2013/2014 Groundwater Monitoring Report Facility Lead Corrective Action

Prepared for:

Hercules Incorporated
Aqualon Division
1111 Hercules Road
Hopewell, Virginia 23860-5245

Prepared by:
Groundwater & Environmental Services, Inc.
3701 Saunders Avenue
Richmond, Virginia 23227

January 2015

TABLE OF CONTENTS

TABLE OF CONTENTS ..... **I**

LIST OF FIGURES ..... **II**

LIST OF TABLES ..... **II**

LIST OF ATTACHMENTS ..... **II**

1.0 INTRODUCTION **1**

2.0 2013 SITE-WIDE GROUNDWATER SAMPLING EVENTS **1**

2.1 Groundwater Flow/Direction *1*

2.2 Sampling Methodology *2*

2.3 Analyte Selection Process *3*

2.4 Screening Criteria *4*

2.5 June 2013 Semi-Annual Sampling Event *5*

2.5.1 Eastern and Western Whitewater Lagoons (SWMUs #3 and #4) Results 6

2.5.2 Old Landfill and Landfill #156 (SWMU #5) Results 6

2.5.3 Natrosol Lagoon (SWMU #7) Results 7

2.5.4 Reten/Aqualon Basin (SWMU #8 and #29) Results 7

2.5.5 Sludge Drying Beds (SWMU #14) Results 8

2.5.6 Vacuum Filter Sludge Pile (SWMU #15) Results 9

2.5.7 Main Holding Basin Wells (SWMU #1) Results 9

2.6 November/December 2013 Semi-Annual Sampling Event *10*

2.6.1 Eastern and Western Whitewater Lagoons (SWMUs #3 and #4) Results 11

2.6.2 Old Landfill and Landfill #156 (SWMU #5) Results 11

2.6.3 Natrosol Lagoon (SWMU #7) Results 12

2.6.4 Reten/Aqualon Basin (SWMU #8 and #29) Results 12

2.6.5 Sludge Drying Beds (SWMU #14) Results 13

2.6.6 Vacuum Filter Sludge Pile (SWMU #15) Results 14

2.6.7 Main Holding Basin Wells (SWMU #1) Results 14

2.7 July 2014 Semi-Annual Sampling Event *15*

2.7.1 Eastern and Western Whitewater Lagoons (SWMUs #3 and #4) Results 15

2.7.2 Old Landfill and Landfill #156 (SWMU #5) Results 16

2.7.3 Natrosol Lagoon (SWMU #7) Results 16

2.7.4 Reten/Aqualon Basin (SWMU #8 and #29) Results 17

2.7.5 Sludge Drying Beds (SWMU #14) Results 18

2.7.6 Vacuum Filter Sludge Pile (SWMU #15) Results 19

2.7.7 Main Holding Basin Wells Results 19

3.0 GEOCHEMICAL EVALUATION **20**

3.1 Geochemistry of Organic Compound Biodegradation *20*

3.2 Sampling and Analysis *21*

3.3 Discussion of Results *21*

3.4 Conclusions *23*

4.0 CONCLUSIONS AND RECOMMENDATIONS **23**

LIST OF FIGURES

Figure 1: Site Location Map
Figure 2: SWMU Summary Map
Figure 3: Groundwater Contour Map – June 2013
Figure 4: Groundwater Contour Map – August 2013
Figure 5: Groundwater Contour Map – July 2014

LIST OF TABLES

Table 1: 2013/2014 Groundwater Sampling Natural Attenuation Field Parameters
Table 2: June 2013 Groundwater Sampling Matrix
Table 3: November/December 2013 Groundwater Sampling Matrix
Table 4: July 2014 Groundwater Sampling Matrix
Table 5: Summary of 2013/2014 Detected Groundwater Constituents, Whitewater Lagoons
Table 6: Summary of 2013/2014 Detected Groundwater Constituents, Old Landfill and Landfill #156
Table 7: Summary of 2013/2014 Detected Groundwater Constituents, Natrosol Lagoon
Table 8: Summary of 2013/2014 Detected Groundwater Constituents, Reten-Aqualon Basin
Table 9: Summary of 2013/2014 Detected Groundwater Constituents, Sludge Drying Beds
Table 10: Summary of 2013/2014 Detected Groundwater Constituents, Vacuum Filter Sludge Pile
Table 11: Summary of 2013/2014 Detected Groundwater Constituents, Main Holding Basin
Table 12: Geochemical Parameter Comparison

LIST OF ATTACHMENTS

Attachment A: June 2013 Site-Wide Groundwater Sampling Event Laboratory Analytical Data
Attachment B: November/December 2013 Site-Wide Groundwater Sampling Event Laboratory Analytical Data Attachment
Attachment C: July 2014 Site-Wide Groundwater Sampling Event Laboratory Analytical Data

1.0 INTRODUCTION

This 2013/2014 Groundwater Monitoring Report has been prepared on behalf of Hercules Incorporated (Hercules) for the Ashland Specialty Ingredients (formerly Hercules Incorporated) facility located at 1111 Hercules Road in Hopewell, Virginia (Facility) as shown on the site location map included as **Figure 1**. As documented in the *Corrective Measures Study (CMS) Report* (April 2014), long-term monitoring (LTM) of groundwater is the proposed corrective measures alternative for the site. The purpose of LTM at the site is to demonstrate that concentrations of groundwater constituents of interest (COIs) are still acceptable and therefore would not change the results of the November 2011 *Human Health Risk Assessment (HHRA)*. The 2013/2014 Groundwater Monitoring Report is intended to present data which will ultimately support the LTM remedy. This report documents and summarizes all field procedures, any deviations from procedures, provides data tables and an evaluation of the data from the 2013 semi-annual groundwater sampling events (i.e., June 2013 and November/December 2013 as well as the July 2014 events).

2.0 2013 SITE-WIDE GROUNDWATER SAMPLING EVENTS

In order to develop a long-term spatial and temporal data set to support the proposed LTM recommendation, comprehensive groundwater sampling events were conducted in June and November/December 2013. Sampling events were also conducted in July 2014 and December 2014. The results of the 2013 and July 2014 events are reported herein. The December 2014 event will be reported in a subsequent report.

2.1 Groundwater Flow/Direction

As detailed in previous reports, surface stratigraphy below the topographic highs at the Facility is composed of a fairly thick sequence (10 to 30 feet) of silty clay/clay, which is underlain by a layer of gray silty sand. The silty sand layer ranges in thickness from 10 to 20 feet and forms the uppermost aquifer at the site. The aquifer is underlain by a second silty-clay to clay layer, which ranges in thickness from approximately 15 to 20 feet, and appears to be laterally continuous across the majority of the site.

Deeper borings that have penetrated this lower clay layer have encountered a second sand/gravel aquifer beneath the clay. Based on the data presented in the February 1992 *Groundwater Quality Assessment Program* and April 1993 *Groundwater Quality Assessment Program*, the hydraulic conductivity of the lower clay unit is at least three orders of magnitude lower than the upper sand aquifer (WESTON, 1993), which suggests that the clay layer serves as an aquatard between the upper and lower sand units.

In general, groundwater from the upper sand discharges to surface water where it overlies the upper clay formation. Historical surface water elevations confirm this groundwater/surface water relationship.

Groundwater elevations were measured in site wells during the 2013 sampling events and the July 2014 event. During the events, an electronic interface probe, capable of detecting non-aqueous phase liquid (NAPL, or product) and water to the nearest 0.01-foot, was used to measure depth to product (DTP), if applicable, depth to water (DTW), and depth to bottom (DTB) within each well. The depth measurements were converted to elevation data relative to surveyed reference points at the top of casing (TOC) for each well. The 2013/2014 groundwater elevation data are presented in **Table 1**.

Groundwater elevation data were utilized to develop groundwater elevation contour interpretations presented on **Figure 3** through **5**, representing the June 2013, November/December 2013 and July 2014 events, respectively. Groundwater in the shallow sand mimics topography to a large extent. Groundwater elevations for the wells installed downgradient (to the east) of the former Sludge Drying Beds indicate a localized "mound" in the vicinity of the drying beds. The groundwater flow in this area is controlled by the deeply incised swales to the northwest, southwest, and to the east (Bailey Creek) of the former Solid Waste Management Unit (SWMU).

2.2 Sampling Methodology

The following sections outline the sampling methodologies employed during the semi-annual site-wide groundwater sample collection events in 2013/2014 which were performed in accordance with the *Phase III Sampling and Analysis Plan (SAP)* (April 2007). A map of the site, including SWMUs and other key features, presents the location of the Facility wells on **Figure 2**.

Groundwater samples were collected from onsite wells in accordance with the parameters listed in **Tables 2** through **4**. Prior to sampling, each of the wells was purged of at least three well volumes or until water quality parameters, including fines content, stabilized with a Grunfos pump using the low-flow purging method. New, dedicated, Teflon-lined polyethylene tubing was used to sample each well. Due to damage to well MW-5D, groundwater samples were not collected from this well.

During purging, a YSI® 556 water quality meter equipped with a flow-through cell was connected to each well in order to continuously monitor water quality parameters, which included: pH, specific conductivity, dissolved oxygen (DO), temperature, oxidation-reduction potential (ORP) and turbidity as shown in **Table 1**. Purging continued until these parameters stabilized (less than 0.2 pH units or a 10% change for the other parameters between three consecutive readings approximately three minutes apart) and the water appeared clear, and nearly free of fines. Upon stabilization, the flow-through cell was removed and the flow rate was adjusted to

less than ~100 milliliters per minute (ml/min).

Samples were placed directly in laboratory-provided sample containers, on ice, and shipped for overnight delivery to TestAmerica Laboratories, Inc. (TA) in Savannah, Georgia. Purge water was transported to the Wastewater Treatment Area for treatment at the Facility's wastewater treatment plant. Personal protective equipment (PPE) as well as tubing and bailers were placed in the onsite trash dumpster for disposal as a solid waste.

2.3 Analyte Selection Process

As detailed in the *CMS Report*, the 2013/2014 analyte list for each monitoring well was selected based on an evaluation of the 2011 and 2012 site-wide groundwater data set. A total of 34 monitoring wells were sampled during the June and November/December 2013 and July 2014 sampling events. An additional well, (i.e., SDB-MW2) was sampled in December 2013 and July 2014 as part of a geochemical evaluation as detailed in **Section 3.0** below.

For purposes of selecting the 2013 and 2014 analyte list, detected COI concentrations from a given area during 2011/2012 groundwater events were first screened against the applicable Exposure Point Concentrations (EPCs). EPCs are the concentrations that a receptor may contact in an environmental medium and were calculated using the 2007 groundwater data for use in the risk characterization conducted in the risk assessment. The analytical results for samples from a given medium (in this case, groundwater) were combined to derive a single EPC for each COI that conservatively represents the level of that COI to which potential receptors may be exposed. These EPCs were used to evaluate incidental groundwater exposure by a construction worker.

The analyte selection process was similar to the data evaluation process used for the 2013 and July 2014 groundwater data further described below in **Section 2.4** as well as the 2011 *HHRA*.

If a detected constituent from the 2011/2012 sampling event exceeded its respective EPC, Tapwater Regional Screening Level (RSL) or Maximum Contaminant Level (MCL), it was retained for further monitoring and was included in the analyte list for that well. The following constituents were detected at concentrations exceeding the screening values and are identified as COI in groundwater based on the 2011/2012 data for the direct contact pathway and/or vapor intrusion pathway (the potentially completed exposure pathways identified in the HHRA):

- 1,1,2,2-Tetrachloroethane;
- 1,1-Dichloroethane;
- 1,2-Dichloroethane;
- Chloroform;
- Diethyl ether;
- t-Butanol;
- Tetrachloroethene;
- Trichloroethene;

- 1,4-Dioxane;
- Ethanol;
- Methanol;
- Aluminum;
- Antimony;
- Arsenic;
- Barium;
- Beryllium;
- Cadmium;
- Cobalt;
- Copper;
- Iron;
- Manganese;
- Mercury;
- Nickel;
- Selenium; and
- Vanadium.

The June 2013, November/December 2013 and July 2014 sampling matrixes are presented in **Tables 2** through **4**. Two sets of Quality Assurance / Quality Control (QA/QC) samples were collected as described below. A more detailed LTM sampling plan will be presented in the forthcoming Corrective Measures Implementation (CMI) Workplan.

2.4 Screening Criteria

The evaluation of the 2013 and July 2014 detected groundwater concentrations was conducted using the same data evaluation process presented in the 2011 *HHRA* and in Section 2.6.4 of the *CMS Report*.

The groundwater analytical results were screened against the following Risk Based Screening Levels (RBSLs) (in order of priority):

- EPC calculated in the 2011 *HHRA*;
- Tapwater Regional Screening Level (RSLs) derived from the USEPA Regional Screening Table dated November 2014; and
- USEPA Maximum Contamination Level (MCLs).

The screening levels for non-carcinogenic analytical parameters have been adjusted to reflect a Hazard Quotient of 0.1. The use of the Hazard Quotient for screening purposes compensates for the potential cumulative effects of the noncarcinogenic analytical parameters.

As described above in **Section 2.3**, the EPCs were calculated using the 2007 groundwater data. For all areas with the exception of the Main Holding Basin (MHB), five samples or less were available from the 2007 data set to represent that area. For these areas, EPCs were based on the maximum detected concentrations. For groundwater of the MHB, where the data set contained 15 samples, EPCs were based on the lower of the upper confidence limit (UCL) or the maximum detected concentrations. Details of the statistical calculations were provided in the *HHRA.*

For groundwater associated with the Reten/Aqualon Basin (RAB) and Sludge Drying Beds (SDB), analytical results from 2007 for selected inorganic COI were available

for both total and dissolved phases. EPCs were determined for both phases, and the higher of the two EPCs was selected as the final EPC for the *HHRA* and has been used for evaluation of the 2013 and 2014 data.

EPCs for COI for the vapor intrusion from groundwater pathway for each area were the same EPCs used for direct contact with groundwater. Those EPCs were used to evaluate inhalation exposure by an indoor worker.

As documented in the USEPA-approved *HHRA*, the risk characterization was conducted using the aforementioned EPCs and no unacceptable risks were identified. The total hazard indexes (His), potential cumulative cancer risks and predicted fetal blood lead levels met the target benchmarks. Therefore; the use of EPCs as the primary screening mechanism is protective of human health and the environment.

For purposes of evaluating the 2013 and 2014 groundwater data, the detected concentrations in a given area were first screened against the applicable EPCs. If the concentration did not exceed the EPC it was not considered an exceedance or evaluated for further screening. In some cases, a constituent may not have had an EPC identified in the 2011 *HHRA*. In these instances, the detected concentrations are screened against the current RBSLs (Tapwater RSL or MCL, if no Tapwater RSL is available). Certain constituents (i.e. t-Butanol and ethanol) for which RBSLs were not available were assigned "surrogates", in other words, constituents with structural or toxicological similarities whose screening values could conservatively be used in the absence of a constituent-specific value. Selected surrogates were identified in Tables 3-1 and 3-6 of the *HHRA* and the applicable screening values have been added to **Tables 5** through **11** as appropriate. Constituents for which surrogates were selected are flagged as such in the tables.

In some instances, analyte results that were U-qualified (i.e., not detected) had a reporting limit or method detection limit that exceeded the respective screening criteria. The U-qualified groundwater data results are presented in **Tables 5** through **11** for each area.

2.5 June 2013 Semi-Annual Sampling Event

The first 2013 semi-annual sampling event was conducted on June 3 – 6, 2013. The groundwater sampling of onsite wells was performed using low-flow sampling protocols in accordance with the approved *Phase III SAP* and as described in **Section 2.2**. Groundwater quality field parameters were measured during sampling as documented in **Table 1.** Due to obstructions encountered and/or damage to well MW-5D groundwater samples were not collected from this well.

