Batch: 507501

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507397

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	120		200	313		ug/L		98	75 - 125	3	20
Calcium	46000		5000	49100	4	ug/L		60	75 - 125	7	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-507396/1-A
Matrix: Water
Analysis Batch: 507519

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.0	U	5.0	0.50	ug/L		12/21/17 12:58	12/22/17 08:07	1
Arsenic	3.0	U	3.0	1.5	ug/L		12/21/17 12:58	12/22/17 08:07	1
Cadmium	0.50	U	0.50	0.15	ug/L		12/21/17 12:58	12/22/17 08:07	1
Chromium	1.99	J	5.0	1.6	ug/L		12/21/17 12:58	12/22/17 08:07	1
Copper	5.0	U	5.0	1.7	ug/L		12/21/17 12:58	12/22/17 08:07	1
Lead	2.5	U	2.5	0.98	ug/L		12/21/17 12:58	12/22/17 08:07	1
Nickel	5.0	U	5.0	1.9	ug/L		12/21/17 12:58	12/22/17 08:07	1
Silver	1.0	U	1.0	0.10	ug/L		12/21/17 12:58	12/22/17 08:07	1
Zinc	20	U	20	9.6	ug/L		12/21/17 12:58	12/22/17 08:07	1

Lab Sample ID: MB 680-507396/1-A
Matrix: Water
Analysis Batch: 507540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	100	25	ug/L		12/21/17 12:58	12/22/17 11:45	1
Manganese	5.0	U	5.0	1.8	ug/L		12/21/17 12:58	12/22/17 11:45	1

Lab Sample ID: LCS 680-507396/2-A
Matrix: Water
Analysis Batch: 507519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507396

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			50.0	56.2		ug/L		112	85 - 115		

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

Lab Sample ID: LCS 680-507396/2-A
Matrix: Water
Analysis Batch: 507519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	111		ug/L		111	85 - 115
Cadmium	50.0	55.7		ug/L		111	85 - 115
Chromium	100	113		ug/L		113	85 - 115
Copper	100	115		ug/L		115	85 - 115
Lead	500	561		ug/L		112	85 - 115
Nickel	100	115		ug/L		115	85 - 115
Silver	50.0	55.5		ug/L		111	85 - 115
Zinc	100	109		ug/L		109	85 - 115

Lab Sample ID: LCS 680-507396/2-A
Matrix: Water
Analysis Batch: 507540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	5060		ug/L		101	85 - 115
Manganese	500	496		ug/L		99	85 - 115

Lab Sample ID: 480-128768-1 MS
Matrix: Water
Analysis Batch: 507519

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.7	J	50.0	64.6		ug/L		124	70 - 130
Arsenic	3.0	U	100	123		ug/L		123	70 - 130
Cadmium	0.89		50.0	61.8		ug/L		122	70 - 130
Chromium	200	B F1	100	347	F1	ug/L		145	70 - 130
Copper	2.0	J	100	125		ug/L		123	70 - 130
Lead	2.3	J	500	604		ug/L		120	70 - 130
Nickel	2.6	J	100	125		ug/L		123	70 - 130
Silver	1.0	U	50.0	58.0		ug/L		116	70 - 130
Zinc	9.9	J	100	129		ug/L		119	70 - 130

Lab Sample ID: 480-128768-1 MS
Matrix: Water
Analysis Batch: 507540

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	370		5000	6030		ug/L		113	70 - 130
Manganese	8.8		500	549		ug/L		108	70 - 130

Lab Sample ID: 480-128768-1 MSD
Matrix: Water
Analysis Batch: 507519

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.7	J	50.0	64.7		ug/L		124	70 - 130	0	20
Arsenic	3.0	U	100	125		ug/L		125	70 - 130	1	20
Cadmium	0.89		50.0	61.9		ug/L		122	70 - 130	0	20
Chromium	200	B F1	100	337	F1	ug/L		136	70 - 130	3	20

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

Lab Sample ID: 480-128768-1 MSD
Matrix: Water
Analysis Batch: 507519

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	2.0	J	100	125		ug/L		123	70 - 130	0	20
Lead	2.3	J	500	604		ug/L		120	70 - 130	0	20
Nickel	2.6	J	100	127		ug/L		124	70 - 130	1	20
Silver	1.0	U	50.0	58.9		ug/L		118	70 - 130	2	20
Zinc	9.9	J	100	129		ug/L		120	70 - 130	1	20

Lab Sample ID: 480-128768-1 MSD
Matrix: Water
Analysis Batch: 507540

Client Sample ID: POTW_20171211
Prep Type: Total/NA
Prep Batch: 507396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	370		5000	5800		ug/L		109	70 - 130	4	20
Manganese	8.8		500	524		ug/L		103	70 - 130	5	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-506502/1-A
Matrix: Water
Analysis Batch: 507073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		12/14/17 17:20	12/19/17 12:45	1

Lab Sample ID: LCS 680-506502/2-A
Matrix: Water
Analysis Batch: 507073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.63		ug/L		105	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-507654/1-A
Matrix: Water
Analysis Batch: 507680

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507654

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		12/26/17 08:58	12/26/17 11:19	1

Lab Sample ID: LCS 680-507654/2-A
Matrix: Water
Analysis Batch: 507680

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	35.40		mg/L		89	78 - 114

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 680-507654/3-A
Matrix: Water
Analysis Batch: 507680

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 507654

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	35.60		mg/L		89	78 - 114	1	18

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-506514/1-A
Matrix: Water
Analysis Batch: 506565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506514

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		12/15/17 04:18	12/15/17 08:59	1

Lab Sample ID: LCS 680-506514/2-A
Matrix: Water
Analysis Batch: 506565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506514

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0501		mg/L		100	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-507226/11
Matrix: Water
Analysis Batch: 507226

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			12/20/17 11:05	1

Lab Sample ID: LCS 680-507226/12
Matrix: Water
Analysis Batch: 507226

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	1.01		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-507226/20
Matrix: Water
Analysis Batch: 507226

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	1.05		mg/L		105	90 - 110	3	30

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-507141/1-A
Matrix: Water
Analysis Batch: 507198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507141

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		12/20/17 09:33	12/20/17 10:28	1

Lab Sample ID: LCS 680-507141/2-A
Matrix: Water
Analysis Batch: 507198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507141

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0918		mg/L		92	75 - 125

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-506366/1
Matrix: Water
Analysis Batch: 506366

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			12/14/17 06:42	1

Lab Sample ID: LCS 680-506366/2
Matrix: Water
Analysis Batch: 506366

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	18.0		mg/L		90	80 - 120

Lab Sample ID: LCSD 680-506366/3
Matrix: Water
Analysis Batch: 506366

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
Total Suspended Solids	20.0	18.0		mg/L		90	80 - 120	0	25

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 680-507833/7
Matrix: Water
Analysis Batch: 507833

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.1		SU		101	63 - 158

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-391888/1
Matrix: Water
Analysis Batch: 391888

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			12/13/17 05:26	1

Lab Sample ID: LCS 480-391888/2
Matrix: Water
Analysis Batch: 391888

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	203		mg/L		103	85 - 115

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

GC/MS VOA

Analysis Batch: 506838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	624	
480-128768-2	TRIP BLANK	Total/NA	Water	624	
MB 680-506838/7	Method Blank	Total/NA	Water	624	
LCS 680-506838/3	Lab Control Sample	Total/NA	Water	624	
LCSD 680-506838/4	Lab Control Sample Dup	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 506524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	625	
MB 680-506524/3-A	Method Blank	Total/NA	Water	625	
LCS 680-506524/4-A	Lab Control Sample	Total/NA	Water	625	
480-128768-1 MS	POTW_20171211	Total/NA	Water	625	
480-128768-1 MSD	POTW_20171211	Total/NA	Water	625	

Analysis Batch: 507074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	625	506524
MB 680-506524/3-A	Method Blank	Total/NA	Water	625	506524
LCS 680-506524/4-A	Lab Control Sample	Total/NA	Water	625	506524
480-128768-1 MS	POTW_20171211	Total/NA	Water	625	506524
480-128768-1 MSD	POTW_20171211	Total/NA	Water	625	506524

Metals

Prep Batch: 506502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	245.1	
MB 680-506502/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-506502/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 507073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	245.1	506502
MB 680-506502/1-A	Method Blank	Total/NA	Water	245.1	506502
LCS 680-506502/2-A	Lab Control Sample	Total/NA	Water	245.1	506502

Prep Batch: 507396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	200.8	
MB 680-507396/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-507396/2-A	Lab Control Sample	Total/NA	Water	200.8	
480-128768-1 MS	POTW_20171211	Total/NA	Water	200.8	
480-128768-1 MSD	POTW_20171211	Total/NA	Water	200.8	

Prep Batch: 507397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	200.7	
MB 680-507397/1-A	Method Blank	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 507397 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-507397/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-128768-1 MS	POTW_20171211	Total/NA	Water	200.7	
480-128768-1 MSD	POTW_20171211	Total/NA	Water	200.7	

Analysis Batch: 507501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	200.7 Rev 4.4	507397
MB 680-507397/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	507397
LCS 680-507397/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	507397
480-128768-1 MS	POTW_20171211	Total/NA	Water	200.7 Rev 4.4	507397
480-128768-1 MSD	POTW_20171211	Total/NA	Water	200.7 Rev 4.4	507397

Analysis Batch: 507519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	200.8	507396
MB 680-507396/1-A	Method Blank	Total/NA	Water	200.8	507396
LCS 680-507396/2-A	Lab Control Sample	Total/NA	Water	200.8	507396
480-128768-1 MS	POTW_20171211	Total/NA	Water	200.8	507396
480-128768-1 MSD	POTW_20171211	Total/NA	Water	200.8	507396

Analysis Batch: 507540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	200.8	507396
MB 680-507396/1-A	Method Blank	Total/NA	Water	200.8	507396
LCS 680-507396/2-A	Lab Control Sample	Total/NA	Water	200.8	507396
480-128768-1 MS	POTW_20171211	Total/NA	Water	200.8	507396
480-128768-1 MSD	POTW_20171211	Total/NA	Water	200.8	507396

General Chemistry

Analysis Batch: 391888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	SM 5210B	
USB 480-391888/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-391888/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 506366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	SM 2540D	
MB 680-506366/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 680-506366/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-506366/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

Prep Batch: 506514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	Distill/CN	
MB 680-506514/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-506514/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

General Chemistry (Continued)

Analysis Batch: 506565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	335.4	506514
MB 680-506514/1-A	Method Blank	Total/NA	Water	335.4	506514
LCS 680-506514/2-A	Lab Control Sample	Total/NA	Water	335.4	506514

Prep Batch: 507141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	Distill/Phenol	
MB 680-507141/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-507141/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 507198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	420.1	507141
MB 680-507141/1-A	Method Blank	Total/NA	Water	420.1	507141
LCS 680-507141/2-A	Lab Control Sample	Total/NA	Water	420.1	507141

Analysis Batch: 507226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	350.1	
MB 680-507226/11	Method Blank	Total/NA	Water	350.1	
LCS 680-507226/12	Lab Control Sample	Total/NA	Water	350.1	
LCSD 680-507226/20	Lab Control Sample Dup	Total/NA	Water	350.1	

Prep Batch: 507654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	1664A	
MB 680-507654/1-A	Method Blank	Total/NA	Water	1664A	
LCS 680-507654/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 680-507654/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 507680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	1664A	507654
MB 680-507654/1-A	Method Blank	Total/NA	Water	1664A	507654
LCS 680-507654/2-A	Lab Control Sample	Total/NA	Water	1664A	507654
LCSD 680-507654/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	507654

Analysis Batch: 507833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-128768-1	POTW_20171211	Total/NA	Water	SM 4500 H+ B	
LCS 680-507833/7	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

Client Sample ID: POTW_20171211

Date Collected: 12/11/17 15:15
Date Received: 12/12/17 03:10

Lab Sample ID: 480-128768-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	506838	12/18/17 21:54	WAS	TAL SAV
Total/NA	Prep	625			506524	12/15/17 08:30	CEW	TAL SAV
Total/NA	Analysis	625		1	507074	12/19/17 22:50	OK	TAL SAV
Total/NA	Prep	200.7			507397	12/21/17 12:58	AJR	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	507501	12/22/17 02:10	BCB	TAL SAV
Total/NA	Prep	200.8			507396	12/21/17 12:58	AJR	TAL SAV
Total/NA	Analysis	200.8		1	507519	12/22/17 08:38	BWR	TAL SAV
Total/NA	Prep	200.8			507396	12/21/17 12:58	AJR	TAL SAV
Total/NA	Analysis	200.8		1	507540	12/22/17 12:11	BCB	TAL SAV
Total/NA	Prep	245.1			506502	12/14/17 17:20	NVF	TAL SAV
Total/NA	Analysis	245.1		1	507073	12/19/17 13:18	NVF	TAL SAV
Total/NA	Prep	1664A			507654	12/26/17 08:58	JAS	TAL SAV
Total/NA	Analysis	1664A		1	507680	12/26/17 11:19	JAS	TAL SAV
Total/NA	Prep	Distill/CN			506514	12/15/17 04:18	DAM	TAL SAV
Total/NA	Analysis	335.4		10	506565	12/15/17 09:45	DAM	TAL SAV
Total/NA	Analysis	350.1		1	507226	12/20/17 10:56	ALG	TAL SAV
Total/NA	Prep	Distill/Phenol			507141	12/20/17 09:33	CFJ	TAL SAV
Total/NA	Analysis	420.1		1	507198	12/20/17 10:28	CFJ	TAL SAV
Total/NA	Analysis	SM 2540D		1	506366	12/14/17 06:42	KLD	TAL SAV
Total/NA	Analysis	SM 4500 H+ B		1	507833	12/27/17 09:36	JER	TAL SAV
Total/NA	Analysis	SM 5210B		1	391888	12/13/17 05:26	LAW	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 12/11/17 00:00
Date Received: 12/12/17 03:10

Lab Sample ID: 480-128768-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	506838	12/18/17 19:19	WAS	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