2.5.1 Eastern and Western Whitewater Lagoons (SWMUs #3 and #4) Results

The analytical detections identified in the groundwater samples collected from the Whitewater Lagoons (WWL) (i.e., monitoring wells WWL-1, WWL-2, WWL-3U and WWL-3L) are summarized in **Table 5**. In addition, a blind field duplicate sample was collected from monitoring well WWL-2 and is presented in the table as well.

The following organic COI was detected above its respective EPC:

- T-Butanol (370 micrograms per liter (µg/L) in WWL-1 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

The following inorganic COI were detected above their respective EPCs:

- Arsenic (6.5 µg/L and 6.6 µg/L in WW-2 and the field duplicate, respectively);
- Barium (2,500 µg/L and 2,400 µg/L in WWL-2 and the field duplicate, respectively);
- Cadmium (0.17 J µg/L and 0.17 J µg/L in WWL-3U and WWL-3L, respectively);
- Cobalt (110 µg/L and 100 µg/L in WWL-2 and the field duplicate, respectively);
- Manganese (25,000 µg/L and 26,000 µg/L in WWL-2 and the field duplicate, respectively); and
- Nickel (31µg/L and 31µg/L in WWL-2 and the field duplicate, respectively).

No other organic COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the WWL wells.

2.5.2 Old Landfill and Landfill #156 (SWMU #5) Results

The analytical detections identified in the groundwater samples collected from the Old Landfill and Landfill #156 (i.e., monitoring wells LF-1, LF-2, LF-3 and LF-5) are summarized in **Table 6**. Well LF-4 was removed from the sampling matrix following the screening process as described above in **Section 2.4** and a lack of COI.

The following organic COI was detected at concentrations exceeding its respective EPC:

- 1,1-Dichloroethane (ranging from 1.6 µg/L to 2.9 µg/L).

The following organic COI (which did not have an EPC identified in the 2011 *HHRA*)

was detected in a sample collected from the LF wells at a concentration that exceeded the Tapwater RSL:

- Trichloroethylene (1.2 μg/L in LF-1 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

The following inorganic COI were detected above their respective EPCs in the LF wells:

- Barium (170 μg/L in LF-3 only);
- Cobalt (9 μg/L in LF-3 only);
- Manganese (4,700 μg/L in LF-3 only); and
- Nickel (13 μg/L in LF-3 only).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the LF wells.

2.5.3 Natrosol Lagoon (SWMU #7) Results

The analytical detections identified in the groundwater samples collected from the Natrolsol Lagoon (NAT) (i.e., monitoring wells NAT-1 through NAT-4) are summarized in **Table 7**.

The following organic COI was detected at a concentration exceeding its respective EPC:

- Trichloroethylene (TCE) (39 μg/L in NAT-1 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

The following inorganic COI was detected in the NAT wells at a concentration exceeding its respective EPC:

- Cadmium (0.57 μg/L in NAT-1 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

2.5.4 Reten/Aqualon Basin (SWMU #8 and #29) Results

The analytical detections identified in the groundwater samples collected from monitoring wells RAB-MW1R through RAB-MW4 are summarized in **Table 8**. In addition, a blind field duplicate sample was collected from monitoring well RAB-

MW1R and is presented in the table as well. Well RAB-MW1R was sampled for full compound lists of all methods (VOCs, SVOCs, metals and methanol/ethanol) due to the limited data set available for this replacement well.

The following organic COI was detected at concentrations exceeding its respective EPC in samples collected from the RAB wells:

- T-Butanol (38,000 D µg/L and 37,000D µg/L in RAB-MW1R and the field duplicate respectively).

In the absence of an EPC, the following organic COI was detected at concentrations exceeding its respective Tapwater RSLs:

- 1,4 Dioxane (2.4 µg/L and 1.4 J µg/L in RAB-MW1R and the field duplicate, respectively).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

The following inorganic COI were detected in the RAB wells at concentrations exceeding their respective EPCs:

- Cobalt (150 µg/L and 170 µg/L in RAB-MW1R and the field duplicate, respectively); and
- Manganese (12,000 µg/L in RAB-MW2 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

2.5.5 Sludge Drying Beds (SWMU #14) Results

The analytical detections identified in the groundwater samples collected from monitoring wells SDB-MW-1 and SDB-MW-3 are summarized in **Table 9**. Monitoring well SDB-MW-2 was removed from the sampling list following the screening process as described above in **Section 2.4** and a lack of COI; however this well was sampled as part of the geochemical evaluation as further detailed in **Section 3.2**.

The following organic COI was detected at a concentration exceeding the EPC in samples collected from the SDB wells:

- T-Butanol (6 µg/L in SDB-MW-1 only).

No other organic COI were detected at concentrations exceeding their respective EPCs or, in the absence of EPCs, their respective Tapwater RSLs or MCL.

The following inorganic COI was detected at concentrations exceeding their respective EPCs:

- Cadmium (0.66 µg/L in SDB-MW-3 only);
- Iron (190,000 µg/L in SDB-MW-1 only); and
- Nickel (35 µg/L in SDB-MW-3 only).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the SDB wells.

2.5.6 Vacuum Filter Sludge Pile (SWMU #15) Results

The analytical detections identified in the groundwater sample collected from the Vacuum Filter Sludge Pile (VFSP) (i.e., monitoring well VFSP-MW-1) are summarized in **Table 10**.

No organic COI were detected at concentrations exceeding their respective EPCs or, in the absence of EPCs, their respective Tapwater RSLs or MCLs.

The following inorganic COI were detected in VFSP-MW1 at concentrations exceeding their respective EPCs:

- Barium (200 µg/L);
- Cobalt (2.5 µg/L);
- Iron (4,300 µg/L);
- Manganese (780 µg/L); and
- Nickel (2.5 µg/L).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the VFSP well.

2.5.7 Main Holding Basin Wells (SWMU #1) Results

The analytical detections identified in the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-4U, MW-5, MW-5U, MW-6, MW-7L, MW-7U, MW-8D, MW-8L-R, MW-8U, MW-9 and MW-10 are summarized in **Table 11**.

The following organic COI were detected in the MHB wells at concentrations exceeding their respective EPCs:

- Chloroform (0.78 J µg/L in MW-10 only);
- Diethyl ether (8,400 µg/L in MW-2 only);
- T-Butanol (ranging from 3,000 µg/L to 4,800 µg/L);
- 1,4-dioxane (ranging from 16 µg/L to 27 µg/L); and

In the absence of EPCs, the following organic COI were detected at concentrations exceeding their respective Tapwater RSLs:

- Bis(2-chloroethyl)ether (0.27 J µg/L and 0.78 J µg/L in MW-2 and MW-3, respectively); and
- Naphthalene (0.15 J µg/L in MW-7U only).

No other organic COI were detected at concentrations exceeding their respective EPCs or, in the absence of EPCs, their respective Tapwater RSLs or MCL.

The following inorganic COI were detected above their respective EPCs, in the MHB wells:

- Aluminum (780 µg/L in MW-8D only);
- Arsenic (34 µg/L in MW-8L-R only);
- Barium (ranging from 800 µg/L to 1,000 µg/L);
- Cadmium (ranging from 3.8 µg/L to 29 µg/L);
- Chromium (13 µg/L in MW-1 only);
- Cobalt (390 µg/L in MW-7U only);
- Iron (ranging from 83,000 µg/L to 110,000 µg/L);
- Lead (ranging from 0.92 J µg/L to 3 µg/L);
- Manganese (42,000 µg/L in MW-7U only);
- Mercury (1 µg/L in MW-7U only); and
- Nickel (130 µg/L and 58 µg/L in MW-7U and MW-10, respectively).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the MHB wells.

2.6 November/December 2013 Semi-Annual Sampling Event

The second 2013 semi-annual sampling event was conducted on November 25 – 27 and December 2 – 3, 2013. The groundwater sampling of onsite wells was performed using low-flow sampling protocols in accordance with the approved *Phase III SAP* and as described in **Section 2.2**. Groundwater quality field parameters were measured during sampling as documented in **Table 3.** Due to obstructions encountered and/or damage to well MW-5D groundwater samples were not collected from this well.

In addition to the parameters collected as described above in **Section 2.3**, select groundwater samples were analyzed for geochemical parameters as further described in **Section 3.0**.

2.6.1 Eastern and Western Whitewater Lagoons (SWMUs #3 and #4) Results

The analytical detections identified in the groundwater samples collected from monitoring wells WWL-1, WWL-2, WWL-3U and WWL-3L are summarized in **Table 5**.

The following organic COI were detected above their respective EPCs:

- T-Butanol (330 µg/L in WWL-1 only); and
- Methanol (4.3 J µg/L in WWL-2 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

The following inorganic COI were detected at concentrations exceeding their respective EPCs:

- Aluminum (590 µg/L in WWL-3U only);
- Barium (3,000 µg/L in WWL-2 only);
- Cadmium (0.14 J µg/L in WWL-3L);
- Cobalt (170 µg/L in WWL-2 only);
- Manganese (47,000 µg/L in WWL-2 only); and
- Nickel (33 µg/L in WWL-2 only).

No other inorganic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

2.6.2 Old Landfill and Landfill #156 (SWMU #5) Results

The analytical detections identified in the groundwater samples collected from monitoring wells LF-1 through LF-3 and LF-5 are summarized in **Table 6**. Monitoring well LF-4 was removed from the sampling matrix following the screening process as described above in **Section 2.4** and a lack of COI.

The following organic COI was detected at concentrations exceeding its respective EPC:

- 1,1-Dichloroethane (ranging from 1.4 µg/L to 3.2 µg/L).

The following organic COI (which did not have EPCs identified in the *HHRA*) were detected in the samples collected from the LF wells at concentrations that exceed their respective Tapwater RSL:

- Trichloroethylene (ranging from 0.53 J µg/L to 1.1 µg/L).

The following inorganic COI were detected above their respective EPCs in the LF wells:

- Aluminum (340 µg/L in LF-1 only);
- Manganese (3,100 µg/L in LF-3 only); and
- Nickel (9.2 µg/L in LF-3 only).

No other inorganic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

2.6.3 Natrosol Lagoon (SWMU #7) Results

The analytical detections identified in the groundwater samples collected from monitoring wells NAT-1 through NAT-4 are summarized in **Table 7**. The sample collected from NAT-4 was field filtered using a 0.45 micron filter due to elevated turbidity (i.e., 29.2 NTU) and the sample was analyzed for total metals as well as dissolved metals. The dissolved metals results for NAT-4 did not report any EPC exceedances, or in the absence of an EPC, Tapwater RSL or MCL exceedances. The total and dissolved metals detections are summarized in **Table 7.**

The following organic compound was detected at a concentration exceeding its respective EPC:

- Trichloroethylene (TCE) (35 µg/L in NAT-1 only).

The following inorganic compounds were detected above their respective EPCs:

- Arsenic (12 µg/L in unfiltered NAT-4 sample only);
- Barium (140 µg/L in unfiltered NAT-4 sample only);
- Cadmium (0.37 J µg/L in NAT-1 only);
- Iron (42,000 µg/L in unfiltered NAT-4 sample only);
- Lead (1.9 µg/L and 14 µg/L in NAT-2 and unfiltered NAT-4 sample, respectively); and
- Vanadium (39 µg/L in unfiltered NAT-4 sample only).

No other COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSLs or MCLs.

2.6.4 Reten/Aqualon Basin (SWMU #8 and #29) Results

The analytical detections identified in the groundwater samples collected from monitoring wells RAB-MW1R through RAB-MW4 are summarized in **Table 8**. In addition, a blind field duplicate sample was collected from monitoring well RAB-MW1R and is presented in the table as well. Well RAB-MW1R was sampled for full

compound lists of all methods (VOCs, SVOCs, metals and methanol/ethanol) due to the limited data set available for this replacement well.

The following organic COI was detected at concentrations exceeding its respective EPC in samples collected from the RAB wells:

- T-Butanol (21,000 µg/L and 28,000 µg/L in RAB-MW1R and the associated field duplicate, respectively).

No other organic COI were detected at concentrations exceeding their EPC.

The following organic COI was detected at concentrations exceeding the respective Tapwater RSL:

- 1,4-Dioxane (1.7 J µg/L and 7.4 J µg/L in RAB-MW1R and the associated field duplicate, respectively).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSLs or MCLs.

The following inorganic COI were detected in the RAB wells at concentrations exceeding their respective EPCs:

- Barium (ranging from 230 µg/L to 280 µg/L);
- Cadmium (1.5 µg/L in RAB-MW4, only);
- Iron (200,000 µg/L in RAB-MW3 only); and
- Manganese (16,000 µg/L in RAB-MW2 only).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs or MCLs were detected in the RAB wells.

2.6.5 Sludge Drying Beds (SWMU #14) Results

The analytical detections identified in the groundwater samples collected from monitoring wells SDB-MW-1 and SDB-MW-3 are summarized in **Table 9**. Biogeochemical parameters were collected from SDB-MW-2 during the November/December 2013 sampling event.

No organic parameters were detected at concentrations exceeding their respective EPC, Tapwater RSLs or MCLs.

The following inorganic COI were detected at a concentration exceeding its respective EPC:

- Arsenic (8.2 µg/L in SDB-MW-1 only).
- Cadmium (0.54 µg/L in SDB-MW-3 only);

- Iron (200,000 µg/L in SDB-MW-1 only); and
- Nickel (37 µg/L in SDB-MW-3 only).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the SDB wells.

2.6.6 Vacuum Filter Sludge Pile (SWMU #15) Results

The analytical detections identified in the groundwater samples collected from monitoring well VFSP-MW-1 are summarized in **Table 10**.

The following inorganic compounds were detected above their respective EPCs:

- Barium (200 µg/L);
- Cobalt (2.7 µg/L);
- Iron (4,600 µg/L); and
- Manganese (880 µg/L).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in VFSP well.

2.6.7 Main Holding Basin Wells (SWMU #1) Results

The analytical detections identified in the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-4U, MW-5, MW-5U, MW-6, MW-7L, MW-7U, MW-8D, MW-8L-R, MW-8U, MW-9 and MW-10 are summarized in **Table 11**. In addition, a blind field duplicate sample was collected from monitoring well MW-7U as presented in the table.

The following organic COI were detected in the MHB wells at concentrations exceeding their respective EPCs:

- Chloroform (0.82 J µg/L in MW-10 only);
- Diethyl ether (9,200 µg/L in MW-2 only);
- T-Butanol (ranging from 4,200 µg/L to 5,500 µg/L); and
- 1,4-dioxane (ranging from 19 µg/L and 58 µg/L).
- Methanol (2.2 J µg/L in MW-7L only).

In the absence of EPCs, the following organic COI were detected at concentrations exceeding their respective Tapwater RSLs:

- 1,2-Dichloroethane (0.24 J µg/L in MW-10 only);
- Naphthalene (0.26 J µg/L in MW-7U only); and

No other organic COI were detected at concentrations exceeding their respective

EPCs or, in the absence of EPCs, their respective Tapwater RSLs or MCL.

The following inorganic COI were detected above their respective EPC in the MHB wells:

- Aluminum (1,100 µg/L and 570 µg/L in MW-6 and MW-10, respectively);
- Arsenic (38 µg/L in MW-8L-R only);
- Barium (ranging from 720 µg/L to 1,200 µg/L);
- Cadmium (ranging from 3.8 µg/L to 5.7 µg/L);
- Cobalt (200 µg/L and 190 µg/L in MW-7U and the associated field duplicate, respectively);
- Iron (ranging from 80,000 µg/L to 160,000 µg/L);
- Manganese (ranging from 11,000 µg/L to 23,000 µg/L);
- Nickel (ranging from 59 µg/L to 65 µg/L).

No other inorganic COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs or MCLs were detected in the MHB wells.

2.7 July 2014 Semi-Annual Sampling Event

The first 2014 semi-annual sampling event was conducted on July 14 – 18. The groundwater sampling of onsite wells was performed using low-flow sampling protocols in accordance with the approved *Phase III SAP* and as described in **Section 2.2**. Groundwater quality field parameters were measured during sampling as documented in **Table 1.** Due to obstructions encountered and/or damage to well MW-5D groundwater samples were not collected from this well.

In addition to the parameters collected as described above in **Section 2.3**, select groundwater samples were analyzed for geochemical parameters as further described in **Section 3.0**.

2.7.1 Eastern and Western Whitewater Lagoons (SWMUs #3 and #4) Results

The analytical detections identified in the groundwater samples collected from monitoring wells WWL-1, WWL-2, WWL-3U and WWL-3L are summarized in **Table 5**.

The following organic COI were detected above their respective EPCs:

- T-Butanol (340 µg/L in WWL-1 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

The following inorganic COI were detected at concentrations exceeding their respective EPCs:

- Aluminum (610 µg/L in WWL-3U only);
- Arsenic (9.2 µg/L in WWL-2 only); and
- Cadmium (ranging from 0.14 J µg/L to 0.42 J µg/L).

No other inorganic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

2.7.2 Old Landfill and Landfill #156 (SWMU #5) Results

The analytical detections identified in the groundwater samples collected from monitoring wells LF-1 through LF-3 and LF-5 are summarized in **Table 6**. Monitoring well LF-4 was removed from the sampling matrix following the screening process as described above in **Section 2.4** and a lack of COI.

The following organic COI was detected at concentrations exceeding its respective EPC:

- 1,1-Dichloroethane (3.2 µg/L in LF-5 only).

The following organic COI (which did not have an EPC identified in the *HHRA*) was detected in the samples collected from the LF wells at concentrations that exceeded its respective Tapwater RSL:

- Trichloroethylene (ranging from 0.38 J µg/L to 0.71 J µg/L).

The following inorganic COI were detected above their respective EPCs in the LF wells:

- Aluminum (530 µg/L in LF-3 only);
- Barium (160 µg/L in LF-3 only);
- Chromium (22 µg/L in LF-5 only);
- Cobalt (6.7 µg/L in LF-3 only);
- Manganese (3,000 µg/L in LF-3 only);
- Nickel (8.5 µg/L in LF-3 only); and
- Vanadium (4.7 J µg/L in LF-3 only).

No other inorganic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSL or MCL.

2.7.3 Natrosol Lagoon (SWMU #7) Results

The analytical detections identified in the groundwater samples collected from

monitoring wells NAT-1 through NAT-4 are summarized in **Table 7**. The sample collected from NAT-4 was field filtered using a 0.45 micron filter due to elevated turbidity (i.e., 35.4 NTU) and held for subsequent analysis; however, the lab discarded the held sample prior to the end of the hold period without notifying GES and the analysis was not run.

The following organic compound was detected at a concentration exceeding its respective EPC:

- Trichloroethylene (TCE) (33 µg/L in NAT-1 only).

The following inorganic compounds were detected above their respective EPCs:

- Aluminum (3,300 µg/L in NAT-4 only);
- Barium (160 µg/L in NAT-4 only):
- Cadmium (0.35 J µg/L in NAT-1 only);
- Iron (25,000 µg/L in NAT-4 only);
- Lead (9.5 µg/L in NAT-4 only); and
- Vanadium (37 µg/L in NAT-4 only).

No other COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSLs or MCLs.

2.7.4 Reten/Aqualon Basin (SWMU #8 and #29) Results

The analytical detections identified in the groundwater samples collected from monitoring wells RAB-MW1R through RAB-MW4 are summarized in **Table 8**. In addition, a blind field duplicate sample was collected from monitoring well RAB-MW1R and is presented in the table as well. The samples for inorganic analyses collected from RAB-MW1R, RAB-MW2 and RAB-MW3 were field filtered using 0.45 micron filters due to elevated turbidity (i.e., >19 NTU) and held for subsequent analysis; however, the lab discarded the held samples prior to the end of the hold period without notifying GES and the analysis was not run. Well RAB-MW1R was sampled for full compound lists of all methods (VOCs, SVOCs, metals and methanol/ethanol) due to the limited data set available for this replacement well.

The following organic COI was detected at concentrations exceeding the respective EPC in samples collected from the RAB wells:

- T-Butanol (40,000 µg/L and 25,000 µg/L in RAB-MW1R and the associated field duplicate, respectively).

No other organic COI were detected at concentrations exceeding their EPC.

The following organic COI (which did not have an EPC identified in the *HHRA*) was detected at a concentration exceeding the respective Tapwater RSL:

- 1,4-Dioxane (2.1 µg/L in RAB-MW1R).

It is noted that the field duplicate concentration of 1,4-dioxane was non detect (reporting limit of 1.9 µg/L).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSLs or MCLs.

The following inorganic COI were detected in the RAB wells at concentrations exceeding their respective EPCs:

- Barium (240 µg/L in RAB-MW1R and associated field duplicate);
- Cadmium (1.2 µg/L in RAB-MW2, only);
- Cobalt (160 µg/L in RAB-MW2, only);
- Manganese (12,000 µg/L in RAB-MW2 only); and
- Mercury (0.54 J µg/L in RAB-MW-1R only).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs or MCLs were detected in the RAB wells.

2.7.5 Sludge Drying Beds (SWMU #14) Results

The analytical detections identified in the groundwater samples collected from monitoring wells SDB-MW-1 and SDB-MW-3 are summarized in **Table 9**. Geochemical parameters were collected from SDB-MW-2 during the July 2014 sampling event and the results are discussed below in **Section 3.3**.

The following organic COI was detected at a concentration exceeding its respective EPC:

- T-Butanol (11 µg/L SDB-MW-1 only).

No other organic COI exceeded their respective EPC or, in the absence of an EPC, their respective Tapwater RSLs or MCLs.

The following inorganic COI were detected at a concentration exceeding its respective EPC:

- Cadmium (0.66 µg/L in SDB-MW-3 only);

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the SDB wells.

2.7.6 Vacuum Filter Sludge Pile (SWMU #15) Results

The analytical detections identified in the groundwater samples collected from monitoring well VFSP-MW-1 are summarized in **Table 10**.

The following inorganic compounds were detected above their respective EPCs:

- Barium (140 µg/L);
- Cobalt (3.3 µg/L); and
- Manganese (800 µg/L).

No other COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs, or MCLs were detected in the VFSP well.

2.7.7 Main Holding Basin Wells Results

The analytical detections identified in the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-4U, MW-5, MW-5U, MW-6, MW-7L, MW-7U, MW-8D, MW-8L-R, MW-8U, MW-9 and MW-10 are summarized in **Table 11**. In addition, a blind field duplicate sample was collected from monitoring well MW-7U as presented in the table. The sample collected from MW-9 was field filtered using a 0.45 micron filter due to elevated turbidity (i.e., 35.8 NTU) and held for subsequent analysis; however, the lab discarded the held sample prior to the end of the hold period without notifying GES and the analysis was not run.

The following organic COI were detected in the MHB wells at concentrations exceeding their respective EPCs:

- Chloroform (0.82 J µg/L in MW-10 only);
- Diethyl ether (6,100 µg/L in MW-2 only);
- T-Butanol (ranging from 2,300 µg/L to 3,100 µg/L);
- 1,4-dioxane (24 µg/L in MW-10 only); and
- Methanol (2.5 J µg/L in MW-5U only).

In the absence of EPCs, the following organic COI were detected at concentrations exceeding their respective Tapwater RSLs:

- 1,2-Dichloroethane (0.18 J µg/L in MW-10 only);
- Naphthalene (0.17 J µg/L in MW-7U only); and

No other organic COI were detected at concentrations exceeding their respective EPCs or, in the absence of EPCs, their respective Tapwater RSLs or MCL.

The following inorganic COI were detected above their respective EPC in the MHB wells:

- Aluminum (ranging from 580 µg/L to 1,200 µg/L and 570 µg/L);
- Arsenic (33 µg/L in MW-8L-R only);
- Barium (ranging from 820 µg/L to 1,000 µg/L);
- Cadmium (6.7 µg/L and 3.7 µg/L in MW-7U and MW-10 respectively);
- Cobalt (540 µg/L in MW-7U only);
- Iron (ranging from 81,000 µg/L to 180,000 µg/L);
- Lead (ranging from 0.82 J µg/L to 1.3 µg/L);
- Manganese (13,000 µg/L and 62,000 µg/L in MW-2 and MW-7U respectively);
- Nickel (190 µg/L and 63 µg/L in MW-7U and MW-10 respectively).

No other inorganic COI exceedances of EPCs or, in the absence of EPCs, Tapwater RSLs or MCLs were detected in the MHB wells.

3.0 GEOCHEMICAL EVALUATION

Following the April and May 2011 geochemical groundwater sampling event, Geochemistry Services LLC provided Hercules with a *Geochemical Characterization and Model* of the site in order to understand the aquifer geochemistry as it pertains to biodegradation of organic contaminants at the site. A conceptual model was developed in order to evaluate the occurrence of biodegradation and natural attenuation of organics in the subsurface. During the November/December 2013 and July 2014 sampling events, GES sampled ten (10) wells to compare the results to the 2011 groundwater sampling event. The comparison results are included in **Table 12**.

3.1 Geochemistry of Organic Compound Biodegradation

As documented throughout this report, the predominant organics in groundwater at the site consist of t-Butanol, diethyl ether, ethanol and methanol. Organic compounds such as these can be transformed from one species to another organic species or to inorganic carbon (carbonate species) by naturally occurring microorganisms that utilize the contaminants for food or energy production. The alcohols (t-Butanol, ethanol and methanol) and ether (diethyl ether) found in groundwater associated with the site will be primarily biodegraded by microorganisms that utilize the compounds as electron donors. As such, the microorganisms require an electron acceptor (oxidizing agent) to complete the biogeochemical reaction. The necessary oxidizing agents are generally available in shallow aquifer systems under aerobic and anaerobic conditions. Biodegradation reactions in the aquifer reduce organic contaminant concentrations, resulting in natural attenuation of the aforementioned constituents along groundwater flowpaths away from the source.

Biodegradation would result in decreases in dissolved oxygen, nitrate and sulfate with increases in dissolved ammonium, manganese and iron.

3.2 Sampling and Analysis

In November/December 2013 and July 2014, groundwater samples were collected from ten (10) monitoring wells in order to evaluate the occurrence of biodegradation in the vicinity of the MHB compared to the 2011 geochemical results. The following monitoring wells were chosen for geochemical sampling:

- MW-1, -2, -3, -4, -4U, -5, -5U, -8U, -8D; and
- SDB-MW2.

Groundwater from each of the monitoring wells was sampled and analyzed for a wide range of parameters, including field measurements of pH, specific conductance, DO, temperature, ORP and turbidity. Following evaluation of the 2011 *Geochemical Characterization and Model*, the list of parameters was further refined for the November/December 2013 and July 2014 sampling event to include the following parameters:

- Ammonia, Dissolved;
- Orthophosphate, Dissolved;
- Calcium, Dissolved;
- Ferrous Iron;
- Magnesium, Dissolved;
- Manganese, Dissolved;
- Potassium, Dissolved;
- Sodium, Dissolved;
- Sulfide, Dissolved;
- Sulfide;
- Nitrite;
- Nitrate;
- Chloride;
- Sulfate;
- Dissolved Organic Carbon;
- Alkalinity;
- Bicarbonate Alkalinity as CaCO3;
- Carbonate Alkalinity as CaCO3; and
- Ammonium ion as NH4.

3.3 Discussion of Results

The occurrence of elevated iron, manganese, ammonium and sulfide concentrations in groundwater and the low redox potential and molecular oxygen concentrations detected provide strong evidence of active biodegradation of organic compounds in the shallow aquifer. The ability of the aquifer to continue the biodegradation process is dependent on the presence of oxidizing agents in the system, particularly solid phase oxidants like reducible iron and manganese minerals.

Table 12 provides a comparison of the 2011, 2013 and 2014 field measurements for the ten wells sampled for the geochemical parameters. The results of the 2011

analyses were detailed in the *Final Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Summary Report* (November 2011). The pH values were all in narrow range of 5.38 standard units (S.U.) in MW-2 to 6.97 S.U. in MW-5U.

ORP ranged from -134.6 mV in MW-5 to 118.9 mV in SBD-MW-2. Low ORP is consistent with the low DO concentrations that cover a fairly large range from 0.20 milligrams per liter (mg/L) in MW-5 to 3.59 mg/L in MW-3. DO measurements had the greatest deviation with six of the ten monitoring wells exhibiting increased levels of dissolved oxygen in 2013/2014 in comparison to 2011and are still considered low and are favorable conditions for biodegradation.

The concentrations of total and dissolved geochemical constituents in the groundwater are also listed in **Table 12**. In general, concentrations of the majority of the geochemical parameters remained stable when comparing the 2011 and 2013/2014 sampling events.

Dissolved iron in groundwater is an excellent indicator of the redox status of the geochemical system, especially at pH values greater than 5.5 S.U. Almost all of the monitoring wells have elevated levels of dissolved iron. When comparing the 2011 and 2013/2014 sampling events; an increase of dissolved iron was observed in five of the ten wells sampled for geochemical parameters. The iron levels suggest that the aquifer in the vicinity of these wells has been impacted by the presence of organic contaminant and their partial biodegradation.

Manganese is similar to iron in regards to an indicator of biodegradation. If manganese minerals are present in the aquifer, they would be expected to provide high dissolved concentrations similar to the iron concentrations. When comparing the dissolved manganese concentrations in the two events, six monitoring wells exhibited lower concentrations in 2013/2014 with the largest reduction in MW-2 from 88,000 mg/L in 2011 to 10,000 mg/L and 11,000 mg/L in 2013 and 2014, respectively. Although, the concentrations have decreased in these wells, the levels are still above 1 mg/L, which is an indication that biodegradation reactions are occurring in the aquifer. The manganese concentrations are contributing to the oxidation of organic compounds.

Dissolved ammonium exhibited increases in the majority of the wells sampled for geochemical parameters in comparison to the 2011 sampling event. This is indicative of consumption of nitrate and sulfate (dissolved oxidizing agents), suggesting denitrification.

All of the remaining geochemical parameters appear to be in stable condition and exhibit similar concentrations when comparing the three sampling events.