Accreditation/Certification Summary

Client: Ashland LLC
TestAmerica Job ID: 480-128768-1
Project/Site: Hercules Glens Falls Annual POTW

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10842	03-31-18

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
200.8	200.8	Water	Iron
625	625	Water	2,4,5-Trichlorophenol

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Water	pH

Method Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

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 4500 H+ B	pH	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

Sample Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls Annual POTW

TestAmerica Job ID: 480-128768-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-128768-1	POTW_20171211	Water	12/11/17 15:15	12/12/17 03:10
480-128768-2	TRIP BLANK	Water	12/11/17 00:00	12/12/17 03:10

Chain of Custody Record

480501-Albany 681-Atlanta 681-Atlanta

TestAmerica Buffalo
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-128768 COC

Client Information	Sampler: Garrett Lowe	Lab PM: Barnett, Eddie T	Carrie	COC No: 680-88845-35895.1
Client Contact: ~~Bryan~~Reles Cody Hume	Phone: 860-992-2636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 1 of 1
Company: Antea USA, Inc.				Job #:
Address: ~~5788 Wide Water Parkway 2nd Floor - ANTEA~~ 500 Summit Lake Dr. Valhalla NY	Due Date Requested:			Preservation Codes:
City: ~~Syracuse~~ Valhalla, NY	TAT Requested (days): Standard			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: NY, 13214				
Phone: ~~614-798-6146(Tel)~~ 914 495 9932	PO #: PO304839 Task 400			
Email: bryan.reles@anteagroup.com Cody.hume@anteagroup.com	WO #:			
Project Name: Ashland Glens Falls Annual POTW	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Reques

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	350.1 - Ammonia	200.7_CWA, 200.8_CWA, 245.1	1664A_NP - HEM (Oil & Grease)	624_5ml - 624-VOC	625 - (MOD) Acid/Base Priority Pollutants	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	335.4 - Cyanide, Total	420.1 - Phenolics, Total Recoverable	SM4500_H+ - pH					Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	D	S	A	N	N	N	B	S	N						
POTW_20171211	12/11/17	1515	G	Water	N	N	X	X	X	X	X	X	X	X	X	X					15	
Trip Blank	12/11/17	-	-	Water						X											2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/11/17 1545	Antea		12/11/17 1545	Antea Group
2		12/11/17 1700	Antea		12-11-17	1700
3		12-11-17 1800	TA		12-12-17 0310	TAS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.4 #1

Ver: 08/04/2016

12/27/2017

TestAmerica
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica

Client Information	Sampler	Lab PM	Carrier
Client Contact: Cody Hume	Phone: 860-992-2636	Barnett, Eddie T	
Company: Antea USA, Inc.		E-Mail: eddie.barnett@testamericainc.com	
Address: 5786 Wide Water Parkway, 2nd Floor - ANTEA	Due Date Requested:		
City: Syracuse	TAT Requested (days): Standard		
State, Zip: NY, 13214			
Phone: 914 495 9932	PO #: PO304839 Task 400		
Email: bryan.reles@anteagroup.com	WO #:		
Project Name: Ashland Glens Falls Annual POTW	Project #: 68000956		
Site: Ashland Glens Falls	SSOW#:		

COC No: 680-88845-35895.1
Page: Page 1 of 1
Job #:

480-128768 COC

Analysis Reques

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	350.1 - Ammonia	200.7_CWA, 200.8_CWA, 245.1	1664A_NP - HEM (Oil & Grease)	624_5ml - 624-VOC	625 - (MOD) Acid/Base Priority Pollutants	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	335.4 - Cyanide, Total	420.1 - Phenolics, Total Recoverable	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	D	S	A	N	N	N	B	S	N		
POTW - 20171211	12/11/17	1515	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	15	
Trip Blank	12/11/17	-	-	Water						X							2	

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment		
Relinquished by	Date/Time: 12/11/17 1545	Company: Antea	Received by	Date/Time: 12/11/17 1545	Company: Antea Group	
Relinquished by	Date/Time: 12/11/17 1700	Company: Antea	Received by	Date/Time: 12-11-17	Company: 1700	
Relinquished by	Date/Time: 12-11-17 1800	Company: TA	Received by	Date/Time: 12-12-17 0310	Company: TAS	
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No:		Cooler Temperature(s) °C and Other Remarks:		1.4 #1	

Ver: 08/04/2016

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 480-39555.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eddie.barnett@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-128768-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 12/22/2017			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Hercules Glens Falls O&M Quarterly	Project #: 68000956			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	335.4/Distill_CN Cyanide, Total	200.8_CWA/200.8_P_TOT (MOD) Chromium & Lead	245.1/245.1_Prep Mercury (CVAA)	420.1/Distill_Phenol Phenolics, Total Recoverable	2540D	200.7_CWA/200.7_P_TOT (MOD) Custom Sublist Template	SM4500_H+/ pH Only	350.1	624_5ml/ (MOD) Custom Sublist Template	1664A/1664A_P_W Oil and Grease (HEM)	625/625_Prep (MOD) Acid/Base Priority Pollutants			Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
POTW_20171211 (480-128768-1)	12/11/17	15:15 Eastern		Water			X	X	X	X	X	X	X	X	X	X	X			14	
TRIP BLANK (480-128768-2)	12/11/17	Eastern		Water											X					2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/12/17 1600	TAS	[signature]	12/13/17 935	TASAV
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.2 OT: 1.7

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 480-128768-1

Login Number: 128768
List Number: 2
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (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 LLC

Job Number: 480-128768-1

Login Number: 128768
List Number: 3
Creator: Hopkins, Ashley

List Source: TestAmerica Savannah
List Creation: 12/13/17 04:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 (excluding tests with immediate HTs)	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT 3 - SUMP A AND B WEEKLY TOTALIZER SUMMARY

		Sump A				Sump B				
			Since Previous Reading				Since Previous Reading			Ave. Total Sump A + Sump B Flow Since Previous Reading (Gal/Day)
Date	Days	Totalizer Reading (Gal)	Gallons Pumped	Ave. Gal/Day	% of Sump A + Sump B Flow	Totalizer Reading (Gal)	Gallons Pumped	Ave. Gal/Day	% of Sump A + Sump B Flow	
1/3/2017	--	1,358,566	--	--	--	45,629,961	--	--	--	--
1/11/2017	8	1,386,993	28,427	3,553	9	45,914,995	285,034	35,629	91	39,183
1/19/2017	8	1,422,138	35,145	4,393	11	46,194,352	279,357	34,920	89	39,313
1/26/2017	7	1,455,141	33,003	4,715	11	46,464,755	270,403	38,629	89	43,344
2/1/2017	6	1,489,358	34,218	5,703	12	46,707,699	242,944	40,491	88	46,194
2/6/2017	5	1,518,502	29,144	5,829	13	46,895,336	187,637	37,527	87	43,356
2/15/2017	9	1,577,066	58,564	6,507	19	47,138,280	242,944	26,994	81	33,501
2/22/2017	7	1,619,183	42,117	6,017	11	47,491,838	353,558	50,508	89	56,525
3/9/2017	15	1,740,941	121,758	8,117	31	47,759,041	267,203	17,814	69	25,931
3/13/2017	4	1,771,480	30,539	7,635	18	47,900,261	141,220	35,305	82	42,940
3/23/2017	10	1,840,279	68,799	6,880	17	48,227,651	327,390	32,739	83	39,619
3/29/2017	6	1,882,898	42,619	7,103	17	48,429,912	202,261	33,710	83	40,813
4/5/2017	7	1,957,573	74,676	10,668	19	48,738,481	308,569	44,081	81	54,749
4/10/2017	5	2,052,473	94,900	18,980	23	49,053,723	315,242	63,048	77	82,028
4/17/2017	7	2,156,450	103,978	14,854	26	49,350,878	297,155	42,451	74	57,305
4/24/2017	7	2,242,147	85,697	12,242	22	49,648,899	298,021	42,574	78	54,817
5/2/2017	8	2,324,103	81,956	10,244	19	49,989,570	340,671	42,584	81	52,828
5/8/2017	6	2,385,868	61,765	10,294	18	50,264,937	275,367	45,895	82	56,189
5/15/2017	7	2,462,704	76,836	10,977	20	50,571,131	306,194	43,742	80	54,719
5/23/2017	8	2,539,931	77,227	9,653	19	50,899,821	328,690	41,086	81	50,740
5/30/2017	7	2,605,945	66,014	9,431	17	51,222,364	322,543	46,078	83	55,508
6/6/2017	7	2,675,777	69,832	9,976	17	51,557,333	334,969	47,853	83	57,829
6/12/2017	6	2,738,016	62,239	10,373	18	51,837,153	279,820	46,637	82	57,010
6/23/2017	11	2,807,660	69,644	6,331	18	52,161,336	324,183	29,471	82	35,802
6/26/2017	3	2,857,078	49,418	16,473	20	52,353,537	192,201	64,067	80	80,540
7/3/2017	7	2,939,902	82,824	11,832	18	52,721,184	367,647	52,521	82	64,353
7/10/2017	7	3,061,909	122,007	17,430	23	53,120,683	399,499	57,071	77	74,501
7/18/2017	8	3,163,056	101,147	12,643	21	53,501,996	381,313	47,664	79	60,307
7/26/2017	8	3,248,583	85,528	10,691	19	53,861,275	359,279	44,910	81	55,601
8/1/2017	6	3,305,829	57,246	9,541	17	54,131,891	270,616	45,103	83	54,644
8/8/2017	7	3,364,907	59,078	8,440	16	54,445,807	313,916	44,845	84	53,285
8/15/2017	7	3,394,602	29,695	4,242	15	54,612,780	166,973	23,853	85	28,095
8/22/2017	7	3,456,392	61,790	8,827	17	54,906,466	293,686	41,955	83	50,782
8/28/2017	6	3,493,718	37,326	6,221	13	55,160,780	254,314	42,386	87	48,607
9/5/2017	8	3,539,411	45,693	5,712	12	55,495,243	334,463	41,808	88	47,520
9/15/2017	10	3,594,056	54,645	5,465	12	55,912,740	417,497	41,750	88	47,214
9/18/2017	3	3,610,516	16,460	5,487	11	56,043,710	130,970	43,657	89	49,143
9/25/2017	7	3,645,392	34,876	4,982	10	56,348,056	304,346	43,478	90	48,460
10/4/2017	9	3,689,277	43,885	4,876	10	56,724,520	376,464	41,829	90	46,705
10/9/2017	5	3,711,682	22,405	4,481	10	56,918,304	193,784	38,757	90	43,238
10/16/2017	7	3,744,129	32,447	4,635	11	57,180,192	261,888	37,413	89	42,048
10/25/2017	9	3,786,949	42,820	4,758	11	57,529,497	349,305	38,812	89	43,569
10/31/2017	6	3,814,571	27,622	4,604	11	57,751,670	222,173	37,029	89	41,632
11/6/2017	6	3,844,180	29,609	4,935	12	57,965,906	214,236	35,706	88	40,641
11/13/2017	7	3,882,074	37,894	5,413	14	58,207,438	241,532	34,505	86	39,918
11/21/2017	8	3,923,047	40,974	5,122	14	58,463,848	256,410	32,051	86	37,173
12/4/2017	13	3,985,020	61,973	4,767	13	58,895,776	431,928	33,225	87	37,992
12/18/2017	14	4,049,092	64,072	4,577	16	59,239,034	343,258	24,518	84	29,095
12/24/2017	6	4,096,907	47,815	7,969	16	59,491,734	252,700	42,117	84	50,086
			Maximum	18,980	31			64,067	91	
			Minimum	3,553	9			17,814	69	

ATTACHMENT 4 – SITE INSPECTION REPORTS

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Quarterly Activities - Quarter/Year Q1 2017

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Calibrate discharge flow meters	3/13/17	KA
2	Inspect discharge monitoring program for conformity	3/13/17	KA
	Site Security		
1	Inspect access roads for damage	3/2/17	KA
2	Inspect entire fence line and repair if necessary	3/2/17	KA
3	Inspect all locks and gates in upper and lower area	3/2/17	KA
4	Inspect all locks and gates across street	3/2/17	KA
5	Inspect old remediation building and fence line	3/2/17	KA
6	Inspect offsite wells and for proper security	3/2/17	KA
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	3/2/17	KA
2	Discharge piping in EPS	3/2/17	KA
3	Inspect vegetation for uncovered electrical lines	3/2/17	KA
4	Inspect all vaults for leaks or standing water	3/13/17	KA
	Site Monitoring		
1	Inspect outfall structures along Hudson River	3/2/17	KA
2	Inspect all roadways	3/2/17	KA
3	Inspect all ditches/swales, catch basins and rip-rap	3/2/17	KA

COMMENTS

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Quarterly Activities - Quarter/Year 6/26/17 2nd Quarter

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Calibrate discharge flow meters	6/26/17	GC
2	Inspect discharge monitoring program for conformity	6/26/17	GC
	Site Security		
1	Inspect access roads for damage	6/26/17	GC
2	Inspect entire fence line and repair if necessary	6/26/17	GC
3	Inspect all locks and gates in upper and lower area	6/26/17	GC
4	Inspect all locks and gates across street	6/26/17	GC
5	Inspect old remediation building and fence line	6/26/17	GC
6	Inspect offsite wells and properties for proper security	6/26/17	GC
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station		
2	Discharge piping in EPS	6/26/17	GC
3	Inspect vegetation for uncovered electrical lines	~~GC~~ 6/26/17	GC
4	Inspect all vaults for leaks or standing water	6/26/17	GC
	Site Monitoring		
1	Inspect outfall structures along Hudson River	6/26/17	GC
2	Inspect all roadways	6/26/17	GC
3	Inspect all ditches/swales, catch basins and rip-rap	6/26/17	GC
4	Inspect Former Storm Water Impoundment Basin Cover	6/26/17	GC
5	Inspect Ponded & Backwater Area	6/26/17	GC

COMMENTS

Ground Water Extraction System #3 : uncovered line by SUMPA

Ground Water Extraction System : #4 : due to inclement weather and incoming storm clouds Water not removed from extraction wells