3.4 Conclusions

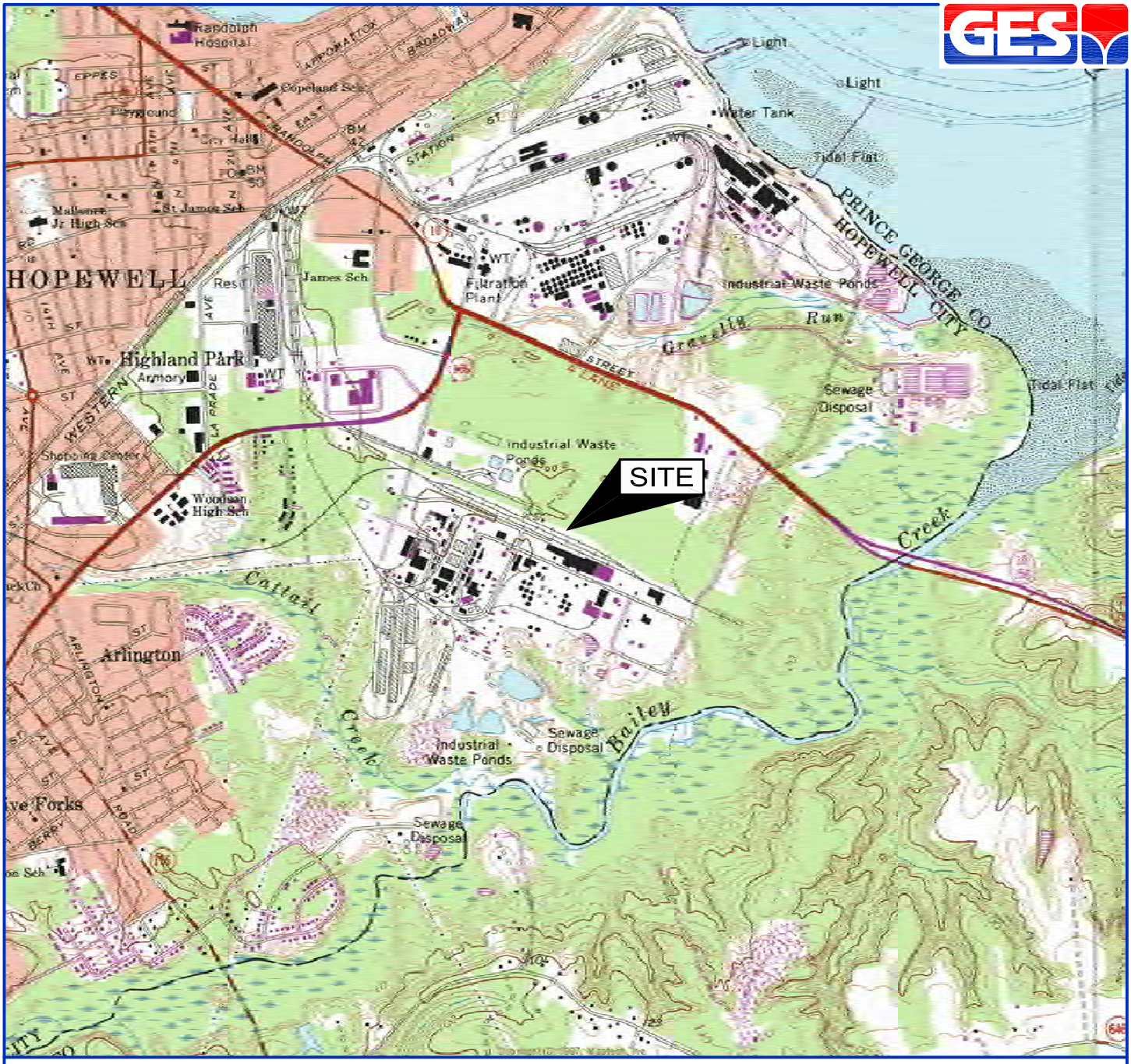
Field measurements and laboratory analytical results for the geochemical parameters show the occurrence of active biodegradation of organic compounds. The presence of byproducts ammonium, iron and manganese at relatively high dissolved levels and low levels of dissolved oxygen and nitrate indicates a reduced redox potential. Although biodegradation reactions of organic constituents of concern are occurring at the site, they are not yet sufficient to eliminate contaminants from the groundwater (particularly in and around the MHB). Continued high concentrations of reducible iron oxyhydroxide minerals in the solid phase will allow microorganisms to continue biodegradation of the organic contaminants.

4.0 CONCLUSIONS AND RECOMMENDATIONS

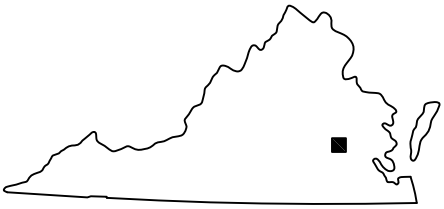
The 2011 risk assessment considered current and future site conditions and corresponding exposure pathways. EPC exceedances observed during the 2013 and July 2014 events are not expected to change the results of the previous risk assessment work conducted at the site which indicated no unacceptable risks for the construction worker exposed to groundwater or indoor worker exposed to indoor air since the majority of concentrations across the site remained stable with few increases and few decreases from the 2011 to July 2014 sampling events.

Groundwater will continue to be monitored on a semi-annual basis and a LTM plan will be provided in the forthcoming CMI Workplan. The second 2014 sampling event was conducted in December 2014. The results of the December 2014 and forthcoming first semi-annual 2015 events will be submitted as the next annual groundwater monitoring report in late 2015/early 2016.

FIGURES

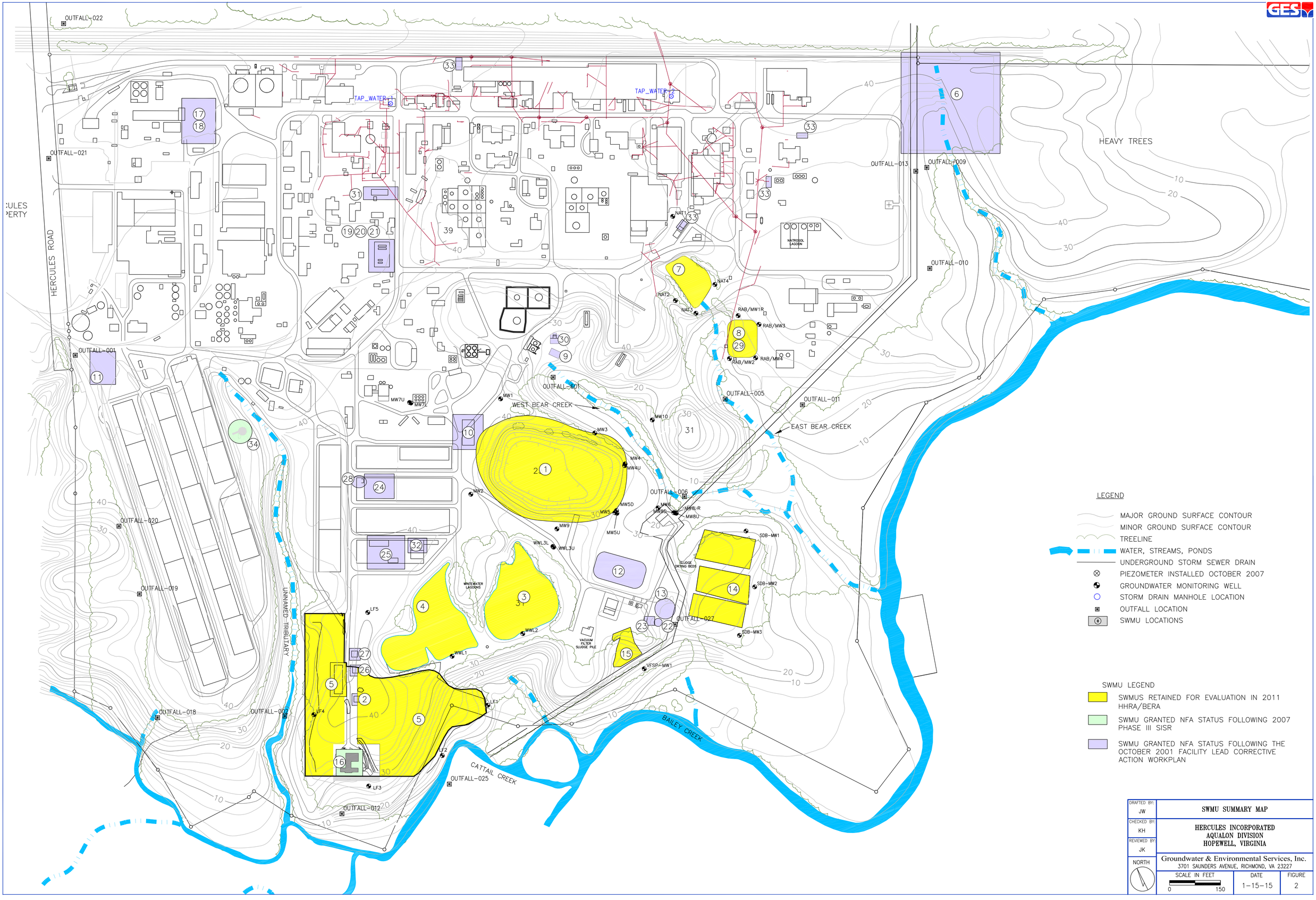


SOURCE: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE 1987
HOPEWELL, VIRGINIA
CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION
LAT. 037° 17' 19.86" N
LONG. 077° 16' 37.63" W
(APPROXIMATE SITE COORDINATES)

DRAFTED BY: JW	SITE LOCATION MAP
CHECKED BY: KH	HERCULES INCORPORATED AQUALON DIVISION HOPEWELL, VIRGINIA
REVIEWED BY: JK	Groundwater & Environmental Services, Inc. 3701 SAUNDERS AVENUE, RICHMOND, VA 23227
NORTH	SCALE IN FEET: 0 — 2000 / DATE: 1-15-15 / FIGURE: 1



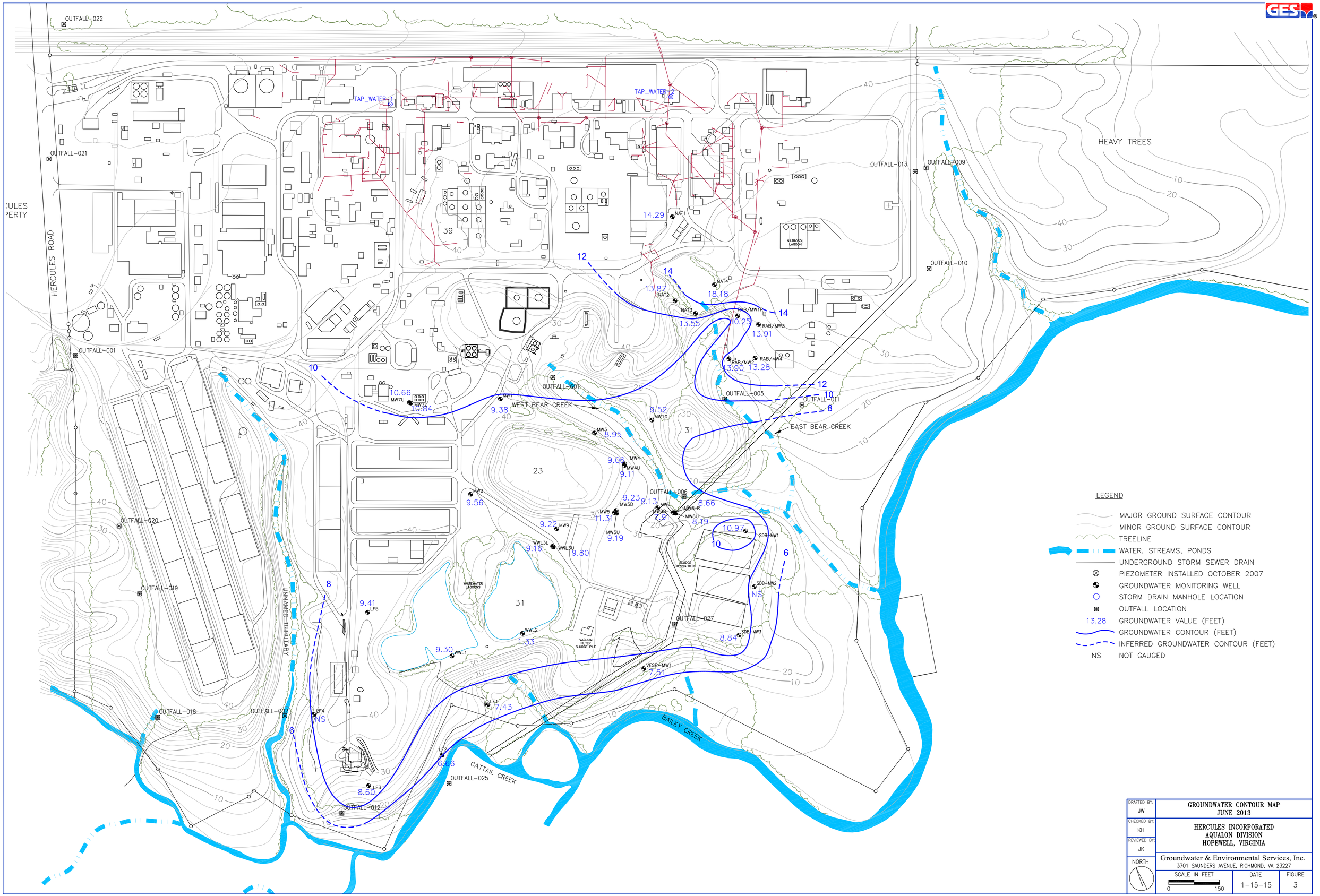
LEGEND

- MAJOR GROUND SURFACE CONTOUR
- MINOR GROUND SURFACE CONTOUR
- TREELINE
- WATER, STREAMS, PONDS
- UNDERGROUND STORM SEWER DRAIN
- PIEZOMETER INSTALLED OCTOBER 2007
- GROUNDWATER MONITORING WELL
- STORM DRAIN MANHOLE LOCATION
- OUTFALL LOCATION
- SWMU LOCATIONS

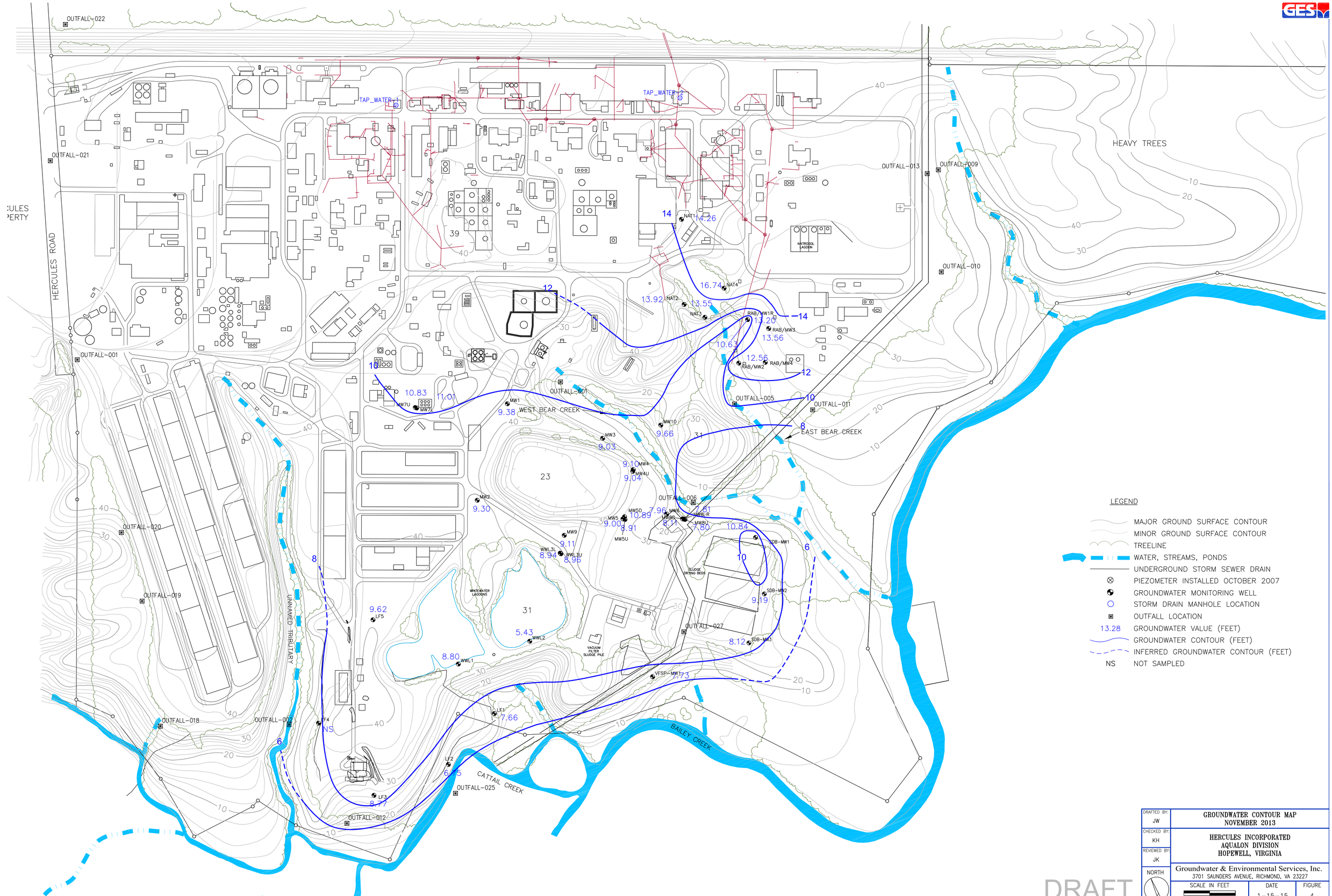
SWMU LEGEND

- SWMUS RETAINED FOR EVALUATION IN 2011 HHRA/BERA
- SWMU GRANTED NFA STATUS FOLLOWING 2007 PHASE III SISR
- SWMU GRANTED NFA STATUS FOLLOWING THE OCTOBER 2001 FACILITY LEAD CORRECTIVE ACTION WORKPLAN

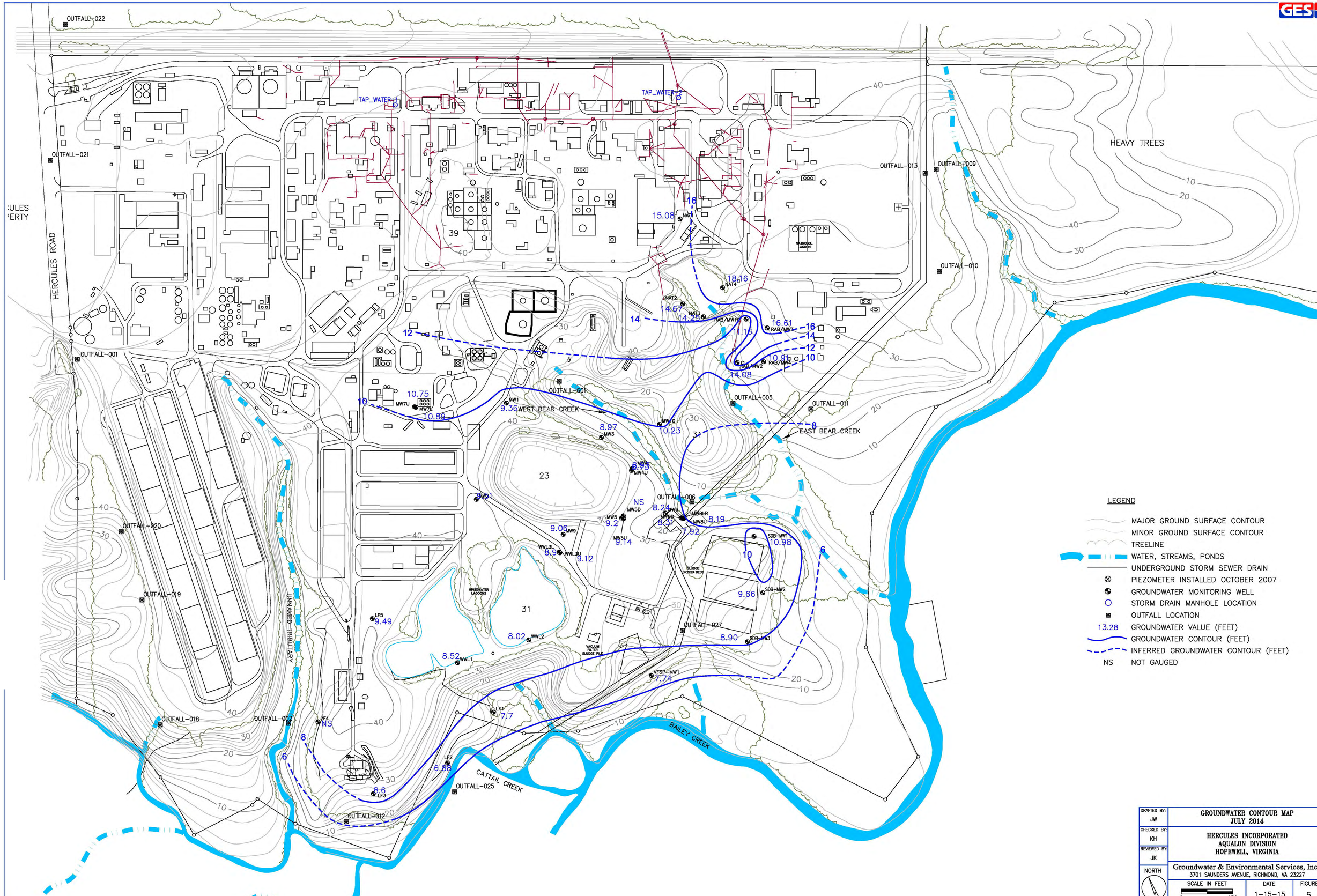
DRAFTED BY: JW	**SWMU SUMMARY MAP**
CHECKED BY: KH	**HERCULES INCORPORATED AQUALON DIVISION HOPEWELL, VIRGINIA**
REVIEWED BY: JK	Groundwater & Environmental Services, Inc. 3701 SAUNDERS AVENUE, RICHMOND, VA 23227
NORTH	SCALE IN FEET: 0 150 / DATE: 1-15-15 / FIGURE: 2



DRAFTED BY: JW	GROUNDWATER CONTOUR MAP JUNE 2013
CHECKED BY: KH	HERCULES INCORPORATED AQUALON DIVISION HOPEWELL, VIRGINIA
REVIEWED BY: JK	Groundwater & Environmental Services, Inc. 3701 SAUNDERS AVENUE, RICHMOND, VA 23227
NORTH	SCALE IN FEET 0 150 / DATE 1-15-15 / FIGURE 3



HERCULES ROAD
HEAVY TREES
WEST BEAR CREEK
EAST BEAR CREEK
UNNAMED TRIBUTARY
CATTAIL CREEK
BAILEY CREEK
OUTFALL-001
OUTFALL-002
OUTFALL-005
OUTFALL-006
OUTFALL-007
OUTFALL-009
OUTFALL-010
OUTFALL-011
OUTFALL-012
OUTFALL-013
OUTFALL-018
OUTFALL-019
OUTFALL-020
OUTFALL-021
OUTFALL-022
OUTFALL-025
OUTFALL-027
TAP_WATER-1
TAP_WATER-2
NATROSOL LAGOON
WHITEWATER LAGOONS
VACUUM FILTER SLUDGE PILE
SLUDGE DRYING BEDS
LEGEND
MAJOR GROUND SURFACE CONTOUR
MINOR GROUND SURFACE CONTOUR
TREELINE
WATER, STREAMS, PONDS
UNDERGROUND STORM SEWER DRAIN
PIEZOMETER INSTALLED OCTOBER 2007
GROUNDWATER MONITORING WELL
STORM DRAIN MANHOLE LOCATION
OUTFALL LOCATION
13.28 GROUNDWATER VALUE (FEET)
GROUNDWATER CONTOUR (FEET)
INFERRED GROUNDWATER CONTOUR (FEET)
NS NOT SAMPLED
DRAFT
DRAFTED BY: JW
CHECKED BY: KH
REVIEWED BY: JK
NORTH
GROUNDWATER CONTOUR MAP
NOVEMBER 2013
HERCULES INCORPORATED
AQUALON DIVISION
HOPEWELL, VIRGINIA
Groundwater & Environmental Services, Inc.
3701 SAUNDERS AVENUE, RICHMOND, VA 23227
SCALE IN FEET
0 150
DATE 1-15-15
FIGURE 4



DRAFTED BY: JW	GROUNDWATER CONTOUR MAP JULY 2014
CHECKED BY: KH	HERCULES INCORPORATED AQUALON DIVISION HOPEWELL, VIRGINIA
REVIEWED BY: JK	Groundwater & Environmental Services, Inc. 3701 SAUNDERS AVENUE, RICHMOND, VA 23227
NORTH	SCALE IN FEET 0 150 — DATE 1-15-15 — FIGURE 5

TABLES

Table 1
Groundwater Sampling Field Parameters
2013/2014 Site-Wide Groundwater Sampling Event
Hercules - Aqualon
Hopewell, Virginia

Well ID	Unit Completed	Easting X	Northing Y	Total Depth (feet)	Screened Interval	Top of Ground Surface	Top of PVC Casing	Sample Date	Depth to Water	Groundwater Elevation	Sample Time	pH	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Temperature (°C)	Oxidation Reduction Potential (mV)	Turbidity (NTUs)
WWL-1	LPUS	11838358.46	3628729.75	43.5	33.5 - 43.5	32.76	32.3	6/6/2013	23.00	9.3	10:05	6.53	3.600	0.11	20.50	-148.8	3.82
								11/27/2013	23.50	8.80	11:25	6.60	3.799	0.44	17.60	-97.7	7.95
								7/18/2014	23.78	8.52	10:50	6.49	3.594	0.59	21.30	-77.1	11.7
WWL-2	US	11838710.56	3628703.005	40.4	30.4 - 40.4	32.2	31.8	6/6/2013	30.47	1.33	10:45	6.09	11.820	0.30	20.20	-24.7	4.84
								11/27/2013	26.37	5.43	13:45	6.02	17.870	0.42	17.42	17.1	6.58
								7/17/2014	23.78	8.02	14:15	6.39	4.947	0.81	21.60	-23.6	10.3
WWL-3U	UPUS	11839000.8	3629029.188	33	21 - 33	37.94	40.22	6/4/2013	30.42	9.80	13:05	4.46	2.820	1.73	20.50	-33.1	9.10
								12/3/2013	31.26	8.96	15:25	5.72	2.573	2.54	18.79	-41.7	9.70
								7/18/2014	31.10	9.12	9:00	6.10	2.673	1.01	20.30	22.3	8.46
WWL-3L	LPUS	11838999.12	3629033.435	42	38 - 42	37.94	40.2	6/4/2013	31.04	9.16	14:30	5.89	3.910	0.75	20.30	-34.8	8.80
								12/3/2013	31.26	8.94	10:05	5.92	3.801	0.50	17.43	-66.4	11.10
								7/17/2014	31.30	8.90	16:15	6.09	3.812	2.00	22.10	20.6	11.4
LF-1	LS	11838427.84	3628449.91	40	30 - 40	13.04	16.19	6/5/2013	8.76	7.43	13:35	6.18	1.010	0.28	16.80	-7.1	5.20
								12/3/2013	8.53	7.66	10:45	5.99	1.228	5.07	16.28	-38.6	6.30
								7/17/2014	8.49	7.70	9:50	6.36	1.090	4.34	17.60	111.1	5.04
LF-2	LS	11838137.41	3628309.211	39	29 - 39	13.79	16.36	6/5/2013	9.70	6.66	14:45	6.11	0.820	0.24	17.50	3.1	8.20
								12/3/2013	9.61	6.75	11:45	5.95	0.976	3.18	18.20	-23.7	8.95
								7/17/2014	9.48	6.88	10:10	6.49	0.915	2.74	17.50	55.6	6.97
LF-3	LPUS	11837758.39	3628306.248	28	18 - 28	23.24	25.5	6/4/2013	16.90	8.60	15:15	6.18	1.260	0.38	16.30	22.0	7.80
								12/3/2013	16.73	8.77	13:00	6.04	0.820	2.65	18.08	-8.4	9.75
								7/17/2014	16.90	8.60	10:50	7.18	0.741	0.60	18.90	79.6	9.8
LF-4	LS	11837644.03	3628718.962	57	47 - 57	33.79	36.81	NS									
								NS									
								NS									
LF-5	LPUS	11838064.73	3629073.598	57	47 - 57	38.71	41.57	6/4/2013	32.16	9.41	14:30	6.23	0.870	0.29	18.70	-9.7	8.40
								11/27/2013	31.95	9.62	9:55	6.11	1.260	2.41	13.37	-2.1	7.47
								7/17/2014	32.08	9.49	11:35	6.85	1.151	0.87	20.70	41.4	8.3
NAT-1	US	11840118.37	3630274.997	48	25 - 45	40.95	43.05	6/4/2013	28.76	14.29	9:25	5.53	0.750	0.27	21.50	203.1	7.60
								11/25/2013	28.79	14.26	15:25	5.86	1.011	0.95	20.89	186.2	9.86
								7/15/2014	27.97	15.08	10:47	5.69	0.980	1.77	23.54	189.4	9.5
NAT-2	US	11839979.32	3629898.975	44	20 - 40	33.39	35.33	6/4/2013	21.46	13.87	12:45	6.73	1.310	0.25	18.50	-111.1	19.70
								11/25/2013	21.41	13.92	14:30	6.92	1.680	0.26	17.93	-82.3	3.68
								7/14/2014	20.66	14.67	16:05	6.85	1.632	1.15	18.33	-114.9	9.5
NAT-3	US	11840047.31	3629806.258	30	8 - 28	28.89	31.46	6/4/2013	17.91	13.55	11:25	7.30	3.080	0.41	16.30	-118.0	7.50
								11/25/2013	17.91	13.55	13:35	7.32	4.063	0.35	17.48	-90.2	5.37
								7/14/2014	17.21	14.25	13:58	7.22	4.378	1.71	17.31	-118.2	9.28
NAT-4	US	11840182.11	3629899.228	36	15 - 35	29.76	31.06	6/5/2013	12.88	18.18	9:35	6.93	0.379	0.44	19.10	-94.1	13.70
								11/26/2013	14.32	16.74	12:40	7.04	0.467	0.69	15.52	-57.1	29.20
								7/16/2014	12.90	18.16	14:25	6.76	0.440	0.83	21.75	-63.6	35.4
RAB-MW1	NDA	3416.4372	3761.6494	Well Abandoned													
RAB-MW1R	NDA	11840142.72	3629673.714	35	25 - 35	26.64	28.64	6/6/2013	18.39	10.25	15:15	5.83	1.52	15.1	18.8	-14	15
								11/26/2013	18.01	10.63	9:40	6.03	2.906	2.16	16.64	-1.7	5.67
								7/16/2014	17.48	11.16	9:40	6.31	1.353	6.27	19.3	132.6	19.4
RAB-MW2	NDA	11840113.77	3629546.258	25.15	Unknown	23.49	25.6	6/6/2013	11.70	13.90	15:40	6.12	3.840	0.83	20.30	-44.9	30.40
								11/25/2013	12.40	13.20	12:00	5.95	3.590	3.04	20.84	3.9	8.70
								7/16/2014	11.52	14.08	12:30	6.13	3.221	2.31	20.10	97.4	41.7
RAB-MW3	NDA	11840305.64	3629644.444	22.39	Unknown	27.23	29.76	6/6/2013	15.85	13.91	13:30	6.02	0.940	0.25	17.20	-14.1	9.75
								11/25/2013	16.20	13.56	14:05	6.16	0.844	5.97	15.17	-23.9	3.97
								7/15/2014	13.15	16.61	11:40	6.31	1.353	6.27	19.30	132.6	19.40
RAB-MW4	NDA	11840230.7	3629502.741	25.65	Unknown	24.31	26.76	6/5/2013	13.48	13.28	16:35	5.87	2.860	1.03	22.00	-17.6	9.80
								11/25/2013	14.20	12.56	12:55	6.22	2.527	5.39	19.45	132.7	9.40
								7/15/2014	15.85	10.91	10:55	6.17	0.989	0.64	20.80	-46.3	9.4
SDB-MW1	UPUS	11839878.58	3628756.318	35	25 - 35	29.34	32.03	6/6/2013	21.06	10.97	12:15	5.78	0.870	0.55	17.50	-42.0	2.11
								12/2/2013	21.19	10.84	14:15	5.76	1.208	1.31	17.50	-52.4	8.70
								7/16/2014	21.05	10.98	14:20	5.92	1.093	0.91	18.40	-24.7	13.2
SDB-MW2	UPUS	11839816.95	3628494.383	32	22 - 32	25.5	28.37	NS									
								12/2/2013	19.18	9.19	15:00	5.99	2.712	1.54	17.78	43.7	7.30
								7/16/2014	18.71	9.66	14:50	6.49	2.186	2.52	17.70	118.90	5.89
SDB-MW3	UPUS	11839663.09	3628307.774	35	25 - 35	25.94	28.5	6/6/2013	19.66	8.84	12:50	5.71	2.010	0.86	17.80	101.7	6.50
								12/3/2013	20.38	8.12	9:45	5.58	2.437	5.81	16.72	86.4	6.90
								7/16/2014	19.60	8.90	15:40	5.99	2.280	3.17	18.70	128.6	6.89
VFSP-MW1	UPUS	11839182.97	3628331.06	36	26 - 36	9.39	12.32	6/5/2013	4.81	7.51	12:15	6.43	0.493	0.25	16.00	-23.0	11.20
								12/3/2013	4.59	7.73	14:10	6.18	0.611	3.07	16.15	-35.7	9.87
								7/18/2014	4.58	7.74	11:45	7.28	0.397	0.97	16.20	90.1	5.02