→ go up to the computer : Jump Drive on panel door

Swap Jump drive & download files, and delete so it can be swapped

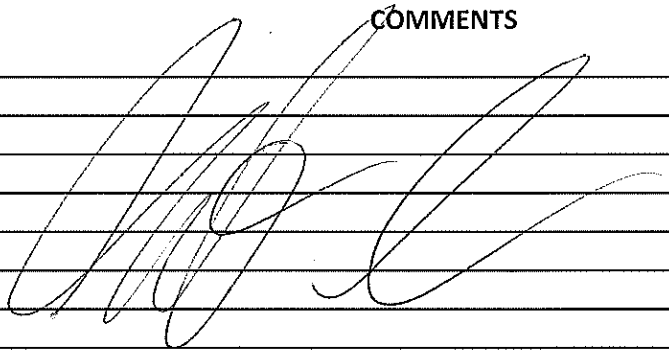
Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Quarterly Activities - Quarter/Year 7/3/17

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Calibrate discharge flow meters	7/3/17	GC
2	Inspect discharge monitoring program for conformity	7/3/17	GC
	Site Security		
1	Inspect access roads for damage	7/3/17	GC
2	Inspect entire fence line and repair if necessary	7/3/17	GC
3	Inspect all locks and gates in upper and lower area	7/3/17	GC
4	Inspect all locks and gates across street	7/3/17	GC
5	Inspect old remediation building and fence line	7/3/17	GC
6	Inspect offsite wells and for proper security	7/3/17	GC
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	7/3/17	GC
2	Discharge piping in EPS	7/3/17	GC
3	Inspect vegetation for uncovered electrical lines	7/3/17	GC
4	Inspect all vaults for leaks or standing water	7/3/17	GC
	Site Monitoring		
1	Inspect outfall structures along Hudson River	7/3/17	GC
2	Inspect all roadways	7/3/17	GC
3	Inspect all ditches/swales, catch basins and rip-rap	7/3/17	GC

COMMENTS



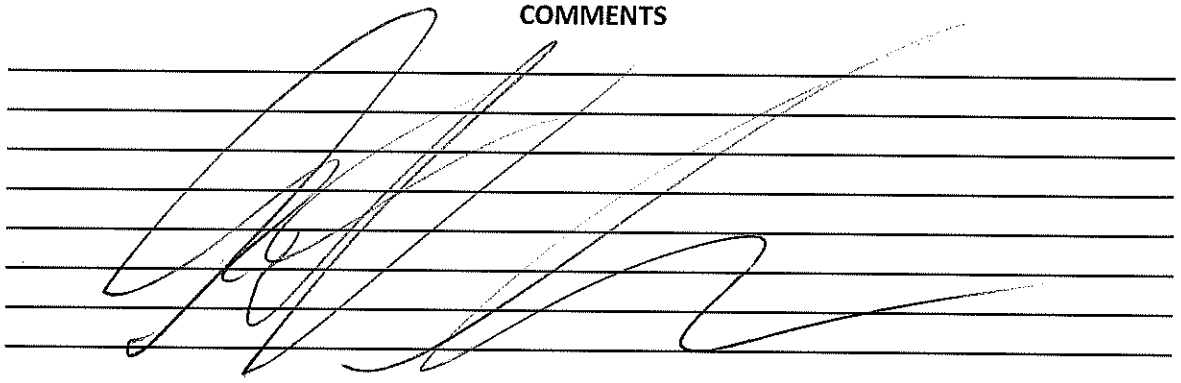
Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Quarterly Activities - Quarter/Year 4Q 2017

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Calibrate discharge flow meters	11/6	GC
2	Inspect discharge monitoring program for conformity	11/6	GC
	Site Security		
1	Inspect access roads for damage	11/6	GC
2	Inspect entire fence line and repair if necessary	11/6	GC
3	Inspect all locks and gates in upper and lower area	11/6	GC
4	Inspect all locks and gates across street	11/6	GC
5	Inspect old remediation building and fence line	11/6	GC
6	Inspect offsite wells and properties for proper security	11/6	GC
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	11/6	GC
2	Discharge piping in EPS	11/6	GC
3	Inspect vegetation for uncovered electrical lines	11/6	GC
4	Inspect all vaults for leaks or standing water	11/6	GC
	Site Monitoring		
1	Inspect outfall structures along Hudson River	11/6	GC
2	Inspect all roadways	11/6	GC
3	Inspect all ditches/swales, catch basins and rip-rap	11/6	GC
4	Inspect Former Storm Water Impoundment Basin Cover	11/6	GC
5	Inspect Ponded & Backwater Area	11/6	GC

COMMENTS



Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Monthly Activities - Month/Year Jan 2017

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		1/4/17	KA
2	Record pH and flow meter readings in EPS		1/3/17	MM
3	Record pH and flow readings at POTW		1/4/17	CA
4	Submit samples to laboratry for analysis		1/4/17	EA
	Site Security			
1	Gates secured & locked		1/4/17	KA
2	Access roads		1/4/17	KA
3	Site utilities operational		1/4/17	KA
4	Inspect fire extinguishers and sign tag		1/4/17	KA
5	Inspect chemical storage cabinets		1/4/17	KA
6	Inspect all fence lines for holes or breaks		1/4/17	KA
7	Inspect all buildings for security		1/4/17	KA
	Site Monitoring			
1	Inspect landfill cap		1/4/17	KA
2	Vegitative cover		1/4/17	KA
3	Cement company pond (Geotextile & stone)		1/4/17	KA
4	Inspect rip-rap		1/4/17	KA
5	Inspect ditches/swales and catch basins		1/4/17	KA
6	Hudson River bank		1/4/17	KA

COMMENTS

Access roads on west side of site are icy/slushy

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Monthly Activities - Month/Year Feb. 2017

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		2/1/17	KA
2	Record pH and flow meter readings in EPS		2/1/17	KA
3	Record pH and flow readings at POTW		2/1/17	KA
4	Submit samples to laboratry for analysis		2/1/17	KA
	Site Security			
1	Gates secured & locked		2/1/17	KA
2	Access roads		2/1/17	KA
3	Site utilities operational		2/1/17	KA
4	Inspect fire extinguishers and sign tag		2/1/17	KA
5	Inspect chemical storage cabinets		2/1/17	KA
6	Inspect all fence lines for holes or breaks		2/1/17	KA
7	Inspect all buildings for security		2/1/17	KA
	Site Monitoring			
1	Inspect landfill cap		2/1/17	KA
2	Vegitative cover		2/1/17	KA
3	Cement company pond (Geotextile & stone)		2/1/17	KA
4	Inspect rip-rap		2/1/17	KA
5	Inspect ditches/swales and catch basins		2/1/17	KA
6	Hudson River bank		2/1/17	KA

COMMENTS

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Monthly Activities - Month/Year March 2017

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		3/2/17	KA
2	Record pH and flow meter readings in EPS		3/2/17	KA
3	Record pH and flow readings at POTW		3/2/17	KA
4	Submit samples to laboratry for analysis		3/2/17	KA
	Site Security			
1	Gates secured & locked		3/2/17	KA
2	Access roads		3/2/17	KA
3	Site utilities operational		3/2/17	KA
4	Inspect fire extinguishers and sign tag		3/2/17	KA
5	Inspect chemical storage cabinets		3/2/17	KA
6	Inspect all fence lines for holes or breaks		3/2/17	KA
7	Inspect all buildings for security		3/2/17	KA
	Site Monitoring			
1	Inspect landfill cap		3/2/17	KA
2	Vegitative cover		3/2/17	KA
3	Cement company pond (Geotextile & stone)		3/2/17	KA
4	Inspect rip-rap		3/2/17	KA
5	Inspect ditches/swales and catch basins		3/2/17	KA
6	Hudson River bank		3/2/17	KA

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year April 2017
Date of visit: 4/10/17
O&M Tech(s): Katie Angel & Garrett Gouse

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		4/10/17	KA
2	Record pH and flow meter readings in EPS		4/10/17	KA
3	Record pH and flow readings at POTW		4/10/17	KA
4	Submit samples to laboratry for analysis		4/10/17	KA
	Site Security			
1	Gates secured & locked		4/10/17	KA
2	Access roads		4/10/17	KA
3	Site utilities operational		4/10/17	KA
4	Inspect fire extinguishers and sign tag		4/10/17	KA
5	Inspect all fence lines for holes or breaks		4/10/17	KA
6	Inspect all buildings for security		4/10/17	KA
	Site Monitoring			
1	Inspect landfill cap		4/10/17	KA
2	Vegitative cover		4/10/17	KA
3	Cement company pond (Geotextile & stone)		4/10/17	KA
4	Inspect rip-rap		4/10/17	KA
5	Inspect ditches/swales and catch basins		4/10/17	KA
6	Hudson River bank		4/10/17	KA

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.

Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 5/17
Date of visit: 5/2/17
O&M Tech(s): Garrett/Crowe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples	Collected @ 1030	5/2/17	GC
2	Record pH and flow meter readings in EPS		5/2/17	GC
3	Record pH and flow readings at POTW		5/2/17	GC
4	Submit samples to laboratry for analysis		5/2/17	GC
	Site Security			
1	Gates secured & locked		5/2/17	GC
2	Access roads		5/2/17	GC
3	Site utilities operational		5/2/17	GC
4	Inspect fire extinguishers and sign tag		5/2/17	GC
5	Inspect all fence lines for holes or breaks		5/2/17	GC
6	Inspect all buildings for security		5/2/17	GC
	Site Monitoring			
1	Inspect landfill cap		5/2/17	GC
2	Vegitative cover		5/2/17	GC
3	Cement company pond (Geotextile & stone)		5/2/17	GC
4	Inspect rip-rap		5/2/17	GC
5	Inspect ditches/swales and catch basins		5/2/17	GC
6	Hudson River bank		5/2/17	GC

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 6/17
Date of visit: 6/6/17
O&M Tech(s): Garrett Crowe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		6/6/17	GC
2	Record pH and flow meter readings in EPS		6/6/17	GC
3	Record pH and flow readings at POTW		6/6/17	GC
4	Submit samples to laboratry for analysis		6/6/17	GC
	Site Security			
1	Gates secured & locked		6/6/17	GC
2	Access roads		6/6/17	GC
3	Site utilities operational		6/6/17	GC
4	Inspect fire extinguishers and sign tag		6/6/17	GC
5	Inspect all fence lines for holes or breaks		6/6/17	GC
6	Inspect all buildings for security		6/6/17	GC
	Site Monitoring			
1	Inspect landfill cap		6/6/17	GC
2	Vegitative cover	brass needs to be cut	6/6/17	GC
3	Cement company pond (Geotextile & stone)		6/6/17	GC
4	Inspect rip-rap		6/6/17	GC
5	Inspect ditches/swales and catch basins		6/6/17	GC
6	Hudson River bank		6/6/17	GC

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 7/17
Date of visit: 7/3/17
O&M Tech(s): Garrett Lowe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples	Yes	7/3/17	GL
2	Record pH and flow meter readings in EPS	Yes	7/3/17	GL
3	Record pH and flow readings at POTW	Yes	7/3/17	GL
4	Submit samples to laboratry for analysis	Yes	7/3/17	GL
	Site Security			
1	Gates secured & locked	Yes	7/3/17	GL
2	Access roads	Yes	7/3/17	GL
3	Site utilities operational	Yes	7/3/17	GL
4	Inspect fire extinguishers and sign tag	Yes	7/3/17	GL
5	Inspect all fence lines for holes or breaks	Yes	7/3/17	GL
6	Inspect all buildings for security	Yes	7/3/17	GL
	Site Monitoring			
1	Inspect landfill cap	Yes/good	7/3/17	GL
2	Vegitative cover	Yes/good	7/3/17	GL
3	Cement company pond (Geotextile & stone)	good	7/3/17	GL
4	Inspect rip-rap	good	7/3/17	GL
5	Inspect ditches/swales and catch basins	good	7/3/17	GL
6	Hudson River bank	good	7/3/17	GL

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 6/17
Date of visit: 8/1/17
O&M Tech(s): Garrett Crowl

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		8/1/17	GC
2	Record pH and flow meter readings in EPS		8/1/17	GC
3	Record pH and flow readings at POTW		8/1/17	GC
4	Submit samples to laboratry for analysis		8/2/17	GC
	Site Security			
1	Gates secured & locked		8/1/17	GC
2	Access roads		8/1/17	GC
3	Site utilities operational		8/1/17	GC
4	Inspect fire extinguishers and sign tag		8/1/17	GC
5	Inspect all fence lines for holes or breaks		8/1/17	GC
6	Inspect all buildings for security		8/1/17	GC
	Site Monitoring			
1	Inspect landfill cap		8/1/17	GC
2	Vegitative cover	Knee high	8/1/17	GC
3	Cement company pond (Geotextile & stone)		8/1/17	GC
4	Inspect rip-rap		8/1/17	GC
5	Inspect ditches/swales and catch basins		8/1/17	GC
6	Hudson River bank		8/1/17	GC

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 9/17
Date of visit: 9/5/17
O&M Tech(s): Garrett Crowe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		9/5	GC
2	Record pH and flow meter readings in EPS		9/5	GC
3	Record pH and flow readings at POTW		9/5	GC
4	Submit samples to laboratry for analysis	Submitting tomorrow AM	9/5	GC
	Site Security			
1	Gates secured & locked	✓	9/5	GC
2	Access roads	✓	9/5	GC
3	Site utilities operational	✓	9/5	GC
4	Inspect fire extinguishers and sign tag	✓	9/5	GC
5	Inspect all fence lines for holes or breaks	✓	9/5	GC
6	Inspect all buildings for security	✓	9/5	GC
	Site Monitoring			
1	Inspect landfill cap	✓	9/5	GC
2	Vegitative cover	✓	9/5	GC
3	Cement company pond (Geotextile & stone)	✓	9/5	GC
4	Inspect rip-rap	✓	9/5	GC
5	Inspect ditches/swales and catch basins	✓	9/5	GC
6	Hudson River bank	✓	9/5	GC

COMMENTS

[signature]