Table 1
Groundwater Sampling Field Parameters
2013/2014 Site-Wide Groundwater Sampling Event
Hercules - Aqualon
Hopewell, Virginia

Well ID	Unit Completed	Easting X	Northing Y	Total Depth (feet)	Screened Interval	Top of Ground Surface	Top of PVC Casing	Sample Date	Depth to Water	Groundwater Elevation	Sample Time	pH	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Temperature (°C)	Oxidation Reduction Potential (mV)	Turbidity (NTUs)
MW-1	US	11839032.72	3629778.26	47	17 - 47	41.84	43.28	6/5/2013	33.90	9.38	13:15	5.87	2.020	0.63	21.40	-181.3	7.30
								12/2/2013	33.90	9.38	11:50	5.50	2.145	1.52	19.26	46.6	9.43
								7/17/2014	33.92	9.36	8:50	5.96	1.952	2.21	20.50	39.8	5.72
MW-2	LPUS	11838730.68	3629410.602	53	33 - 53	40.45	42.46	6/4/2013	32.90	9.56	16:10	5.84	3.500	0.12	20.10	-84.9	10.10
								12/2/2013	33.16	9.30	10:25	5.44	3.936	0.90	19.84	-33.5	8.82
								7/17/2014	32.95	9.51	8:40	5.38	3.570	1.42	20.32	-9.4	9.5
MW-3	LPUS	11839387.23	3629459.234	53	33 - 53	33.13	34.82	6/3/2013	25.87	8.95	15:45	6.63	0.537	0.28	17.60	-105.3	7.60
								11/26/2013	25.79	9.03	11:15	6.46	0.349	3.59	17.07	-67.9	9.60
								7/17/2014	25.85	8.97	10:30	6.23	0.320	1.33	18.47	-74.2	25.4
MW-4	LPUS	11839465.38	3629268.544	52	32 - 52	32.38	33.67	6/3/2013	24.61	9.06	12:35	5.99	2.130	0.66	20.20	-78.4	11.80
								11/26/2013	24.63	9.04	12:50	6.10	2.638	2.60	18.15	-64.1	9.70
								7/16/2014	24.74	8.93	11:30	6.11	2.062	1.03	19.12	-68.1	9.7
MW-4U	LPUS	11839459.97	3629261.799	36	21 - 36	32.08	32.61	6/3/2013	23.50	9.11	14:15	5.86	2.900	0.11	24.10	-72.6	9.90
								11/26/2013	23.51	9.10	14:30	6.03	3.197	3.33	16.70	-36.8	9.96
								7/16/2014	23.88	8.73	13:40	6.08	3.054	1.26	20.94	-54.4	8.6
MW-5	US	11839332.96	3629071.486	52	27 - 52	29.44	31.28	6/3/2013	22.05	9.23	15:50	6.07	3.690	0.91	22.10	-99.6	9.60
								12/3/2013	22.28	9.00	14:41	6.66	3.501	0.20	19.40	-134.6	9.70
								7/15/2014	22.08	9.20	14:57	6.37	3.280	0.73	19.28	-107.7	9.8
MW-5U	UPUS	11839340.96	3629065.349	26	16 - 26	29.34	30.32	6/4/2013	21.13	9.19	9:15	6.90	8.710	0.29	21.20	-119.3	5.20
								12/3/2013	21.41	8.91	12:15	6.97	8.450	0.31	20.54	-119.4	2.01
								7/15/2014	21.18	9.14	15:46	6.68	8.504	1.23	20.61	-103.2	4.74
MW-5D	LS	11839343.98	3629077.989	72	62 - 72	29.3	32.36	6/4/2013	21.05	11.31	NS						
								12/3/2013	21.47	10.89	NS						
								7/16/2014	NM	NM	NS						
MW-6	US	11839532.47	3629015.383	32	12 - 32	15.18	16.24	6/3/2013	8.11	8.13	14:30	6.11	2.370	0.63	17.70	-57.6	7.54
								11/27/2013	8.28	7.96	9:40	6.40	3.400	0.98	18.90	-52.8	10.12
								7/17/2014	8.00	8.24	13:33	6.00	3.139	1.26	19.99	-48.3	9.7
MW-7U	LS	11838624.62	3629924.87	59	39 - 59	42.73	44.51	6/5/2013	33.85	10.66	10:25	5.08	6.950	0.31	21.80	-70.9	10.10
								11/27/2013	33.68	10.83	13:05	5.23	6.228	2.25	17.59	60.1	31.20
								7/18/2014	33.76	10.75	11:15	4.81	7.788	1.66	23.79	104.6	8.4
MW-7L	LS	11838629.56	3629920.204	82	60 - 82	42.76	44.54	6/5/2013	33.70	10.84	12:45	6.59	0.520	0.27	19.20	-190.6	8.40
								11/27/2013	33.53	11.01	12:15	6.76	0.557	2.05	18.36	-34.1	9.64
								7/18/2014	33.65	10.89	12:55	6.48	0.528	0.60	22.77	-29.1	9.81
MW-8U	UPUS	11839602.64	3628959.52	23	8 - 23	17.95	20.87	6/3/2013	12.96	7.91	12:00	6.50	2.240	0.22	19.60	-149.8	7.62
								12/2/2013	13.06	7.81	15:18	6.59	3.122	0.22	21.55	-113.4	9.40
								7/17/2014	12.95	7.92	14:35	6.37	2.942	0.89	21.51	-133.5	8.7
MW-8L	LPUS	3116.9818	2822.5656	Well Abandoned													
MW-8L-R	LPUS	11839513.96	3628909.114	32	22 - 32	17.81	20.98	6/3/2013	12.79	8.19	12:35	6.77	3.12	0.25	19.9	-156	6.73
								12/2/2013	12.87	8.11	13:42	6.81	4.201	0.37	21.21	-143.2	4.4
								7/17/2014	12.79	8.19	15:35	6.54	3.929	0.87	20.31	-143.2	7.89
MW-8D	LS	11839593.03	3628966.195	51	41 - 51	17.97	20.01	6/3/2013	11.35	8.66	13:15	6.61	0.161	1.07	20.70	65.5	5.70
								12/2/2013	12.21	7.80	12:43	6.70	0.237	0.37	19.34	-68.4	8.34
								7/18/2014	11.70	8.31	8:36	6.80	0.226	0.47	21.00	8.1	9.07
MW-9	US	11839048.25	3629103.733	48	28 - 48	39.57	41.22	6/4/2013	32.00	9.22	11:00	6.36	3.000	0.19	19.80	-84.4	8.80
								11/27/2013	32.11	9.11	14:15	6.09	3.176	2.71	18.56	-77.7	8.40
								7/18/2014	32.16	9.06	14:30	7.30	2.859	0.69	20.30	-48.3	35.8
MW-10	US	11839663.82	3629413.804	35	15 - 35	19.74	21.48	6/6/2013	11.96	9.52	10:50	5.11	1.210	0.32	16.20	187.5	4.10
								11/26/2013	11.82	9.66	14:00	5.46	1.730	0.32	17.35	206.7	6.28
								7/15/2014	11.25	10.23	15:50	5.70	1.447	3.14	15.80	163.1	8.4

Notes:
US = upper sand (screened across >75% of unit)
LS = lower sand
LPUS = lower portion of upper sand
UPUS = upper portion of upper sand
NDA = no data available
NS = Not Sampled

NM, not measured; NS, not sampled; ºC, degrees Celsius;
SC, specific conductance; mS/cm, milli-siemens per centimeter;
DO, dissolved oxygen; mg/L; milligrams per liter;
ORP, oxidation-reduction potential; mV, millivolts;
NTU, Nephelometric turbidity units

Table 2
Groundwater Sampling Collection Matrix
June 2013 Site-Wide Groundwater Sampling Event
Hercules - Aqualon
Hopewell, Virginia

Well ID	Sample Date	Sample Time	VOCs[1]	SVOCs[2]	Metals[3]	Methanol & Ethanol[4]
WWL-1	6/6/2013	10:05	TBA	--	aluminum, cadmium	--
WWL-2	6/6/2013	10:45	--	--	aluminum, arsenic, barium, cadmium, cobalt, manganese, nickel	--
WWL-3U	6/4/2013	13:05	--	--	aluminum, cadmium, vanadium	--
WWL-3L	6/4/2013	14:30	TBA	--	aluminum, cadmium	--
LF-1	6/5/2013	13:35	1,1-DCA, TCE	--	aluminum, cadmium	--
LF-2	6/5/2013	14:45	1,1-DCA	--	aluminum, cadmium	methanol
LF-3	6/4/2013	15:15	--	--	aluminum, barium, cadmium, cobalt, manganese, nickel, vanadium	methanol
LF-4	Not Sampled					
LF-5	6/4/2013	14:30	1,1-DCA	--	chromium	--
NAT-1	6/4/2013	9:25	TCE	--	cadmium, cobalt, lead	--
NAT-2	6/4/2013	12:45	--	--	lead	methanol
NAT-3	6/4/2013	11:25	PCE	--	cadmium	--
NAT-4	6/5/2013	9:35	diethyl ether	--	aluminum, arsenic, barium, chromium, iron, lead, vanadium	--
RAB-MW1R	6/6/2013	15:15	full VOCs	full SVOCs	full metals	methanol, ethanol
RAB-MW2	6/6/2013	15:40	diethyl ether	--	cadmium, cobalt, manganese, nickel	--
RAB-MW3	6/6/2013	13:30	--	--	barium, iron	--
RAB-MW4	6/5/2013	16:35	--	--	cadmium	--
SDB-MW-1	6/6/2013	12:15	TBA	--	aluminum, arsenic, chromium, iron, lead, manganese, nickel	--
SDB-MW-2	Not Sampled					
SDB-MW-3	6/6/2013	12:50	TBA, diethyl ether	--	cadmium, nickel	--
VFSP-MW1	6/5/2013	12:15	TBA	--	barium, cobalt, iron, manganese, nickel	--
MW-1	6/5/2013	13:15	--	1,4-dioxane	chromium	--
MW-2	6/4/2013	16:10	diethyl ether	1,4-dioxane, bis(2-chloroethyl)ether	aluminum, iron, manganese	methanol, ethanol
MW-3	6/3/2013	15:45	--	full SVOC	--	--
MW-4	6/3/2013	12:35	TBA	--	aluminum, barium	methanol
MW-4U	6/3/2013	14:50	TBA	--	aluminum, barium, iron, lead	--
MW-5	6/3/2013	15:50	--	--	aluminum, barium, iron	--
MW-5U	6/4/2013	9:15	--	--	--	methanol
MW-6	6/3/2013	14:30	--	--	aluminum, lead	--
MW-7U	6/5/2013	10:25	--	naphthalene	cadmium, cobalt, manganese, lead, mercury, nickel, vanadium	--
MW-7L	6/5/2013	12:45	--	--	aluminum, chromium, iron, lead	methanol
MW-8U	6/3/2013	12:00	TBA	--	aluminum, lead	--
MW-8L-R	6/3/2013	12:35	TBA	1,4-dioxane	aluminum, arsenic, barium	--
MW-8D	6/3/2013	13:15	--	--	aluminum, cadmium, lead	--
MW-9	6/4/2013	11:00	--	--	aluminum, iron, lead	--
MW-10	6/6/2013	10:50	chloroform, 1,2-DCA	1,4-dioxane	aluminum, cadmium, nickel	--
Total			**19**	**7**	**32**	**8**
QA/QC Samples						
Equipment Blank 1	6/4/2013	9:30	1	1	1	1
Equipment Blank 2	6/6/2013	16:00	--	--	1	--
Trip Blank	6/3/2013	--	1	--	--	--
Trip Blank	6/4/2013	--	1	--	--	--
Trip Blank	6/5/2013	--	1	--	--	--
Trip Blank	6/6/2013	--	1	--	--	--
Field Blank 1	6/6/2013	12:55	1	1	1	1
Field Blank 2	6/5/2013	13:40	--	--	1	--
Field Dup 1 (RAB-MW-1R)	6/6/2013	15:55	1	1	1	1
Field Dup 2 (WWL-2)	6/6/2013	10:45	--	--	1	--
MS 1 (MW-10)	6/6/2013	10:50	1	1	1	--
MSD 1 (MW-10)	6/6/2013	10:50	1	1	1	--
MS 1 (RAB-MW-1R)	6/6/2013	15:50	--	--	--	1
MSD 1 (RAB-MW-1R))	6/6/2013	15;50	--	--	--	1
MS 2 (MW-5)	6/3/2013	15:50	--	--	1	--
MSD 2 (MW-5)	6/3/2013	15:50	--	--	1	--
Total count			**28**	**12**	**42**	**13**

Notes:
[1] Select volatile Organic Coumpounds (VOCs) (i.e., 1,1,2,2-tetrachloroethane, 1,1-dichloroethane, 1,2-dichloroethane, chloroform, diethyl ether, t-Butanol, tetrachloroethene, and trichlorethene) were analyzed via US EPA SW846 method 8260B
[2] Select semi-volatile Organic Coumpounds (SVOCs) (i.e., 1,4-dioxane, bis(2-ethylhexyl)phthalate, bis(2-chloroethyl)ether and naphthalene) were analyzed via US EPA SW846 method 8270D
[3] Select metals (i.e., aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, selenium and vanadium) were analyzed via US EPA SW846 method 6020A
[4] Methanol and Ethanol were analyzed by US EPA SW846 method 8015C

Table 3
Groundwater Sampling Collection Matrix
November/December 2013 Site-Wide Groundwater Sampling Event
Hercules, Aqualon
Hopewell, Virginia

Well ID	Sample Date	Sample Time	VOCs (8260B)	SVOCs (8270C)	Metals (6020)	Methanol & Ethanol (8015B)
WWL-1	11/27/2013	11:25	TBA	--	aluminum, antimony, cadmium	--
WWL-2	11/27/2013	13:45	--	--	aluminum, arsenic, barium, cadmium, cobalt, manganese, nickel	methanol
WWL-3U	12/3/2013	15:25	--	--	aluminum, cadmium	methanol
WWL-3L	12/3/2013	10:05	--	--	aluminum, cadmium	--
LF-1	12/3/2013	10:45	1,1-DCA, TCE	--	aluminum, cadmium	methanol
LF-2	12/3/2013	11:45	1,1-DCA, TCE	--	aluminum, cadmium, lead	methanol
LF-3	12/3/2013	13:00	--	--	aluminum, barium, chromium, cobalt, manganese, nickel, vanadium	methanol
LF-4	Not Sampled					
LF-5	11/27/2013	10:00	1,1-DCA, 1,2-DCA, TCE	--	chromium	methanol
NAT-1	11/25/2013	15:25	TCE	--	cadmium, cobalt, lead	--
NAT-2	11/25/2013	14:30	--	--	lead	methanol
NAT-3	11/25/2013	13:35	TBA	--	cadmium, chromium, lead, nickel	--
NAT-4	11/26/2013	12:40	diethyl ether	--	aluminum, arsenic, barium, beryllium, cadmium, chromium, iron, lead, vanadium	methanol
RAB-MW1R	11/26/2013	9:40	full VOCs	full SVOCs	full metals	methanol, ethanol
RAB-MW2	11/25/2013	12:00	diethyl ether	--	cadmium, cobalt, manganese, nickel	methanol
RAB-MW3	11/25/2013	14:05	--	--	barium, iron	--
RAB-MW4	11/25/2013	12:55	--	--	cadmium	--
SDB-MW-1	12/2/2013	14:15	TBA	--	aluminum, arsenic, chromium, iron, lead, manganese, nickel	--
SDB-MW-2	12/2/2013	15:00	--	--	--	--
SDB-MW-3	12/3/2013	9:45	TBA, diethyl ether	--	cadmium, nickel, selenium	--
VFSP-MW1	12/3/2013	14:10	--	--	barium, cobalt, iron, manganese, nickel	--
MW-1	12/2/2013	11:50	--	1,4-dioxane	chromium, lead	--
MW-2	12/2/2013	10:25	diethyl ether	1,4-dioxane, bis(2-chloroethyl)ether	aluminum, iron, manganese	methanol, ethanol
MW-3	11/26/2013	11:15	--	full SVOC	--	--
MW-4	11/26/2013	12:50	TBA	--	aluminum, barium, lead	methanol
MW-4U	11/26/2013	14:30	TBA	--	aluminum, barium, iron, lead	methanol
MW-5	12/3/2013	14:41	--	--	aluminum, barium, iron	--
MW-5U	12/3/2013	12:15	--	1,4-dichlorobenzene	--	methanol
MW-6	11/27/2013	9:40	--	--	aluminum, lead	--
MW-7U	11/27/2013	13:05	--	naphthalene	aluminum, beryllium, cadmium, cobalt, copper, manganese, lead, mercury, nickel	--
MW-7L	11/27/2013	12:15	--	--	aluminum, chromium, lead	methanol
MW-8U	12/2/2013	15:18	TBA	--	aluminum, chromium, lead	--
MW-8L-R	12/2/2013	13:47	TBA	1,4-dioxane	aluminum, arsenic	--
MW-8D	12/2/2013	12:43	--	--	aluminum, cadmium, lead	--
MW-9	11/27/2013	14:15	--	--	aluminum, iron, lead	--
MW-10	11/26/2013	14:00	chloroform, 1,2-DCA	1,4-dioxane	aluminum, cadmium, lead, nickel	--
Total			**17**	**8**	**32**	**15**
QA/QC Samples						
Equipment Blank 1	11/26/2013	10:30	1	1	1	1
Equipment Blank 2	12/2/2013	12:10	---	---	1	---
Trip Blank 1	--	--	1	---	---	---
Trip Blank 2	--	--	1	---	---	---
Trip Blank 3	--	--	1	---	---	---
Trip Blank 4	--	--	1	---	---	---
Field Blank 1	11/25/2014	15:00	1	1	1	1
Field Blank 2	12/2/2013	11:55	---	---	1	---
Field Dup 1 (RAB-MW1R)	11/26/2013	9:45	1	1	1	1
Field Dup 2 (MW-7U)	11/27/2013	13:10	---	---	1	---
MS 1 (RAB-MW1R)	11/26/2013	9:50	1	1	1	1
MSD 1 (RAB-MW1R)	11/26/2013	9:50	1	1	1	1
MS 2 (VFSP-MW1)	12/3/2013	14:10	---	---	1	---
MSD 2 (VFSP-MW1)	12/3/2013	14:10	---	---	1	---
Total count			**26**	**13**	**42**	**20**

Table 3
Groundwater Sampling Collection Matrix
November/December 2013 Site-Wide Groundwater Sampling Event
Hercules, Aqualon
Hopewell, Virginia

Well ID	Sample Date	Sample Time	Dissolved: iron, manganese (6020)	Dissolved Major Cations calcium, magnesium, sodium, ammonium as NH4 and potassium (6020)	Dissolved ortho-phosphate (365.1)	Dissolved ammonia (350.1)	Total sulfide (9034)	Dissolved sulfide (9034)	Alkalinity (2320B)	Major Anions bicarbonate and carbonate, HCO3/CO3, SO4, Cl, NO3, NO2 (9056A)	Dissolved Organic Carbon (9060)
WWL-1	11/27/2013	11:25	--	--	--	--	--	--	--	--	--
WWL-2	11/27/2013	13:45	--	--	--	--	--	--	--	--	--
WWL-3U	12/3/2013	15:25	--	--	--	--	--	--	--	--	--
WWL-3L	12/3/2013	10:05	--	--	--	--	--	--	--	--	--
LF-1	12/3/2013	10:45	--								--
LF-2	12/3/2013	11:45	--	--	--	--	--	--	--	--	--
LF-3	12/3/2013	13:00	--	--	--	--	--	--	--	--	--
LF-4			Not Sampled								
LF-5	11/27/2013	10:00	--	--	--	--	--	--	--	--	--
NAT-1	11/25/2013	15:25	--	--	--	--	--	--	--	--	--
NAT-2	11/25/2013	14:30	--	--	--	--	--	--	--	--	--
NAT-3	11/25/2013	13:35	--	--	--	--	--	--	--	--	--
NAT-4	11/26/2013	12:40	--	--	--	--	--	--	--	--	--
RAB-MW1R	11/26/2013	9:40	--	--	--	--	--	--	--	--	--
RAB-MW2	11/25/2013	12:00	--	--	--	--	--	--	--	--	--
RAB-MW3	11/25/2013	14:05	--	--	--	--	--	--	--	--	--
RAB-MW4	11/25/2013	12:55	--	--	--	--	--	--	--	--	--
SDB-MW-1	12/2/2013	14:15	--	--	--	--	--	--	--	--	--
SDB-MW-2	12/2/2013	15:00	1	1	1	1	1	1	1	1	1
SDB-MW-3	12/3/2013	9:45	--	--	--	--	--	--	--	--	--
VFSP-MW1	12/3/2013	14:10	--	--	--	--	--	--	--	--	--
MW-1	12/2/2013	11:50	1	1	1	1	1	1	1	1	1
MW-2	12/2/2013	10:25	1	1	1	1	1	1	1	1	1
MW-3	11/26/2013	11:15	1	1	1	1	1	1	1	1	1
MW-4	11/26/2013	12:50	1	1	1	1	1	1	1	1	1
MW-4U	11/26/2013	14:30	1	1	1	1	1	1	1	1	1
MW-5	12/3/2013	14:41	1	1	1	1	1	1	1	1	1
MW-5U	12/3/2013	12:15	1	1	1	1	1	1	1	1	1
MW-6	11/27/2013	9:40	--	--	--	--	--	--	--	--	--
MW-7U	11/27/2013	13:05	--	--	--	--	--	--	--	--	--
MW-7L	11/27/2013	12:15	--	--	--	--	--	--	--	--	--
MW-8U	12/2/2013	15:18	1	1	1	1	1	1	1	1	1
MW-8L-R	12/2/2013	13:47	--	--	--	--	--	--	--	--	--
MW-8D	12/2/2013	12:43	1	1	1	1	1	1	1	1	1
MW-9	11/27/2013	14:15	--	--	--	--	--	--	--	--	--
MW-10	11/26/2013	14:00	--	--	--	--	--	--	--	--	--
Total			10	10	10	10	10	10	10	10	10
Equipment Blank 1	11/26/2013	10:30	--	--	--	--	--	--	--	--	--
Equipment Blank 2	12/2/2013	12:10	--	--	--	--	--	--	--	--	--
Trip Blank 1	--	--	--	--	--	--	--	--	--	--	--
Trip Blank 2	--	--	--	--	--	--	--	--	--	--	--
Trip Blank 3	--	--	--	--	--	--	--	--	--	--	--
Trip Blank 4	--	--	--	--	--	--	--	--	--	--	--
Field Blank 1	11/25/2014	15:00	--	--	--	--	--	--	--	--	--
Field Blank 2	12/2/2013	11:55	--	--	--	--	--	--	--	--	--
Field Dup 1 (RAB-MW1R)	11/26/2013	9:45	--	--	--	--	--	--	--	--	--
Field Dup 2 (MW-7U)	11/27/2013	13:10	--	--	--	--	--	--	--	--	--
MS 1 (RAB-MW1R)	11/26/2013	9:50	--	--	--	--	--	--	--	--	--
MSD 1 (RAB-MW1R)	11/26/2013	9:50	--	--	--	--	--	--	--	--	--
MS 2 (VFSP-MW1)	12/3/2013	14:10	--	--	--	--	--	--	--	--	--
MSD 2 (VFSP-MW1)	12/3/2013	14:10	--	--	--	--	--	--	--	--	--
Total count			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Notes:
[1] Select volatile organic compounds (VOCs) (i.e., 1,1,2,2-tetrachloroethane, 1,1-dichloroethane, 1,2-dichloroethane, chloroform, diethyl ether, t-Butanol,
[2] Select semi-volatile organic compounds (SVOCs) (i.e., 1,4-dioxane, bis(2-ethylhexyl)phthalate, bis(2-chloroethyl)ether and naphthalene) were analyzed via US EPA
[3] Select metals (i.e., aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, selenium and vanadium) were analyzed via US EPA SW846 method 6020A
[4] Methanol and Ethanol were analyzed by US EPA SW846 method 8015C

Table 4
Groundwater Sampling Collection Matrix
July 2014 Site-Wide Groundwater Sampling Event
Hercules - Aqualon
Hopewell, Virginia

Well ID	Date Sampled	Time Sampled	VOCs[1] (8260B)	SVOCs[2] (8270C)	Metals[3] (6020)	Methanol & Ethanol[4] (8015B)
WWL-1	7/18/2014	10:50	TBA	--	aluminum, antimony, cadmium	--
WWL-2	7/17/2014	14:15	--	--	aluminum, arsenic, barium, cadmium, cobalt, manganese, nickel	methanol
WWL-3U	7/18/2014	9:00	--	--	aluminum, cadmium	methanol
WWL-3L	7/17/2014	16:15	--	--	aluminum, cadmium	--
LF-1	7/17/2014	9:50	1,1-DCA, TCE	--	aluminum, cadmium	methanol
LF-2	7/17/2014	10:10	1,1-DCA, TCE	--	aluminum, cadmium, lead	methanol
LF-3	7/17/2014	10:50	--	--	aluminum, barium, chromium, cobalt, manganese, nickel, vanadium	methanol
LF-4	Not Sampled					
LF-5	7/17/2014	11:35	1,1-DCA, 1,2-DCA, TCE	--	chromium	methanol
NAT-1	7/15/2014	10:47	TCE	--	cadmium, cobalt, lead	--
NAT-2	7/14/2014	16:05	--	--	lead	methanol
NAT-3	7/14/2014	13:58	TBA	--	cadmium, chromium, lead, nickel	--
NAT-4	7/16/2014	14:25	diethyl ether	--	aluminum, arsenic, barium, beryllium, cadmium, chromium, iron, lead, vanadium	methanol
RAB-MW1R	7/16/2014	9:40	full VOCs	full SVOCs	full metals	methanol, ethanol
RAB-MW2	7/16/2014	12:30	diethyl ether	--	cadmium, cobalt, manganese, nickel	methanol
RAB-MW3	7/16/2014	11:40	--	--	barium, iron	--
RAB-MW4	7/15/2014	10:55	--	--	cadmium	--
SDB-MW-1	7/16/2014	14:20	TBA	--	aluminum, arsenic, chromium, iron, lead, manganese, nickel	--
SDB-MW-2	7/16/2014	14:50	--	--	--	--
SDB-MW-3	7/16/2014	15:40	TBA, diethyl ether	--	cadmium, nickel, selenium	--
VFSP-MW1	7/18/2014	11:45	--	--	barium, cobalt, iron, manganese, nickel	--
MW-1	7/17/2014	8:50	--	1,4-dioxane	chromium, lead	--
MW-2	7/17/2014	8:40	diethyl ether	1,4-dioxane, bis(2-chloroethyl)ether	aluminum, iron, manganese	methanol, ethanol
MW-3	7/17/2014	10:30	--	full SVOC	--	--
MW-4	7/16/2014	11:30	TBA	--	aluminum, barium, lead	methanol
MW-4U	7/16/2014	13:40	TBA	--	aluminum, barium, iron, lead	methanol
MW-5	7/15/2014	14:57	--	--	aluminum, barium, iron	--
MW-5U	7/15/2014	15:56	--	1,4-dichlorobenzene	--	methanol
MW-6	7/17/2014	13:33	--	--	aluminum, lead	--
MW-7U	7/18/2014	11:15	--	naphthalene	aluminum, beryllium, cadmium, cobalt, copper, manganese, lead, mercury, nickel	--
MW-7L	7/18/2014	12:55	--	--	aluminum, chromium,lead	methanol
MW-8U	7/17/2014	14:35	TBA	--	aluminum, chromium, lead	--
MW-8L-R	7/17/2014	15:35	TBA	1,4-dioxane	aluminum, arsenic	--
MW-8D	7/18/2014	8:36	--	--	aluminum, cadmium, lead	--
MW-9	7/18/2014	14:30	--	--	aluminum, iron, lead	--
MW-10	7/15/2014	15:50	chloroform, 1,2-DCA	1,4-dioxane	aluminum, cadmium, lead, nickel	--
Total			**17**	**8**	**32**	**8**
QA/QC Samples						
Equipment Blank 1	7/16/2014	9:55	1	1	1	1
Equipment Blank 2	7/17/2014	9:05	--	--	1	--
Trip Blank	7/15/2014	--	1	--	--	--
Trip Blank	7/16/2014	--	1	--	--	--
Trip Blank	7/17/2014	--	1	--	--	--
Trip Blank	7/18/2014	--	1	--	--	--
Field Blank 1	7/16/2014	9:50	1	1	1	1
Field Blank 2	7/17/2014	9:00	--	--	1	--
Field Dup 1 (RAB-MW1R)	7/16/2014	9:40	1	1	1	1
Field Dup 2 (MW-7U)	7/18/2014	11:20	--	--	1	--
MS 1 (MW-2)	7/17/2014	8:50	1	1	1	1
MSD 1 (MW-2)	7/17/2014	8:50	1	1	1	1
MS 2 (LF-2)	7/17/2014	10:10	--	--	1	--
MSD 2 (LF-2)	7/17/2014	10:10	--	--	1	--
Total count			**26**	**13**	**42**	**13**

Table 4
Groundwater Sampling Collection Matrix
July 2014 Site-Wide Groundwater Sampling Event
Hercules - Aqualon
Hopewell, Virginia