Ciba-Geigy/Hercules Incorporated - Glens Falls, NY

O&M Completion Log

Routine Monthly Activities - Month/Year 10/17

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		10/4	GC
2	Record pH and flow meter readings in EPS		10/4	GC
3	Record pH and flow readings at POTW		10/4	GC
4	Submit samples to laboratry for analysis		10/4	GC
	Site Security			
1	Gates secured & locked		10/4	GC
2	Access roads		10/4	GC
3	Site utilities operational		10/4	GC
4	Inspect fire extinguishers and sign tag		10/4	GC
5	Inspect chemical storage cabinets		10/4	GC
6	Inspect all fence lines for holes or breaks		10/4	GC
7	Inspect all buildings for security		10/4	GC
	Site Monitoring			
1	Inspect landfill cap		10/4	GC
2	Vegitative cover		10/4	GC
3	Cement company pond (Geotextile & stone)		10/4	GC
4	Inspect rip-rap		10/4	GC
5	Inspect ditches/swales and catch basins		10/4	GC
6	Hudson River bank		10/4	GC

COMMENTS

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year November 2017
Date of visit: 11/6/17 - 11/7/17
O&M Tech(s): Garrett Lowe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		11/6	GL
2	Record pH and flow meter readings in EPS		11/7	GL
3	Record pH and flow readings at POTW		11/6	GL
4	Submit samples to laboratry for analysis		11/7	GL
	Site Security			
1	Gates secured & locked		11/6	GL
2	Access roads		11/6	GL
3	Site utilities operational		11/6	GL
4	Inspect fire extinguishers and sign tag		11/6	GL
5	Inspect all fence lines for holes or breaks		11/6	GL
6	Inspect all buildings for security		11/6	GL
	Site Monitoring			
1	Inspect landfill cap		11/6	GL
2	Vegitative cover		11/6	GL
3	Cement company pond (Geotextile & stone)		11/7	GL
4	Inspect rip-rap		11/6	GL
5	Inspect ditches/swales and catch basins		11/6	GL
6	Hudson River bank		11/6	GL

COMMENTS

Winterization Complete

Initial Issue Date:
Revision Date: 1/6/2017

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 12/17
Date of visit: 12/11/17
O&M Tech(s): Garrett Croux / Katie angle

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Collect monthly discharge samples		12/11/17	GC
2	Record pH and flow meter readings in EPS		12/11/17	GC
3	Record pH and flow readings at POTW		12/11/17	GC
4	Submit samples to laboratry for analysis		12/11/17	GC
	Site Security			
1	Gates secured & locked		12/11/17	GC
2	Access roads		12/11/17	GC
3	Site utilities operational		12/11/17	GC
4	Inspect fire extinguishers and sign tag		12/11/17	GC
5	Inspect all fence lines for holes or breaks		12/11/17	GC
6	Inspect all buildings for security		12/11/17	GC
	Site Monitoring			
1	Inspect landfill cap		12/11/17	GC
2	Vegitative cover		12/11/17	GC
3	Cement company pond (Geotextile & stone)		12/11/17	GC
4	Inspect rip-rap		12/11/17	GC
5	Inspect ditches/swales and catch basins		12/11/17	GC
6	Hudson River bank		12/11/17	GC

COMMENTS

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 01/03/2017
Time of visit: 0745 - 1700
O&M Tech(s): MEAGHAN MCNATIVEY

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	N/A	—	13.8	1358565.7	0.0	0	0	25.11	Yes	(No)	Yes	(No)
SUMP B	N/A	—	0.0	45629961	0.0	0	0	23.45	Yes	(No)	(Yes)	No
EPS WET WELL	N/A	—	0.0	Net: 2752490 Gross: 6577306	0.0	N/A	N/A	N/A	--	--	Yes	No
MW-OB33	--	--	--	--	--	--	--	N/A	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	N/A	Yes	(No)	(Yes)	No
MH-4	--	--	--	--	--	--	Gauged 1/4/17 --	18.47	Yes	(No)	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.58	Yes	(No)	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	~2.75	Yes	(No)	Yes	(No)	
QUARRY	DRY	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:

- Lock missing on Sump A
- Multiple mice dead in trailer from traps/poison
- Transducer/Barotroll data was not downloaded due to weather (rain).
- Terry Bohn onsite for telemetry system upgrades
- Download transducer data 1/4/2017. Hillside wells MW-OB33 & MW-OB34 were unable to be checked this week due to slippy (slushy) conditions on hillside.
- Removed water from pump house computer room with shop vac.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 1/11/17
Time of visit: 12:15
O&M Tech(s): Katie, Angie

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A		211.82	13.8	13869301	13.6	0	0	25.81	Yes	No	Yes	No
SUMP B	"	212.01	94.6	45914995	--	0	0	24.84	Yes	No	Yes	No
EPS WET WELL	—	14 cm	82.8	Net: 3104850 Gross: 5929673	NA	NA	NA	NA	--	--	Yes	No
MW-OB33	--	--	--	--	--	--	--	14.45	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	--	7.61	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	--	18.83	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	--	32.23	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2 1.10	Yes	No	Yes	No	Ice on edge of river
QUARRY	Dry	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No

Notes: Lock broken on Sump A.

Ice buildup on western access roads.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 1/19/2017
Time of visit: 0815 -
O&M Tech(s): Bryan Rebis

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	C0850 Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	212.50	211.30	13.9	1432137.9	—	—	—	27.16	Yes	No	Yes	No
SUMP B	214.0	213.46	88.1	46194352	88.5	—	—	24.89	Yes	No	Yes	No
EPS WET WELL	NA	NA	NA	Net: 3463946 Gross: 6288761	NA	NA	NA	NA	--	--	Yes	No
MW-OB33	--	--	--	--	--	--	--	7.38	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	--	13.71	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	--	18.62	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	--	32.02	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.05	Yes	No	Yes	No	
QUARRY	Dry	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No

Notes:
Did not check all vaults for water. Limited on time today.
New lock point for Sump A in process of being made. Will be replaced when finished.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 1/26/17
Time of visit: 9:45 -
O&M Tech(s): K. Angel

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	212.50	211.25	0	14555140.9	0	0	0	26.69	(Yes)	No	Yes	(No)
SUMP B	214	212.43	0	46464755	0	0	0	23.43	(Yes)	No	(Yes)	No
EPS WET WELL	NA	NA	80	Net: 3810727 Gross: 6635549	78.7	NA	NA	NA	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.15	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	13.17	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.46	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.71	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.9	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (If no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:

New lock point for Sump A is being made. Will be replaced when ready.

Labeled MW-OB33 & MW-OB34.

Removed water from pump house floor in control room.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 2/1/17
Time of visit: 10:45am -
O&M Tech(s): K. Angel

anteagroup

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	21250	21131	0	1489358.4	0	0	0	26.35	(Yes)	No	Yes	(No)
SUMP B	214	213.48	0	46707699	—	—	—	25.32	(Yes)	No	(Yes)	No
EPS WET WELL	NA	NA	0	Net: 4131383 Gross: 6956198	NA	NA	NA	NA	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.28	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	13.19	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.53	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.86	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.70	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:
New lock for Sump A is being made. Will be replaced when ready

Removed water from EW-A3.

Collect monthly POTW sampling.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 2/6/17
Time of visit: 10:30 -
O&M Tech(s): Katie Angel

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	212.5	211.62	0	15185O2	0	0	0	25.76	(Yes)	No	Yes	(No)
SUMP B	214	212.97	0	46895336	—	0	0	23.22	(Yes)	No	(Yes)	No
EPS WET WELL	NA	14	0	Net: 4379664 Gross: 7204479	NA	NA	NA	NA	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.41	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	13.57	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.61	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	32.15	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.30	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 3/15/17
Time of visit: 10:30am - 4pm
O&M Tech(s): Katie Angell

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	212.50	211.42	13.9	157706[illegible]59	13.5	20	10	26.75	(Yes)	No	Yes	(No)
SUMP B	214.00	213.04	0	171382[illegible]80	—	—	—	23.26	(Yes)	No	Yes	No
EPS WET WELL	NA	14	0	Net: 4832230 Gross: 765704[illegible]50	0	—	—	—	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	—	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	—	Yes	(No)	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.60	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.83	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.00	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section) NA - see notes	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:
Used shop vac to ~~clean~~ remove water in pump house
Access roads have been plowed, rest of site covered w/1ft of snow.

Did not gauge or download data from MW-OB33 & MW-OB34. Too much snow to go down hillside safely.

Most of extraction wells covered with snow. Did not have time to dig out all to check for water

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 2/22/17
Time of visit: 10:30
O&M Tech(s): Katie Angel

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	212.5	211.74	0	1619182.6	0	0	0	25.64	(Yes)	No	Yes	(No)
SUMP B	214.0	213.96	0	47491838	–	–	–	24.83	(Yes)	No	(Yes)	No
EPS WET WELL	NA	NA	0	Net: 5772699 Gross: 7997514	0	–	–	–	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.0	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	12.33	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.48	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.40	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.90	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:
Replaced dessicant beads in Sump A.
Blocks have been installed above hillside wells to tie off to.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 3/2/17
Time of visit: 7:30 am – 5:30
O&M Tech(s): Katie Angel, Jeff Kmitek

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
		21.51										
SUMP A	21.25	[redacted]	13.8	1,681,078	0	—	—	25.20	(Yes)	No	Yes	(No)
SUMP B	21.4	21.316	0	47730981	0	—	—	24.0	(Yes)	No	(Yes)	No
EPS WET WELL	—	14	83.8	Net: 56505306 Gross: 8475329	—	—	—	—	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	6.92	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	11.19	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.49	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	29.85	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	4.50 @ 8:58, 5.80 @ 10:56	Yes	(No)	Yes	(No)	River level changed rapidly in morning
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:
1Q Groundwater sampling event took place all week.
Work being done on canal next to site on & off all week
MW-OB33 & MW-OB34 transducers stopped during sampling on 3/2/17

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 3/9/17
Time of visit: 9:00
O&M Tech(s): Kristie Angel

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Well Level	COMPUTER: GPM	COMPUTER: Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: PSI 2	WELL/SUMP HEAD: DTW	Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	211.46	0	1740941	0	–	–	26.28	(Yes)	No	Yes	(No)
SUMP B	211.5-214	212.41	0	47759041	0	–	–	23.23	Yes	(No)	(Yes)	No
EPS WET WELL	–	–	0	Net: 6031339 Gross: 8856154	–	–	–	–	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.27	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	–	Yes	(No)	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.65	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.21	(Yes)	No	(Yes)	No

STAFF GAUGES: ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.95	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:
Canal wall is still in the process of being fixed

While connecting to transducer at MW-OB33, had some connection issues but was able to connect long enough to download data.

At Sump B was able to connect long enough to varify transducer 0.1ft difference but then link disconnect and was unable to get back on long enought to download data for Sump B or MW-OB34.

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 3/13/17
Time of visit: 11:30 am
O&M Tech(s): Radic Angel

WELL ID	COMPUTER				WELL/SUMP HEAD							
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW	Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	211.52	14.1	177148.0	13.7	4	4	26.74	Yes	(No)	Yes	(No)
SUMP B	211.5-214	213.85	0	47900261	--	--	--	23.99	Yes	(No)	(Yes)	No
EPS WET WELL	—	—	0	Net: 6021998 Gross: 9044814	—	—	—	—	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.41	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	13.05	Yes	(No)	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.72	Yes	(No)	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.79	Yes	(No)	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.0	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	No

Notes:
Transducer Comm Device malfunctioning sent back to manufactor for new Comm cable. Unable to download data without working Comm Device.

Applied new locking mechanism for Sump A will install next visit.

Removed water from EW-A3

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 3/23/17
Time of visit: 11:00
O&M Tech(s): Katie Angel

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	211-212.5	211.61	0	18402789	0	—	—	25.52	(Yes)	No	(Yes)	No
SUMP B	211.5-214	213.90	84.3	48227651	0	—	—	24.13	(Yes)	No	(Yes)	No
EPS WET WELL	—	—	0	Net: 66695 24 Gross: 9494339	—	—	—	—	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	7.34	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	12.43	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.66	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.72	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.05	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	(No)	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)

Notes:
Have rental Troll Comm Device while waiting for replacement.

Sump B flow meter is pretty erratic jumping from 100 gpm to 50 to 100 to 80 all within ~15 sec stretch

Replaced dessicant beads in Sump B

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 3/29/17
Time of visit: 8:40am - 7pm
O&M Tech(s): Katie Angell

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	PSI 2	DTW				
SUMP A	211-212.5	211.39	0	1882898	0	—	—	25.21	(Yes)	No	(Yes)	No
SUMP B	211.5-214	213.76	0	48429912	0	—	—	23.90	(Yes)	No	(Yes)	No
EPS WET WELL	—	—	—	Net: 6940193 Gross: 9765008	—	—	—	—	--	--	(Yes)	No
MW-OB33	--	--	--	--	--	--	--	6.99	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	--	12.33	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	--	18.36	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	--	31.32	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.2	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section) - didn't have time to check	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	(Yes)	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	No

Notes: Power tripped onsite Saturday 3/25/17. Power was reset Mon. 3/27/17 & a wire with a dead short was found. Wed. 3/29/17 back onsite to investigate mystery wire - pump house basement was found flood over 3 ft of water. Used sump pump to begin removing water from basement and pumped into wet well.

Worked with Terry from Aztech to check pump setting at Sump A & B. Sump A pump settings are reporting lower elevations than are actually occuring.

Installed AquaTroll in MW-OB30, and install rugged Trolls in AW-A14, AW-B4, AW-C11 and MW-OB25 as temp measures until new AquaTrolls are aquired.

Installed on 3/30/17

Initial Issue Date 11/3/2016
Revision Date:
Revised By:

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 4/5/17
Time of visit: 0835
O&M Tech(s): Katie Angel

WELL ID	COMPUTER				WELL/SUMP HEAD				Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Well Level	GPM	Totalizer	GPM	PSI 1	GW Elevation	DTW				
SUMP A	211-212.5	212.50	0	1957573	0	—	216.66	23.23	Yes	No	Yes	No
SUMP B	211.5-214	213.51	0	4873848 1	0	—	217.04	19.35	Yes	No	Yes	No
EPS WET WELL	—	—	0	Net: 7397256 Gross: 10222071	—	—	—	—	--	--	Yes	No
MW-OB33	--	--	--	--	--	--	218.12	5.91	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	213.21	10.37	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	220.87	17.99	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	206.14	29.61	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	5.3	Yes	No	Yes	No	
QUARRY	Dry	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No

Notes:

	DTW	GW Elevation	Downloaded?	Replaced cord
MW-OB30	7.03	216.16	Y	
MW-OB25	4.87	233.58	Y	Replaced Rugged Trolls
AW-A14	16.30	200.52	Y	w/ th Aqua
AW-B4	25.21	213.04	Y	Trolls
AW-C11	42.15	196.30	Y	

Aztech onsite to troubleshoot Sump A & Sump B elevation difference and data radio alarm.

Upper section of pump house has been flooded. ~1ft of water still remains in basement, moved sump pump down off of steps to continue removing water

Alarms on 4/3/17 @02:45:10
Data radio fail at sump A & Sump B

PLC - recording Sump A as on but no flow.

Sump A Elevation is still differening at the well and at the computer. Notified Bryan.

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 4/10/17
Time of visit: 10:30 – 1400
O&M Tech(s): K. Angel & G. Crowe

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	212.23	14.0	2052473	13.8	20	27.45	212.44	0.21	(Yes)	No	(Yes)	No
SUMP B	211.5-214	212.12	91.2	49053723	88.5	–	25.12	211.27	0.85	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	105	Net: 7873061 Gross: 7069883	--	--	--	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	7.42	218.77	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	6.71	217.32	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	10.41	213.17	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	6.58	231.87	--	(Yes)	No	(Yes)	No
AW-A14	--	--	--	--	--	--	16.76	220.06	--	(Yes)	No	(Yes)	No
AW-B4	--	--	--	--	--	--	24.51	213.74	--	(Yes)	No	(Yes)	No
AW-C11	--	--	--	--	--	--	41.28	197.17	--	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	18.51	220.35	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	28.72	207.03	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	5.1	Yes	(No)	Yes	(No)	
QUARRY	Dry	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	(Yes)	No	(Yes)	No

Notes: Sump Pump is still pumping water out of Pump Station Basement
Slight differences at Sump A & B between computer reported GW & actual reported GW propably due to difference in time between. Computer readings collected at ~[redacted] 11:15. Sump A gauged at 13:24. Sump B gauged at 15:06.

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 4/17/17
Time of visit: 1039
O&M Tech(s): Garrett L. Katie A.

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	211.87	0.0	2156450.4	14.3	10	28.17	211.69		Yes	No	Yes	No
SUMP B	211.5-214	213.21	0.0	49350878	0.0		23.24	212.60		Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 194263 Gross: 1116207	--	--	--		--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	8.26	217.93	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	6.99	217.04	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	10.86	217.69	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	7.23	231.22	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.83	219.99	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	25.04	213.21	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	41.73	196.72	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.56	220.30	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	29.21	206.64	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	4.9	Yes	No	Yes	No	
QUARRY	DRY	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

4/14 : HH Level Sump A alarm trip @ 14:09
- Water still in basement, below pump float level

AW-B4 : Large ant nest in well case

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 4/24/17
Time of visit: 12:30pm - 5
O&M Tech(s): Katie Angel

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	211.44	13.8	2242147	13.9	10	27.78	212.11	0.67	(Yes)	No	(Yes)	No
SUMP B	211.5-214	213.57	86.7	49648899	90.1	—	24.56	211.83	1.74	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	0	Net: 626953 Gross: 1599897	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	8.11	218.08	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	6.89	217.14	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	9.93	213.65	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	7.41	231.04	--	(Yes)	No	(Yes)	No
AW-A14	--	--	--	--	--	--	16.73	220.09	--	(Yes)	No	(Yes)	No
AW-B4	--	--	--	--	--	--	24.17	214.08	--	(Yes)	No	(Yes)	No
AW-C11	--	--	--	--	--	--	41.07	197.38	--	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	18.50	220.36	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	28.63	201.12	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	4.50	Yes	(No)	Yes	(No)	
QUARRY	1.7	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	(Yes)	No	(Yes)	No

Notes:
Sump A & B computer elevations collected @ 1316

Sump A well elevation collected @ 1328
Sump B well elevation collected @ 1540

Sump pump in Pump Station basement is running

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 5/2/17
Time of visit: 800
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed??	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	211.91	0.0	21341029	14.5	10	27.46	212.43	-.03	(Yes)	No	(Yes) GC	(No)
SUMP B	211.5-214	213.00	0.0	49989570	0.0	—	24.95	211.44	0.00	(Yes)	No	(Yes)	(No) GC
EPS WET WELL	--	--	0.0	Net: 1104749 Gross: 12077696	--	--	--	→	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	8.97	217.22	--	(Yes)	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.21	216.82	--	(Yes)	No	Yes	No
MW-OB34	--	--	--	--	--	--	11.75	211.83	--	(Yes)	No	Yes	No
MW-OB25	--	--	--	--	--	--	7.22	231.83	--	(Yes)	No	Yes	No
AW-A14	--	--	--	--	--	--	16.82	220.00	--	(Yes)	No	Yes	No
AW-B4	--	--	--	--	--	--	26.12	212.13	--	(Yes)	No	Yes	No
AW-C11	--	--	--	--	--	--	41.09	197.36	--	(Yes)	No	Yes	No
MH-4	--	--	--	--	--	--	18.54	220.32	--	(Yes)	No	Yes	No
EW-B5	--	--	--	--	--	--	29.70	206.05	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	4.20'	Yes	(No)	Yes	(No)	Good condition
QUARRY	2.50'	Yes	(No)	Yes	(No)	Good condition

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	Yes	(No)	(Yes)	No
2	All access roads clear? (If no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (If no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (If yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	(Yes)	No	(Yes)	No
9	Standing water in Effluent Pump Station basement area?	(Yes)	No	(Yes)	No

Notes:

#8: Probably due to very heavy Rains last night

Lights out in EPS Wet Well room

#1 Gates near Railroad tracks open (crossing railroad tracks) upon arrival

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 5/8/2017
Time of visit: 10 am - 5 pm
O&M Tech(s): Katie Angell

anteagroup

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	212.39	0	23858676	0	—	27.08	213.81	0.42 *	(Yes)	No	(Yes)	No
SUMP B	211.5-214	213.29	96.3	50264937	0	—	24.16	212.23	1.06 *	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	103.5	Net: 1483076 Gross: 12456028	--	--	--	--	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	7.90	218.29	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	6.80	217.23	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	9.23	214.35	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	6.72	231.73	--	(Yes)	No	(Yes)	No
AW-A14	--	--	--	--	--	--	16.61	220.21	--	(Yes)	No	(Yes)	No
AW-B4	--	--	--	--	--	--	23.68	214.57	--	(Yes)	No	(Yes)	No
AW-C11	--	--	--	--	--	--	40.28	198.17	--	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	18.41	220.45	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	28.22	207.53	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	7.0	Yes	(No)	Yes	(No)	river very high
QUARRY	2.25	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	(Yes)	No	(Yes)	No

Notes:

Still several inches of water in EPS basement, but below sump pump float level

Collected pump

* Terry from Aztech onsite to reset sump control transducer to ~~correct~~ match weekly transducer

Quarry area lock v. rusty, hard to open & close, should be replaced soon

Sump A well set point reset to 209.67 - 211.22

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 5/15/17
Time of visit: 800
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded?	Enclosure Locked/Well Sealed?
SUMP A	211-212.5	210.34	0.0	2462703.8	14.4	6.0	27.92	211.970	0.00	Yes	No
SUMP B	211.5-214	212.03	~~0.04~~ 94.4	5057113.1	94.9	—	23.55	212.84	-0.65	Yes	Yes
EPS WET WELL	--	--	85.1	Net: 1916324 Gross: 12889285	--	--	--	—	--	--	Yes
MW-OB30	--	--	--	--	--	--	8.49	217.70	--	Yes	Yes
MW-OB33	--	--	--	--	--	--	7.06	217.03	--	Yes	Yes
MW-OB34	--	--	--	--	--	--	10.21	213.37	--	Yes	Yes
MW-OB25	--	--	--	--	--	--	7.35	231.10	--	Yes	No
AW-A14	--	--	--	--	--	--	16.77	220.05	--	Yes / No	No
AW-B4	--	--	--	--	--	--	24.5	213.75	--	Yes / No	No
AW-C11	--	--	--	--	--	--	40.49	197.96	--	Yes / No	No
MH-4	--	--	--	--	--	--	18.55	220.31	--	Yes	Yes
EW-B5	--	--	--	--	--	--	28.60	207.15	--	Yes	Yes

STAFF GAUGES

ID	Level	Gauge Obstructed?	Gauge Cleaned?	Comments
RIVER	5.8	No	No	Good conditon
QUARRY	2.3	No	Yes	Large in good condition

SITE INSPECTION

#	Item	Arrival	Departure
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	Yes
2	All access roads clear? (if no, state details in notes section)	Yes	Yes
3	Site utilities operation? (if no, state details in notes section)	Yes	Yes
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	Yes
5	Any visible site erosion? (if yes, state details in notes section)	No	No
6	Any housekeeping issues? (if yes, state details in notes section)	No	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	No	No
8	Standing water in Effluent Pump Station control room?	No	No
9	Standing water in Effluent Pump Station basement area?	Yes	Yes

Notes:

5/12/17 14:58:47 → SUMP B Data Radio failure Alarm - system is working fine now (5/15/17)

5/12/17 14:58:46 → Sump A Data Radio failure Alarm - System is working fine now (5/15/17)

- Mowing By canal
- Canadian Goose family By EPS wet well

#9: about 3" of Water in EPS basement area, temporary Sump off upon arrival GC turned back on

AW-B4 has Large ants nest

EW-A13, A12, A7, A3 water pumped out of enclosures, EW-A2 circuit not working 3-4" in of H2O remains in Vault

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 5/23/17
Time of visit: 9:00am - 6pm
O&M Tech(s): Katie Angel

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	~~211-212.5~~ 209.07 - 211.22 KA	~~[illegible]~~ 209.71	0	2539931	14.0	10	29.39	210.50	0.79	(Yes)	No	(Yes)	No
SUMP B	211.5-214	212.33	91.4	50899821	91.9	–	24.49	211.90	0.43	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	84.4	Net: 237976 Gross: 13340994	--	--	--	–	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	9.98	216.21	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.46	216.57	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	13.41	210.17	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	7.68	230.77	--	(Yes)	No	(Yes)	No
AW-A14	--	--	--	--	--	--	16.81	220.01	--	(Yes)	No	(Yes)	No
AW-B4	--	--	--	--	--	--	28.06	210.19	--	(Yes)	No	(Yes)	No
AW-C11	--	--	--	--	--	--	42.13	196.32	--	(Yes)	No	(Yes)	No
MH-4	--	--	--	--	--	--	18.48	220.38	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	31.04	204.71	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.1	Yes	(No)	Yes	(No)	Gauge no. are getting worn in 2' range.
QUARRY	2.5	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	(Yes)	No	Yes	(No)

Notes:
Aztech replacing sump in EPS basement. Most water pumped out still ~1/2" on west side of room. Aztech also working in Sump A to replace transducer. Sump A off for maintenance @ ~9:50 AW-A14 water level holding steady. Added AW-A13 to gauging list to make sure well isn't plugged. New transducer installed in Sump A. ~~will need to set~~ KA Transducer is set but will need to be rechecked after sit and acclimating in well.
Removed water from EW-A2, EW-A3, EW-A5, EW-B2, EW-A7, EW-A9/B3, EW-A11, ~~[illegible]~~ and EW-A13/B4

~~[illegible] 5/23/17 @ [illegible]~~ KA

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 5/30/17
Time of visit: 1300
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	210.15	0.0	26059445	14.1	5	28.94	210.950	.03	Yes	No	Yes	No
SUMP B	211.5-214	214.00	0.0	51,222,364	0.0	–	22.53	213.86	.08	Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 0.00 Gross: 0.00	--	--	--	/	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	9.47	216.72	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.39	216.64	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	12.69	210.80	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	7.1	231.35	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.76	220.06	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	27.13	211.12	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	41.9	196.55	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.45	220.41	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	30.56	205.19	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.66	Yes	No	Yes	No	
QUARRY	1.6	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
- grass needs to be cut
5/28/17 @ 722 "Data Radio Fail" for Sumps A+B

1430 -

	DTW	GWS Elevation	Computure GWS Elv	Difference
Sump A	28.78	211.110	211.14	.03
Sump B	22.51	213.88	213.96	.08

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 6/6/17
Time of visit: 800
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	210.16	0.0	36757776.8	0.0	5	29.80	210.09	.07	(Yes)	No	(Yes)	No
SUMP B	211.5-214	213.36	0.0	51557333	0.0	—	23.12	213.27	.09	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	79.0	Net: 0.0 Gross: 0.0	--	--	--	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	9.63	216.56	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.38	216.65	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	12.89	210.69	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	7.10	231.35	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	16.76	220.06	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	27.50	210.93	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	4.72	196.73	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.44	220.42	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	30.47	205.28	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.20	Yes	(No)	Yes	(No)	
QUARRY	2.20	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	(Yes)	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	(Yes)	No	(Yes)	No

Notes:
Terry is not sure why EPS well tot. reading 0 and 0, he will look into
#9 : minimal water in basement

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 6/12/17
Time of visit: 1200
O&M Tech(s): Garrett Lowe

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	209.87	13.7	27380161	0.0	Z	29.47	210.40	.04	Yes	No	Yes	No
SUMP B	211.5-214	212.44	0.0	51837153	~		23.74	212.65	.04	Yes	No	Yes	No
EPS WET WELL	--	--	82.1	Net: 382480 Gross: 382480	--	--	--		--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	9.45	216.74	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.35	216.66	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	12.57	211.01	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	7.39	231.06	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.75	220.07	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	26.81	211.39	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	41.6	196.85	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.45	220.41	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	30.31	205.44	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.5	Yes	No	Yes	No	
QUARRY	~1.8	Yes	No	Yes	No	Pond scum on stick

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
#1 = Mowers on site gate open

Stuff for Quartly sampling event
- Water gatorade
- Stakes for wells
- ICE

Alarm: 6/6/17 ~~12639 Data Radio Fail at SUMP A~~
26377 Data Radio Fail @ Sump B

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 6/19 - 6/23
Time of visit: 700
O&M Tech(s): Garrett Crowe

anteagroup

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Seated?	
SUMP A	211-212.5	220.13	14.1	2807660.5	14.1	5	11.57	222.56	~10	(Yes)	No	(Yes)	No
SUMP B	211.5-214	214.83	96.0	52161336	96.0	—	17.00	214.39	~10	Yes	No	Yes	No
EPS WET WELL	--	--	82.4	Net: 143810 Gross: 421420	--	--	--		--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	9.26	216.93	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	6.34	217.69	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	13.5	210.08	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	7.5	236.95	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	16.25	220.57	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	28.11	210.14	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	42.35	196.10	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	17.87	221.05	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	30.66	205.09	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.40	(Yes)	No	Yes	(No)	Heavy scum buildup on bottom of gauge
QUARRY	1.60	Yes	(No)	Yes	(No)	Scum on bottom of gauge

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	(Yes)	No	Yes	(No)
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	Yes	(No)	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	(Yes)	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:
#1 → Terry and Katie on site
#3 → System down

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 6/26/17
Time of visit: 1030
O&M Tech(s): Garrett L. Nates.

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	209.45	13.8	285 707 8.5	0.0	5	29.16	210.13	.07	Yes	No	Yes	No
SUMP B	211.5-214	211.78	0.0	52 353 537	0.0	—	24.07	212.32	.00	Yes	No	Yes	No
EPS WET WELL	--	--	92.4	Net: 4070650 Gross: 1085260	--	--	--	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	9.82	216.37	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.28	216.75	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	13.40	210.18	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	7.79	230.66	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.86	219.96	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	27.85	210.46	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	42.28	196.17	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.53	220.13	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	30.96	264.79	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.6	Yes	No	Yes	No	1 Bits of Scum on gauge
QUARRY	1.8	Yes	No	Yes	No	Some ~~Scum~~ Scum on gauge

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
#9 Small amount of moisture around sump, small amount of water in sump

Alarms @ SUMP A + B @ 12:22 on 6/23/17 HH Levels

	Comp 1504	Remote Access	Actual 1514	diff.
Sump A	210.21	1514: 210.62	29.34 + 210.55	.07
Sump B	213.52	1518 213.61	1518 32.78 + 213.61	.00

#4: due to afternoon thunderstorms unable to remove water from extraction wells

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 7/3/17
Time of visit: 800
O&M Tech(s): Garrett/Reed

anteagroup

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	215.44	13.8	29349402	14.0	7	24.46	215.43	.00	Yes	No	Yes	No
SUMP B	211.5-214	212.60	43.5	52721184	0.0	—	24.25	212.14	.07	Yes	No	Yes	No
EPS WET WELL	--	--	86.0	Net: 172130 Gross: 1578760	--	--	--		--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	7.19	219.00	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	6.67	217.36	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	10.95	212.63	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	6.52	231.93	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.82	220.00	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	25.17	213.03	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	40.54	147.87	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.57	220.29	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	28.95	206.80	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	4.8	Yes	No	Yes	No	gauge clean
QUARRY	.2	Yes	No	Yes	No	gauge clean

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
#8: heavy Rains Lately
#9: Likely due to heavy rains, very little water
Alarm:
7/1/17 18:02 → AC Power outage @ pump house
7/1/17 20:48 → HH Level Sump A

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: ~~7/13/17~~ 7/10/17
Time of visit: ~~0900~~ 1030
O&M Tech(s): ~~[illegible]~~ KA

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WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	210.34	~~[illegible]~~ 13.7	~~[illegible]~~ 30619087	13.5	5	2.60	210.29	0.05	Yes	No	Yes	No
SUMP B	211.5-214	211.81	0	53120683	0	—	24.54	211.85	.04	Yes	No	Yes	No
EPS WET WELL	--	--	0	Net: 747970 Gross: 217590	--	--	--	NA	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--			--	~~Yes~~	No	Yes	No
MW-OB33	--	--	--	--	--	--			--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--			--	Yes	No	Yes	No
MW-OB26	--	--	--	--	--	--			--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--			--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--			--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--			--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--			--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	29.27	206.48	--	Yes	No	Yes	No

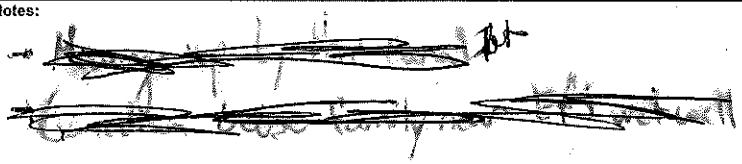
STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.80	Yes	No	Yes	No	Vegetation starting to over grow gauge
QUARRY	2.4	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section) Not checked	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:



- Due to technical difficulties only able to down load data from Sump A & B, and EW-B5

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 07/18/2017
Time of visit: 8:00
O&M Tech(s): Garrett Crowe, Nate Suhadolnik

anteagroup

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-221	213.73	13.4	31630555	0.0	5	28.73	211.160		Yes	No	Yes	No
SUMP B	213.14	213.22	0.0	53501496	0.0		23.95	212.44		Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 16680 Gross: 2761420	--	--			--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	9.03	217.16	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	9.29	216.74	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	13.59	216.99	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	2.91	230.54	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.83	219.99	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	26.61	211.64	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	40.71	197.74	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.50	220.36	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	29.18	205.77	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.46 ft	Yes	No	Yes	No	
QUARRY	2.60 ft	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	No	Yes	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
3	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
4	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
9	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
10	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

#7 ; Get more water / TAPE measur broke from trailor

#9 ; heavy Storms small amount of water

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 7/24 - 7/26
Time of visit: 900
O&M Tech(s): Garrett Crowe

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WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-225	210.32	13.8	3248582.5	0.0	5	-30S	209.64		(Yes)	No	(Yes)	No
SUMP B	211-214	213.54	91.8	33861275	83.9	—	-23.15	213.24		(Yes)	No	(Yes)	No
EPS WET WELL	--	--	0.0	Net: 425870 Gross: 3185760	--	--	-	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	9.80	216.39	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.44	216.59	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	13.36	210.22	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	7.97	230.48	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	16.88	219.94	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	210.88 - 27.37		--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	41.02	197.43	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.55	220.31	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	36.21	205.54	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.2	Yes	(No)	Yes	(No)	
QUARRY	2.5	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	(Yes)	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

7/26/17 telemetry

	time	DTW	Comp Elv.	Actual Elv.	dif.
Sump B	1149	24.26	212.12	212.13	.01
Sump A	1152	29.70	210.26	210.19	.07

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 7/31/17 & 8/1/17
Time of visit: 830 am
O&M Tech(s): Garrett Crowe

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WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	210.06	13.8	33058293	0.0	5	29.16	210.73	.06	Yes	No	Yes	No
SUMP B	211-214	213.39	0.0	54131891	0.0	—	22.41	213.68	.01	Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 77650 Gross: 3543240	--	--			--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	10.25	215.94	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.60	216.43	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	14.21	209.31	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	8.24	230.21	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.97	219.45	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	28.58	204.67	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	41.98	196.47	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.61	220.25	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	31.25	204.50	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.3	Yes	No	Yes	No	
QUARRY	2.4	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	No	Yes	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
3	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
4	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
9	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
10	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

AC Power Outage @ pump house 1:35 am 7/31/17

Telemetry 8/1/17	time	DTW	Actual GWE	Computer GWE	Diff.
Sump B	1014	22.69	213.70	213.69	.01
Sump A	1019	29.80	210.09	210.15	.06

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 8/7/17 - 8/8/17
Time of visit: 830
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.8	~~210.37~~ 216.37	0.0	33649079	0.0	5	~~24.38~~ 24.74	210.51	.06	(Yes)	No	(Yes)	No
SUMP B	210.5-214	24.65	0.0	54445807	0.0	—		211.65	.05	(Yes)	No	(Yes)	No
EPS WET WELL	--	211.60	82.8	Net: 474410 Gross: 3946011	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.42	215.77	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.65	216.38	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	14.58	209.00	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	8.34	230.11	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	16.97	219.55	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	28.92	209.33	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	42.39	196.86	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.61	220.75	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	31.75	204.00	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.1	Yes	(No)	Yes	(No)	thick layer of scum @ very bottom of gauge
QUARRY	2.4	(Yes)	No	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	(Yes)	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

None

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 8/14 - 8/15/2017
Time of visit: 830
O&M Tech(s): Garrett Crowe

anteagroup

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM 13.8 GA		GPM	PSI 1	DTW	GW Elevation 221.64	8/15				
SUMP A	211-212.5	217.93	14.2	33946023	14.2	5	18.25	~~1337~~	.02	Yes	No	Yes	No
SUMP B	211.5-214	212.90	0.0	64612780	0.0	—	15.59	~~1445~~ 220.80	.06	Yes	No	Yes	No
EPS WET WELL	--	--	79.6	Net: 689670 Gross: 4155276	--	--	—	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	9.94	216.75	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	6.38	217.25	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	14.6	208.98	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	8.47	229.58	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	12.32	220.50	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	29.22	209.03	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	43	195.45	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	17.86	221.00	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	32.13	207.07	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.2	Yes	No	Yes	No	
QUARRY	2.6	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	No	Yes	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
3	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
4	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
9	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
10	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

- Removed water from flooded extraction well vaults

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 8/21 - 8/22
Time of visit: 800
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A		209.96	13.7	34563920	14.0	5	29.22	210.67		(Yes)	No	(Yes)	No
SUMP B		213.81	0.0	54906466	0.0	—	24.01	212.38		(Yes)	No	(Yes)	No
EPS WET WELL	--	--	0.0	Net: 1081470 Gross: 4547060	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.59	215.60	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.59	216.44	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	14.41	209.17	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	8.58	229.87	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	16.93	219.89	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	29.17	209.68	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	43.13	195.32	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.52	220.34	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	32.19	203.56	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.3	Yes	(No)	Yes	(No)	
QUARRY	2.5	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	(No)	Yes	(No)
2	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (If no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (If no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (If yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
6	Any visible site erosion? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

1217 EPS well registering reverse flow, Sump A just turned off.

8/22/17 telemetry

	time	DTW	Actual GW Elv.	computer Elv.	difference
Sump B	1228	22.25	214.14	213.93	.21
Sump A	1236	29.53	210.36	210.42	.06

#1: Sump B telemetry off

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 08/28/2017
Time of visit: 10:20
O&M Tech(s): Nate Suhadolnik

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A		209.79	0.0	34937180	0.0	0.0	29.42	210.47	0.04	(Yes)	No	(Yes)	No
SUMP B		213.02	95.1	55160780	0.0	—	23.84	212.55	0.07	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	0.0	Net: 1398970 Gross: 4864570	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.84	215.35	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.66	216.37	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	14.89	208.69	--	(Yes)	No	(Yes)	No
MW-OB25	--	--	--	--	--	--	8.72	229.73	--	(Yes)	No	(Yes)	(No)
AW-A14	--	--	--	--	--	--	16.95	219.87	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	29.63	208.62	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	43.68	194.77	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.54	220.32	--	(Yes)	No	(Yes)	No
EW-B5	--	--	--	--	--	--	32.68	203.07	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.0	Yes	(No)	Yes	(No)	Heavy scum towards bottom
QUARRY	2.6	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

8/28/17 Telemetry

	Time	DTW	Actual GW Elev.	Computer Elev	Difference	
Sump A	15:00	30.01	209.88	209.92	0.04	✓
Sump B	15:10	22.96	213.43	213.36	0.07	✓

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 4/5/17
Time of visit: 1200
O&M Tech(s): Garrett Crowe

antea group

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Seated?	
SUMP A		210.88	0.0	3539 4112	0.0	5	24.53	210.36	.05	Yes	No	Yes	No
SUMP B		213.86	0.0	5549 5243	0.0	—	22.47	213.42	.15	Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 1822340 Gross: 5287930	--	--	—	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	10.60	215.59	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.62	216.44	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	14.86	208.12	--	Yes	No	Yes	No
MW-OB26	--	--	--	--	--	--	8.77	224.64	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.95	219.89	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	29.64	208.61	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	43.65	194.80	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.55	220.31	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	32.64	205.11	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	9	Yes	No	Yes	No	
QUARRY	2.6	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	No	Yes	No
2	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
3	All access roads clear? (If no, state details in notes section)	Yes	No	Yes	No
4	Site utilities operation? (If no, state details in notes section)	Yes	No	Yes	No
5	Standing water in bedrock extraction well vaults? (If yes, state which vaults in notes section)	Yes	No	Yes	No
6	Any visible site erosion? (If yes, state details in notes section)	Yes	No	Yes	No
7	Any housekeeping issues? (If yes, state details in notes section)	Yes	No	Yes	No
8	Any stormwater basin area disturbances? (If yes, state details in notes section)	Yes	No	Yes	No
9	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
10	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

#9: slightly wet on Back left of floor

	telemetry time	DTW	Actual GWE	Computer GWE	Difference
Sump B	1755	24.23 ~~19.64~~	212.20	~~212.01~~ 212.05	.15
Sump A	1803	29.42	210.47	210.52	.05

#1 Sump B off by .15

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 9/11-9/13
Time of visit: 800
O&M Tech(s): Garrett C.

anteagroup

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A		211.12	0.0	35940563	13.3	5	29.73	210.16	.08	(Yes)	No	(Yes)	No
SUMP B		213.89	0.0	65912140	0.0	←	24.71	210.68	.05	(Yes)	No	(Yes)	No
EPS WET WELL	--	--	0.0	Net: 2334330 Gross: 5799920	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.66	215.53	--	(Yes)	No	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.59	216.46	--	(Yes)	No	(Yes)	No
MW-OB34	--	--	--	--	--	--	14.73	208.85	--	(Yes)	No	(Yes)	No
MW-OB26	--	--	--	--	--	--	16.97	214.85	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	9.17	209.33	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	28.58	209.67	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	43.48	194.97	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.54	220.32	--	(Yes)	No	(Yes)	No
EW-B6	--	--	--	--	--	--	32.48	203.27	--	(Yes)	No	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.3	(Yes)	(No)	Yes	(No)	
QUARRY	2.7	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	(Yes)	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	(Yes)	No	(Yes)	No
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	(Yes)	No	(Yes)	No

Notes:

#8: Cement Pond Very High, above Property Fence (top)

9/15/17 System telemetry

	time	DTW	Comp GWE	Actual GWE	diff.
SUMP A	1036	28.88	211.09	211.01	.08
SUMP B	1044	22.45	213.99	213.94	.05

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 09-18-2017
Time of visit: 10:00 AM
O&M Tech(s): Nate Suhadolnik

anteagroup

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	–	209.79	0.0	36105158	0.0	5.0	30.00	209.89	+0.06 ft	Yes	No	Yes	No
SUMP B	–	213.50	0.0	56043710	0.0	–	24.31	212.08	-0.07 ft	Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 2494080 gal Gross: 5959670 gal	--	--	—	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	10.75	215.44	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.64	216.89	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	14.98	208.60	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	8.92	229.53	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.94	219.88	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	29.76	208.49	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	43.61	194.84	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.52	220.34	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	32.67	203.08	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.10 ft	Yes	No	Yes	No	14:43 PM
QUARRY	~~2.75~~ ft	Yes	No	Yes	No	12:30 pm

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	No	Yes	No
2	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
3	All access roads clear? (If no, state details in notes section)	Yes	No	Yes	No
4	Site utilities operation? (If no, state details in notes section)	Yes	No	Yes	No
5	Standing water in bedrock extraction well vaults? (If yes, state which vaults in notes section)	Yes	No	Yes	No
6	Any visible site erosion? (If yes, state details in notes section)	Yes	No	Yes	No
7	Any housekeeping issues? (If yes, state details in notes section)	Yes	No	Yes	No
8	Any stormwater basin area disturbances? (If yes, state details in notes section)	Yes	No	Yes	No
9	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
10	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
10 ⇒ No standing water but floor visibly damp.

Telemetry

	Time	DTW	Actual GWE	Computer GWE	Difference	
Sump A	13:16	29.52	210.37	210.43	0.06	✓
Sump B	14:18	24.27	212.12	212.05	0.07	✓

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 09-25-2017
Time of visit: 9:30
O&M Tech(s): Nate Suhadolnik

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A		210.06	13.2	36453920	13.2	5.0	29.86	210.03	+0.03ft	Yes	(No)	(Yes)	No
SUMP B		212.76	0.0	56348056	0.0	—	23.55	212.84	-0.08 ft	Yes	(No)	(Yes)	No
EPS WET WELL	--	--	76.0	Net: 2859970 Gross: 6325570	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.93	215.26	--	Yes	(No)	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.68	216.35	--	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--	15.00	208.58	--	Yes	(No)	(Yes)	No
MW-OB25	--	--	--	--	--	--	8.97	229.48	--	Yes	(No)	Yes	(No)
AW-A14	--	--	--	--	--	--	16.97	219.85	--	Yes	(No)	Yes	(No)
AW-B4	--	--	--	--	--	--	29.86	208.35	--	Yes	(No)	Yes	(No)
AW-C11	--	--	--	--	--	--	44.11	194.34	--	Yes	(No)	Yes	(No)
MH-4	--	--	--	--	--	--	18.54	220.32	--	Yes	(No)	(Yes)	No
EW-B5	--	--	--	--	--	--	33.04	202.71	--	Yes	(No)	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.0	Yes	(No)	Yes	(No)	
QUARRY	2.50	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

10: Very damp along walls under stairs, slightly damp along middle of room, No standing water.

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 10/4/17
Time of visit: 1100
O&M Tech(s): GarrettCrowe

antea group

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?	Enclosure Locked/Well Seated?
SUMP A		210.64	0.0	36892769	0.0	5	29.23	210.66	.01	Yes / No	Yes / No
SUMP B		217.96	0.0	56724520	0.0	—	23.10	213.29	.06	Yes / No	Yes / No
EPS WET WELL	--	--	0.0	Net: 3317140 Gross: 6782724	--	--	—	→	--	-- / --	Yes / No
MW-OB30	--	--	--	--	--	--	10.90	214.81	--	Yes / No	Yes / No
MW-OB33	--	--	--	--	--	--	2.72	216.31	--	Yes / No	Yes / No
MW-OB34	--	--	--	--	--	--	15.05	208.13	--	Yes / No	Yes / No
MW-OB25	--	--	--	--	--	--	8.97	229.48	--	Yes / No	Yes / No
AW-A14	--	--	--	--	--	--	16.95	219.87	--	Yes / No	Yes / No
AW-B4	--	--	--	--	--	--	30.09	208.16	--	Yes / No	Yes / No
AW-C11	--	--	--	--	--	--	44.38	194.07	--	Yes / No	Yes / No
MH-4	--	--	--	--	--	--	18.56	226.30	--	Yes / No	Yes / No
EW-B5	--	--	--	--	--	--	33.25	202.50	--	Yes / No	Yes / No

STAFF GAUGES

ID	Level	Gauge Obstructed?	Gauge Cleaned?	Comments
RIVER	1.4	Yes / No	Yes / No	
QUARRY	1.7	Yes / No	Yes / No	

SITE INSPECTION

		Arrival	Departure
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes / No	Yes / No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes / No	Yes / No
3	All access roads clear? (if no, state details in notes section)	Yes / No	Yes / No
4	Site utilities operation? (if no, state details in notes section)	Yes / No	Yes / No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes / No	Yes / No
6	Any visible site erosion? (if yes, state details in notes section)	Yes / No	Yes / No
7	Any housekeeping issues? (if yes, state details in notes section)	Yes / No	Yes / No
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes / No	Yes / No
9	Standing water in Effluent Pump Station control room?	Yes / No	Yes / No
10	Standing water in Effluent Pump Station basement area?	Yes / No	Yes / No

Notes:
- Still high water in cement plant Pond

10/4/17 telemetry

	time	DTW	Actual GWE	Computer GWE	Difference
SUMP B	1300	23.14	213.25	213.19	.06
Sump A	1511	29.27	210.62	210.69	.07

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

anteagroup

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 10-09-2017
Time of visit: 10:00
O&M Tech(s): Nate Suhadolnik

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A		211.05	0.0	37116820	0.0	5	28.96	210.99	+0.06	Yes	**No**	**Yes**	No
SUMP B		213.74	0.0	56918304	0.0	—	22.58	213.81	-0.07	Yes	**No**	**Yes**	No
EPS WET WELL	--	--	0.0	Net: 127560 Gross: 7016880	--	--	—	—	--	--	--	**Yes**	No
MW-OB30	--	--	--	--	--	--	10.88	214.83	--	Yes	**No**	**Yes**	No
MW-OB33	--	--	--	--	--	--	7.65	216.38	--	Yes	**No**	**Yes**	No
MW-OB34	--	--	--	--	--	--	14.64	208.94	--	Yes	**No**	**Yes**	No
MW-OB25	--	--	--	--	--	--	9.03	229.42	--	Yes	**No**	Yes	**No**
AW-A14	--	--	--	--	--	--	17.02	219.80	--	Yes	**No**	Yes	**No**
AW-B4	--	--	--	--	--	--	29.77	208.48	--	Yes	**No**	Yes	**No**
AW-C11	--	--	--	--	--	--	44.27	194.18	--	Yes	**No**	Yes	**No**
MH-4	--	--	--	--	--	--	18.61	220.25	--	Yes	**No**	**Yes**	No
EW-B5	--	--	--	--	--	--	33.02	202.73	--	Yes	**No**	**Yes**	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	0.9	Yes	**No**	Yes	**No**	
QUARRY	1.6	Yes	**No**	Yes	**No**	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	**Yes**	No	**Yes**	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	**Yes**	No	**Yes**	No
3	All access roads clear? (if no, state details in notes section)	**Yes**	No	**Yes**	No
4	Site utilities operation? (if no, state details in notes section)	**Yes**	No	**Yes**	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	**No**	Yes	**No**
6	Any visible site erosion? (if yes, state details in notes section)	**Yes**	No	**Yes**	No
7	Any housekeeping issues? (if yes, state details in notes section)	**Yes**	~~No~~	Yes	**No**
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	**No**	Yes	**No**
9	Standing water in Effluent Pump Station control room?	Yes	**No**	Yes	**No**
10	Standing water in Effluent Pump Station basement area?	Yes	**No**	Yes	**No**

Notes:
6) Evidence of beaver taking down tree that is now leaning on fence by cement pond. Photos taken and sent to PM

10) Area under stairs very damp. Floor in center of room a little damp.

Alarms ⇒ AC Power outage at Pump House - Activated 10-06-17 @ 17:25:15 - Deactivated 10-06-17 @ 17:28:46

7) Antea Group sign from front door of effluent pump station off and laying on ground near door.
↳ Taped back up prior to leaving site

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 10/16/17
Time of visit: 1030
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A		210.56	0.0	37441290	0.0	5.0	29.06	210.83	.10	Yes	(No)	(Yes)	No
SUMP B		213.88	0.0	57180192	0.0	–	22.52	213.87	.02	Yes	(No)	(Yes)	No
EPS WET WELL	–	–	6.0	Net: 792580 Gross: 7334500	–	–	–	–	–	–	–	(Yes)	No
MW-OB30	–	–	–	–	–	–	10.88	215.31	–	Yes	(No)	(Yes)	No
MW-OB33	–	–	–	–	–	–	7.68	216.35	–	Yes	(No)	(Yes)	No
MW-OB34	–	–	–	–	–	–	15.07	208.51	–	Yes	(No)	(Yes)	No
MW-OB25	–	–	–	–	–	–	9.12	229.33	–	Yes	(No)	Yes	(No)
AW-A14	–	–	–	–	–	–	17.03	219.76	–	Yes	(No)	Yes	(No)
AW-B4	–	–	–	–	–	–	29.98	208.27	–	Yes	(No)	Yes	(No)
AW-C11	–	–	–	–	–	–	44.19	194.26	–	Yes	(No)	Yes	(No)
MH-4	–	–	–	–	–	–	18.57	220.27	–	Yes	(No)	(Yes)	No
EW-B6	–	–	–	–	–	–	33.11	202.64	–	Yes	(No)	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.9	Yes	(No)	Yes	(No)	
QUARRY	2.0	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	(Yes)	No	(Yes)	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

telemetry

#	Time	DTW	Actual GWE	Comp. GWE	Diff.
Sump B	1111	22.52	213.87	213.89	.02
Sump A	1131	29.06	210.83	210.93	.10

Cement Pond still high; definet signs of Beavers

Heaters set up in trailor

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 10/25/17
Time of visit: 1530
O&M Tech(s): Ke Angel

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	209.67-211.72	210.58	0	3786949.3	0	—	29.27			Yes	(No)	Yes	No
SUMP B	211.50-214	213.28	0	5753949.7	0	—	22.90			Yes	(No)	Yes	No
EPS WET WELL	--	--	0	Net: 152990 Gross: 776042.9	--	--	—	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	N/A	N/A	--	Yes	(No)	Yes	No
MW-OB33	--	--	--	--	--	--			--	Yes	(No)	Yes	No
MW-OB34	--	--	--	--	--	--			--	Yes	(No)	Yes	No
MW-OB25	--	--	--	--	--	--			--	Yes	(No)	Yes	No
AW-A14	--	--	--	--	--	--			--	Yes	(No)	Yes	No
AW-B4	--	--	--	--	--	--			--	Yes	(No)	Yes	No
AW-C11	--	--	--	--	--	--			--	Yes	(No)	Yes	No
MH-4	--	--	--	--	--	--			--	Yes	(No)	Yes	No
EW-B5	--	--	--	--	--	--			--	Yes	(No)	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	0.8	Yes	(No)	Yes	(No)	Gauge muddy around 2' readings
QUARRY	1.4	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section) not checked ~~N/A~~	Yes	No	Yes	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (If yes, state details in notes section)	(Yes)	No	(Yes)	No
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:
Cement pond still higher than normal levels.

Herb onsite moving pparty.

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 10/3/17
Time of visit: 1525
O&M Tech(s): K. Angel

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	209.67-211.17	210.87	13.2	38145708	0	0	30.04			Yes	(No)	(Yes)	No
SUMP B	211.5-214	212.49	~~5.0~~	57751670	0	—	23.72			Yes	(No)	(Yes)	No
EPS WET WELL	--	--	76.9	Net: 424730 Gross: 8032179	--	--			--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--			--	Yes	(No)	(Yes)	No
MW-OB33	--	--	--	--	--	--			--	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--			--	Yes	(No)	(Yes)	No
MW-OB26	--	--	--	--	--	--			--	Yes	(No)	Yes	No
AW-A14	--	--	--	--	--	--			--	Yes	(No)	Yes	(No)
AW-B4	--	--	--	--	--	--			--	Yes	(No)	Yes	(No)
AW-C11	--	--	--	--	--	--			--	Yes	(No)	Yes	(No)
MH-4	--	--	--	--	--	--			--	Yes	(No)	(Yes)	No
EW-B6	--	--	--	--	--	--			--	Yes	(No)	(Yes)	No

NM

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.45	Yes	(No)	Yes	(No)	
QUARRY	1.8	Yes	(No)	Yes	(No)	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	(Yes)	No	(Yes)	No
2	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
3	All access roads clear? (If no, state details in notes section)	(Yes)	No	(Yes)	No
4	Site utilities operation? (If no, state details in notes section)	(Yes)	No	(Yes)	No
5	Standing water in bedrock extraction well vaults? (If yes, state which vaults in notes section) N/A	Yes	No	Yes	No
6	Any visible site erosion? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any housekeeping issues? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Any stormwater basin area disturbances? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
10	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

Initial Issue Date 11/3/2016
Revision Date: 6/27/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, LLC.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 11/6/17
Time of visit: 930
O&M Tech(s): Garrett Crowe

anteagroup

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Seated?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A		210.55	0.0	3844180	0.0	5	28.75	211.14	.06	Yes	No	Yes	No
SUMP B		212.49	~~97.4~~ 86.6	579.65906	92.9	—	22.92	213.47	.05	Yes	No	Yes	No
EPS WET WELL	--	--	84.6	Net: 187820 Gross: 8293061	--	--	—	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	4.95	215.76	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.38	216.65	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	12.94	210.64	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	9.07	229.38	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	16.98	214.84	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	27.84	210.36	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	42.98	195.47	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	15.60	220.26	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	31.58	204.17	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.41	Yes	No	Yes	No	
QUARRY	1.8	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	System Telemetry checked at Effluent Pump Station Computer Screen. Everything operational?	Yes	No	Yes	No
2	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
3	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
4	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
5	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
6	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
8	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
9	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
10	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

	telemetry time	Actual DTW	Actual GWE	computer GWE	diff.
sump B	1119	23.16	213.23	213.18	.05
sump A	1122	28.82	211.07	211.13	.06

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 11/13/17
Time of visit: 1030
O&M Tech(s): Garrett Crowe

anteagroup

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	211.17	13.8 0.0	38820737	0.0	5	28.80	211.09	.08	Yes	No	Yes	No
SUMP B	211.5-214	211.80	924	58207438	103.4	—	24.61	211.78	.02	Yes	No	Yes	No
EPS WET WELL	--	--	84.4	Net: 496350 Gross: 8601590	--	--	--	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	9.95	215.76	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.47	216.56	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	13.01	210.57	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	8.84	229.56	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	17.02	219.80	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	27.87	210.38	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	43.22	195.23	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.60	220.26	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	31.81	203.94	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.4	Yes	No	Yes	No	
QUARRY	1.1	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

Telemetry

Time	Actual DTW	Actual GWE	Computer GWE	Diff
1233	28.80	211.09	211.17	.08
	24.61	211.78	211.80	.02

SumpA
SumpB

Desiccant Beads Replaced in
- SumpA
- SumpB
- EW-B5
- MW-OB25
- AW-B4

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 11/20 21/17
Time of visit: 9:30 – 11
O&M Tech(s): K. Angel

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	210.816	6.0	39230473	00	0	29.18	210.71	0.106	Yes	No	Yes	No
SUMP B	211.5-214	213.21	6.0	58463848	—	—	23.13	213.26	0.05	Yes	No	Yes	No
EPS WET WELL	--	--	0.0	Net: 81600 Gross: 8933939	--	--	--	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--			--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--			--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--			--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--		NM	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--			--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--			--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--			--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--			--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--			--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	3.05	Yes	No	Yes	No	
QUARRY	1.10	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	~~Yes~~ Not chk	~~No~~	~~Yes~~	~~No~~
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
Aztech onsite replacing wet well pump in pump house
Aztech replace transducer in Sump A with more accurate model on 11/20/17. When checking level on 11/21/17 Aztech onsite to recalibrate after sitting overnight

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

antea group

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 11/28/17
Time of visit: 850
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	210.80	0.0	39568745	0.0	5	29.33	210.56	.24	Yes	No	Yes	No
SUMP B	211.5-214	211.67	92.9	58698846	99.4	—	24.84	211.55	.02	Yes	No	Yes	No
EPS WET WELL	–	–	86.7	Net: 1242720 Gross: 9229510	–	–	–	—	–	–	–	Yes	No
MW-OB30	–	–	–	–	–	–	10.25	215.46	–	Yes	No	Yes	No
MW-OB33	–	–	–	–	–	–	32.40	203.35	–	Yes	No	Yes	No
MW-OB34	–	–	–	–	–	–	13.37	210.21	–	Yes	No	Yes	No
MW-OB25	–	–	–	–	–	–	8.59	329.87	–	Yes	No	Yes	No
AW-A14	–	–	–	–	–	–	17.02	219.80	–	Yes	No	Yes	No
AW-B4	–	–	–	–	–	–	28.43	209.82	–	Yes	No	Yes	No
AW-C11	–	–	–	–	–	–	43.97	194.48	–	Yes	No	Yes	No
MH-4	–	–	–	–	–	–	15.60	220.26	–	Yes	No	Yes	No
EW-B5	–	–	–	–	–	–	7.58	216.45	–	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?	Gauge Cleaned?	Comments
RIVER	2.7	Yes / No	Yes / No	
QUARRY	1.0	Yes / No	Yes / No	Pond Frozen Slightly

SITE INSPECTION

		Arrival	Departure
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes / No	Yes / No
2	All access roads clear? (if no, state details in notes section)	Yes / No	Yes / No
3	Site utilities operation? (if no, state details in notes section)	Yes / No	Yes / No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	N/A did not check	Yes / No
5	Any visible site erosion? (if yes, state details in notes section)	Yes / No	Yes / No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes / No	Yes / No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes / No	Yes / No
8	Standing water in Effluent Pump Station control room?	Yes / No	Yes / No
9	Standing water in Effluent Pump Station basement area?	Yes / No	Yes / No

Notes:
11/25/17 – Alarm – AC Power Outage @ pump house

telemetry:

	time	DTW	Comp. GWE	Actual GWE	Difference
Sump B	932	24.84	211.57	211.55	.02'
Sump A	939	29.33	210.80	210.56	.24'

Sump A 1035 29.24 210.90 210.65 .25'

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 12/4/17
Time of visit: 945
O&M Tech(s): Garrett L., Nate S.

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	210.97	0.0	39830199	0.0	5	28.94	210.95	.02	Yes	No	Yes	No
SUMP B	211.5-214	211.78	~~105.6~~ 94.6	58895776	105.6		24.67	211.72	.06	Yes	No	Yes	No
EPS WET WELL	--	--	85.4	Net: 371650 Gross: 4476881	--	--	--	—	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	10.37	215.34	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	7.62	216.41	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	13.50	210.08	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	8.62	229.83	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	17.02	219.80	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	28.64	209.61	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	43.93	194.52	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	18.60	220.26	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	32.44	203.31	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.60	Yes	No	Yes	No	
QUARRY	1.0	Yes	No	Yes	No	

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (If no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section) N/A	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:

Fire extinguishers in trailer are likely recalled

#4: did not check extraction wells

Telemetry

	Time	DTW	Comp. GWE	Actual GWE	Diff.
Sump A	1130	28.94	210.97	210.95	.02
Sump B	1137	24.67	211.78	211.72	.06

Fire extinguishers onsite
3 16lbs Kiddie w/ plastic
1 : 8lbs kiddie w/plastic

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY
Date of visit: 12/11/18
Time of visit: 809
O&M Tech(s): Garrett Crowe

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
SUMP A	211-212.5	210.66	0.0	NM	0.0	—	~~22.77~~ 29.23	210.73	.07	Yes	(No)	(Yes)	No
SUMP B	211.5-214	213.68	0.0	NM	0.0	5	22.77	213.62	.06	Yes	(No)	(Yes)	No
EPS WET WELL	--	--	NM	Net: NM Gross: NM	--	--	--	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.08	215.63	--	Yes	(No)	(Yes)	No
MW-OB33	--	--	--	--	--	--	~~13.25~~ 7.67	216.36	--	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--	~~14.18~~ 13.17	210.41	--	Yes	(No)	(Yes)	No
MW-OB25	--	--	--	--	--	--	8.21	230.24	--	(Yes)	No	Yes	(No)
AW-A14	--	--	--	--	--	--	17.16	219.64	--	(Yes)	No	Yes	(No)
AW-B4	--	--	--	--	--	--	28.21	210.04	--	(Yes)	No	Yes	(No)
AW-C11	--	--	--	--	--	--	43.62	194.83	--	(Yes)	No	Yes	(No)
MH-4	--	--	--	--	--	--	18.61	220.25	--	Yes	(No)	(Yes)	No
EW-B5	--	--	--	--	--	--	32.03		--	Yes	(No)	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.7	Yes	(No)	Yes	(No)	
QUARRY	NM	~~Yes~~	~~No~~	~~Yes~~	~~No~~	NA

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (If no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section) NA	Yes	No	Yes	No
5	Any visible site erosion? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (If yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 12-18-2017
Time of visit: 9:15
O&M Tech(s): Nate Suhaddnik

WELL ID	COMPUTER			Totalizer	WELL/SUMP HEAD				System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Sealed?	
	Well Setpoint/ Interval	Reported GW Elevation	GPM		GPM	PSI 1	DTW	GW Elevation					
SUMP A	211-212.5	210.60	0.0	40490 917	0.0	5	29.33	210.56	+0.04	Yes	(No)	(Yes)	No
SUMP B	211.5-214	213.70	0.0	50239034	0.0	–	22.59	213.80	-0.03	Yes	(No)	(Yes)	No
EPS WET WELL	--	--	0.0	Net: 824950 Gross: 9930171	--	--	--	—	--	--	--	(Yes)	No
MW-OB30	--	--	--	--	--	--	10.28	215.43	--	Yes	(No)	(Yes)	No
MW-OB33	--	--	--	--	--	--	7.91	216.12	--	Yes	(No)	(Yes)	No
MW-OB34	--	--	--	--	--	--	13.52	210.06	--	Yes	(No)	(Yes)	No
MW-OB25	--	--	--	--	--	--	8.30	230.15	--	Yes	(No)	Yes	(No)
AW-A14	--	--	--	--	--	--	17.37	219.45	--	Yes	(No)	Yes	(No)
AW-B4	--	--	--	--	--	--	28.60	209.65	--	Yes	(No)	Yes	(No)
AW-C11	--	--	--	--	--	--	43.98	194.47	--	Yes	(No)	Yes	(No)
MH-4	--	--	--	--	--	--	18.99	219.87	--	Yes	(No)	(Yes)	No
EW-B5	--	--	--	--	--	--	32.38	203.37	--	Yes	(No)	(Yes)	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	2.45	Yes	(No)	Yes	(No)	River not frozen
QUARRY	0.2	Yes	(No)	Yes	(No)	Quarry Frozen - measured from top of accumulated snow

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	(Yes)	No	(Yes)	No
2	All access roads clear? (if no, state details in notes section)	(Yes)	No	(Yes)	No
3	Site utilities operation? (if no, state details in notes section)	(Yes)	No	(Yes)	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	(No)	Yes	(No)
5	Any visible site erosion? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	(No)	Yes	(No)
8	Standing water in Effluent Pump Station control room?	Yes	(No)	Yes	(No)
9	Standing water in Effluent Pump Station basement area?	Yes	(No)	Yes	(No)

Notes:
Sump B flow alarm activated upon arrival. Has been happening frequently the previous weeks and is due to recharge being slow / taking longer than 8 hours to recharge. PM Cody Hume aware of alarms

Initial Issue Date 11/3/2016
Revision Date: 3/31/2017
Revised By: BR

FORMER HERCULES/CIBA-GEIGY GWES DATA SHEET

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

Date of visit: 12/14/17
Time of visit: 1050
O&M Tech(s): Cornell Crew

anteagroup

WELL ID	COMPUTER: Well Setpoint/ Interval	COMPUTER: Reported GW Elevation	COMPUTER: GPM	Totalizer	WELL/SUMP HEAD: GPM	WELL/SUMP HEAD: PSI 1	WELL/SUMP HEAD: DTW	WELL/SUMP HEAD: GW Elevation	System vs. Actual GW Elevation	Datalogger Downloaded ?		Enclosure Locked/Well Seated?	
SUMP A	211-212.5	210.96	0.0	48796070	0.0	5	23.95	210.94	.02	Yes	No	Yes	No
SUMP B	211.5-214	212.14	0.0	59491734	0.0	—	24.33	212.06	.08	Yes	No	Yes	No
EPS WET WELL	--	--	84.5	Net: 1152150 Gross: 1025 7590	--	--	--	→	--	--	--	Yes	No
MW-OB30	--	--	--	--	--	--	10.51	215.58	--	Yes	No	Yes	No
MW-OB33	--	--	--	--	--	--	8.01	216.02	--	Yes	No	Yes	No
MW-OB34	--	--	--	--	--	--	14.93	209.19	--	Yes	No	Yes	No
MW-OB25	--	--	--	--	--	--	8.13	230.32	--	Yes	No	Yes	No
AW-A14	--	--	--	--	--	--	17.15	219.67	--	Yes	No	Yes	No
AW-B4	--	--	--	--	--	--	29.98	208.27	--	Yes	No	Yes	No
AW-C11	--	--	--	--	--	--	44.64	193.81	--	Yes	No	Yes	No
MH-4	--	--	--	--	--	--	13.74	220.12	--	Yes	No	Yes	No
EW-B5	--	--	--	--	--	--	33.27	202.48	--	Yes	No	Yes	No

STAFF GAUGES

ID	Level	Gauge Obstructed?		Gauge Cleaned?		Comments
RIVER	1.4	Yes	No	Yes	No	Iced over measured @ estimated height
QUARRY	0.6	Yes	No	Yes	No	Iced over @ top of snow

SITE INSPECTION

		Arrival		Departure	
1	All Gates and buildings secured and locked? (if no and there is evidence of trespassing, notify PM)	Yes	No	Yes	No
2	All access roads clear? (if no, state details in notes section)	Yes	No	Yes	No
3	Site utilities operation? (if no, state details in notes section)	Yes	No	Yes	No
4	Standing water in bedrock extraction well vaults? (if yes, state which vaults in notes section)	Yes	No	Yes	No
5	Any visible site erosion? (if yes, state details in notes section)	Yes	No	Yes	No
6	Any housekeeping issues? (if yes, state details in notes section)	Yes	No	Yes	No
7	Any stormwater basin area disturbances? (if yes, state details in notes section)	Yes	No	Yes	No
8	Standing water in Effluent Pump Station control room?	Yes	No	Yes	No
9	Standing water in Effluent Pump Station basement area?	Yes	No	Yes	No

Notes:
#8: Puddle on floor in back left corner
#2: ~1' of snow

212.14