Well ID	Date Sampled	Time Sampled	Dissolved: iron, manganese (6020)	Dissolved Major Cations calcium, magnesium, sodium, ammonium as NH4 and potassium (6020)	Dissolved ortho-phosphate (365.1)	Dissolved ammonia (350.1)	Total sulfide (9034)	Dissolved sulfide (9034)	Alkalinity (2320B)	Major Anions bicarbonate and carbonate, HCO3/CO3, SO4, Cl, NO3, NO2 (9056A)	Dissolved Organic Carbon (9060)
WWL-1	7/18/2014	10:50	--	--	--	--	--	--	--	--	--
WWL-2	7/17/2014	14:15	--	--	--	--	--	--	--	--	--
WWL-3U	7/18/2014	9:00	--	--	--	--	--	--	--	--	--
WWL-3L	7/17/2014	16:15	--	--	--	--	--	--	--	--	--
LF-1	7/17/2014	9:50	--								--
LF-2	7/17/2014	10:10	--	--	--	--	--	--	--	--	--
LF-3	7/17/2014	10:50	--	--	--	--	--	--	--	--	--
LF-4			Not Sampled								
LF-5	7/17/2014	11:35	--	--	--	--	--	--	--	--	--
NAT-1	7/15/2014	10:47	--	--	--	--	--	--	--	--	--
NAT-2	7/14/2014	16:05	--	--	--	--	--	--	--	--	--
NAT-3	7/14/2014	13:58	--	--	--	--	--	--	--	--	--
NAT-4	7/16/2014	14:25	--	--	--	--	--	--	--	--	--
RAB-MW1R	7/16/2014	9:40	--	--	--	--	--	--	--	--	--
RAB-MW2	7/16/2014	12:30	--	--	--	--	--	--	--	--	--
RAB-MW3	7/16/2014	11:40	--	--	--	--	--	--	--	--	--
RAB-MW4	7/15/2014	10:55	--	--	--	--	--	--	--	--	--
SDB-MW-1	7/16/2014	14:20	--	--	--	--	--	--	--	--	--
SDB-MW-2	7/16/2014	14:50	1	1	1	1	1	1	1	1	1
SDB-MW-3	7/16/2014	15:40	--	--	--	--	--	--	--	--	--
VFSP-MW1	7/18/2014	11:45	--	--	--	--	--	--	--	--	--
MW-1	7/17/2014	8:50	1	1	1	1	1	1	1	1	1
MW-2	7/17/2014	8:40	1	1	1	1	1	1	1	1	1
MW-3	7/17/2014	10:30	1	1	1	1	1	1	1	1	1
MW-4	7/16/2014	11:30	1	1	1	1	1	1	1	1	1
MW-4U	7/16/2014	13:40	1	1	1	1	1	1	1	1	1
MW-5	7/15/2014	14:57	1	1	1	1	1	1	1	1	1
MW-5U	7/15/2014	15:56	1	1	1	1	1	1	1	1	1
MW-6	7/17/2014	13:33	--	--	--	--	--	--	--	--	--
MW-7U	7/18/2014	11:15	--	--	--	--	--	--	--	--	--
MW-7L	7/18/2014	12:55	--	--	--	--	--	--	--	--	--
MW-8U	7/17/2014	14:35	1	1	1	1	1	1	1	1	1
MW-8L-R	7/17/2014	15:35	--	--	--	--	--	--	--	--	--
MW-8D	7/18/2014	8:36	1	1	1	1	1	1	1	1	1
MW-9	7/18/2014	14:30	--	--	--	--	--	--	--	--	--
MW-10	7/15/2014	15:50	--	--	--	--	--	--	--	--	--
Total			**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
Equipment Blank 1	7/16/2014	9:55	--	--	--	--	--	--	--	--	--
Equipment Blank 2	7/17/2014	9:05	--	--	--	--	--	--	--	--	--
Trip Blank	7/15/2014	--	--	--	--	--	--	--	--	--	--
Trip Blank	7/16/2014	--	--	--	--	--	--	--	--	--	--
Trip Blank	7/17/2014	--	--	--	--	--	--	--	--	--	--
Trip Blank	7/18/2014	--	--	--	--	--	--	--	--	--	--
Field Blank 1	7/16/2014	9:50	--	--	--	--	--	--	--	--	--
Field Blank 2	7/17/2014	9:00	--	--	--	--	--	--	--	--	--
Field Dup 1 (RAB-MW1R)	7/16/2014	9:40	--	--	--	--	--	--	--	--	--
Field Dup 2 (MW-7U)	7/18/2014	11:20	--	--	--	--	--	--	--	--	--
MS 1 (MW-2)	7/17/2014	8:50	--	--	--	--	--	--	--	--	--
MSD 1 (MW-2)	7/17/2014	8:50	--	--	--	--	--	--	--	--	--
MS 2 (LF-2)	7/17/2014	10:10	--	--	--	--	--	--	--	--	--
MSD 2 (LF-2)	7/17/2014	10:10	--	--	--	--	--	--	--	--	--
Total count			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Notes:
[1] Select volatile Organic Coumpounds (VOCs) (i.e., 1,1,2,2-tetrachloroethane, 1,1-dichloroethane, 1,2-dichloroethane, chloroform, diethyl ether, t-Butanol,
[2] Select semi-volatile Organic Coumpounds (SVOCs) (i.e., 1,4-dioxane, bis(2-ethylhexyl)phthalate, bis(2-chloroethyl)ether and naphthalene) were analyzed via US
[3] Select metals (i.e., aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, selenium and vanadium) were analyzed via US EPA SW846
[4] Methanol and Ethanol were analyzed by US EPA SW846 method 8015C

Table 5
Groundwater Analytical Results, Whitewater Lagoons
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	WWL-1			WWL-2				WWL-3U			WWL-3L		
						6/6/2013	11/27/2013	7/18/2014	6/6/2013	6/6/2013 (DUP)	11/27/2013	7/17/2014	6/4/2013	12/3/2013	7/18/2014	6/4/2013	12/3/2013	7/17/2014
						Conc/Qual			Conc/Qual				Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)																		
t-Butanol[4]	75-65-0	--	190	150	--	**370**	**330**	**340**	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA
Alcohols and Glycols (mg/L)																		
Methanol	67-56-1	N	1.9	4	--	NA	NA	NA	NA	NA	**4.3 J**	5 U	NA	**1.3 J**	5 U	NA	NA	NA
Metals (ug/L)																		
Aluminum	7429-90-5	N	490	2,000	--	**68 J**	**260**	**150**	**82 J**	**74 J**	**120**	**170**	**140**	**590**	**83 J**	**140**	**220**	**610**
Antimony	7440-36-0	N	--	0.78	6	NA	5 U	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	C	4.8	0.052	10	NA	NA	NA	**6.5**	**6.6**	**4.3**	**9.2**	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	N	1,600	380	2,000	NA	NA	NA	**2,500**	**2,400**	**3,000**	**1,300**	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	0.14	0.92	5	0.5 U	0.5 U	**0.42 J**	0.5 U	0.5 U	0.5 U	**0.13 J**	**0.17 J**	0.5 U	**0.14 J**	**0.17 J**	**0.14 J**	**0.17 J**
Cobalt	7440-48-4	N	79	0.6	--	NA	NA	NA	**110**	**100**	**170**	**70**	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	N	16,000	43	--	NA	NA	NA	**25,000**	**26,000**	**47,000**	**11,000**	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	22	39	--	NA	NA	NA	**31**	**31**	**33**	**18**	NA	NA	NA	NA	NA	NA

Notes:
NA = Not Analyzed
ug/L = micrograms per liter; mg/L = milligrams per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limit
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EPA.

[1] Carcinogen/NonCarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.

[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.

[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).

[4] Surrogate compounds selected as detailed in Table 3-1 of the Human Health Risk Assessment (Attachment A to the Final RFI Report).
Screening criteria for the selected surrogates have been incorporated into this table
J = Result is less than the RL but greater than or equal to the MDL and the concetration is an approximate value.
U = Indicates the analyte was analzed for but not detected.

Table 6
Groundwater Analytical Results, Old Landfill and Landfill #156
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	LF-1			LF-2			LF-3			LF-5		
						6/5/2013	12/3/2013	7/17/2014	6/5/2013	12/3/2013	7/17/2014	6/4/2013	12/3/2013	7/17/2014	6/4/2013	11/27/2013	7/17/2014
						Conc/Qual			Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)																	
1,1-Dichloroethane	75-34-3	C	1.1	2.7	--	**2.6**	**1.4**	**1.0**	**1.6**	**1.4**	**0.92 J**	NA	NA	NA	**2.9**	**3.2**	**3.2**
1,2-Dichloroethane	107-06-2	C	--	0.17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U
Trichloroethylene	79-01-6	N	ND	0.28	5	**1.2**	**1.1**	**0.38 J**	NA	**0.53 J**	**0.71 J**	NA	NA	NA	NA	**0.66 J**	**0.55 J**
Alcohols and Glycols (mg/L)																	
Methanol	67-56-1	N	ND	4.0	--	NA	**1 J**	5 U	5 U	5 U	5 U	5 U	**1.8 J**	5 U	NA	**1 J**	5 U
Metals (ug/L)																	
Aluminum	7429-90-5	N	340	2,000	--	**91 J**	**340**	**130**	**81 J**	**120**	**98 J**	**87 J**	**260**	**530**	NA	NA	NA
Barium	7440-39-3	N	150	380	2,000	NA	NA	NA	NA	NA	NA	**170**	**140**	**160**	NA	NA	NA
Cadmium	7440-43-9	N	ND	0.92	5	0.5 U	0.5 U	**0.52**	**0.29 J**	**0.85**	**0.79**	0.5 U	NA	NA	NA	NA	NA
Chromium	7440-47-3	--	4.2	--	100	NA	NA	NA	NA	NA	NA	NA	**2.8 J**	**2.8 J**	5 U	**3.9 J**	**22**
Cobalt	7440-48-4	N	5.9	0.6	--	NA	NA	NA	NA	NA	NA	**9**	**5.3**	**6.7**	NA	NA	NA
Lead	7439-92-1	--	0.78	15	15	NA	NA	NA	NA	**0.63 J**	1.5 U	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	N	3,000	43	--	NA	NA	NA	NA	NA	NA	**4,700**	**3,100**	**3,000**	NA	NA	NA
Nickel	7440-02-0	N	7.7	39	--	NA	NA	NA	NA	NA	NA	**13**	**9.2**	**8.5**	NA	NA	NA
Vanadium	7440-62-2	N	3.2	8.6	--	NA	NA	NA	NA	NA	NA	10 U	10 U	**4.7 J**	NA	NA	NA

Notes:
NA = Not Analyzed
ND = Constituent not detected during the 2007 site-wide sampling event; therefore, no EPC was calculated in the 2011 Human Health Risk Assessment
ug/L = micrograms per liter; mg/L = milligrams per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limit
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EPA.

[1] Carcinogen/Noncarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.
[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.
[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).
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.

Table 7
Groundwater Analytical Results, Natrosol Lagoon
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	NAT-1			NAT-2			NAT-3			NAT-4			
						6/4/2013	11/25/2013	7/15/2014	6/4/2013	11/25/2013	7/14/2014	6/4/2013	11/25/2013	7/14/2014	6/5/2013	11/26/2013	11/26/2013 (Dissolved)	7/16/2014
						Conc/Qual			Conc/Qual			Conc/Qual			Conc/Qual			
Volatile Organic Compounds (ug/L)																		
t-Butanol[4]	75-65-0	--	92,000	150	--	NA	NA	NA	NA	NA	NA	NA	**72,000**	**84,000**	NA	NA	NA	NA
Diethyl ether	60-29-7	N	0.5	390	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	100 U	NA	100 U
Tetrachloroethene	127-18-4	N	ND	4.1	5	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	NA	NA	NA
Trichloroethylene	79-01-6	N	8.4	0.28	5	**39**	**35**	**33**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohols and Glycols (mg/L)																		
Methanol	67-56-1	N	ND	4.0	--	NA	NA	NA	5 U	**2.1 J**	5 U	NA	NA	NA	NA	**1.7 J**	NA	5 U
Metals (ug/L)																		
Aluminum	7429-90-5	N	3,200	2,000	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	**1,300**	50 U	**3,300**
Arsenic	7440-38-2	C	7	0.052	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.7**	**12**	**3.8**	**3.8**
Barium	7440-39-3	N	125	380	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	**70**	**140**	**41**	**160**
Beryllium	7440-41-7	N	--	2.5	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.85**	0.5 U	**0.75**
Cadmium	7440-43-9	N	0.29	0.92	5	**0.57**	**0.37 J**	**0.35 J**	NA	NA	NA	0.5 U	**0.18 J**	0.5 U	NA	**0.16 J**	NA	**0.22 J**
Chromium	7440-47-3	--	19	--	100	NA	NA	NA	NA	NA	NA	NA	**9.7**	**5.2**	5 U	5 U	5 U	**13**
Cobalt	7440-48-4	N	27	0.6	--	**14**	**18**	**10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	9,600	1,400	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7,000**	**42,000**	**4,700**	**25,000**
Lead	7439-92-1	--	1	--	15	**0.62 J**	1.5 U	**0.56 J**	**0.8 J**	**1.9**	**0.8 J**	NA	**0.53 J**	1.5 U	1.5 U	**14**	1.5 U	**9.5**
Nickel	7440-02-0	N	34.5	39	--	NA	NA	NA	NA	NA	NA	NA	**22**	**20**	NA	NA	NA	NA
Vanadium	7440-62-2	--	14	8.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	**39**	10 U	**37**

Notes:
NA = Not Analyzed
ND = Constituent not detected during the 2007 site-wide sampling event; therefore, no EPC was calculated in the 2011 Human Health Risk Assessment.
ug/L = micrograms per liter; mg/L = milligrams per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limi
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EPA
[1] Carcinogen/Noncarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.
[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.
[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).
[4] Surrogate compounds selected as detailed in Table 3-1 of the Human Health Risk Assessment (Attachment A to the Final RFI Report). Screening criteria for the selected surrogates have been incorporated into this table.
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.

Table 8
Groundwater Analytical Results, Reten/Aqualon Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	RAB-MW1R						RAB-MW2			RAB-MW3			RAB-MW4		
						6/6/2013	6/6/2013 (DUP)	11/26/2013	11/26/2013 (DUP)	7/16/2014	7/16/2014 (DUP)	6/6/2013	11/25/2013	7/16/2014	6/6/2013	11/25/2013	7/16/2014	6/5/2013	11/25/2013	7/15/2014
						Conc/Qual						Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)																				
1,1,1,2-Tetrachloroethane	630-20-6	N	--	0.57	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	71-55-6	N	--	800	200	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	C	--	0.076	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	79-00-5	N	--	0.041	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	C	--	2.7	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	75-35-4	N	--	28	7	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	87-61-6	N	--	0.7	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	96-18-4	C	--	0.00075	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-Chloropropane	96-12-8	C	--	0.00033	0.2	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	106-93-4	C	--	0.0075	0.05	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	C	--	0.17	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	78-87-5	C	--	0.44	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	78-93-3	N	--	560	--	10 U	1,000 U	5,000 U	10,000 U	5,000 U	5,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	591-78-6	N	--	3.8	--	10 U	1,000 U	5,000 U	10,000 U	5,000 U	5,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	108-10-1	N	--	120	--	10 U	1,000 U	5,000 U	10,000 U	5,000 U	5,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	67-64-1	N	--	1,400	--	**110**	2,500 U	13,000 U	25,000 U	13,000 U	13,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetonitrile	75-05-8	N	--	13	--	40 U	4,000 U	20,000 U	40,000 U	20,000 U	20,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	107-02-8	N	--	0.0042	--	20 U	2,000 U	10,000 U	20,000 U	10,000 U	10,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	107-13-1	C	--	0.052	--	20 U	2,000 U	10,000 U	20,000 U	10,000 U	10,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Allyl chloride	107-05-1	N	--	0.21	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	71-43-2	C	--	0.45	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	75-27-4	C	--	0.13	80	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	75-25-2	C	--	9.2	80	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	74-83-9	N	--	0.75	--	5 U	500 U	2,500 U	5,000 U	2,500 U	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	75-15-0	N	--	81	--	2 U	200 U	1,000 U	2,000 U	1,000 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	56-23-5	C	--	0.45	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	108-90-7	N	--	7.8	100	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	75-00-3	N	--	2,100	--	5 U	500 U	2,500 U	5,000 U	2,500 U	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	67-66-3	C	--	0.22	80	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	74-87-3	N	--	19	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroprene	126-99-8	C	--	0.019	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	N	--	3.6	70	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061-01-5	--	--	--	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	124-48-1	C	--	0.17	80	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromomethane	74-95-3	N	--	0.8	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 8
Groundwater Analytical Results, Reten/Aqualon Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	RAB-MW1R						RAB-MW2			RAB-MW3			RAB-MW4		
						6/6/2013	6/6/2013 (DUP)	11/26/2013	11/26/2013 (DUP)	7/16/2014	7/16/2014 (DUP)	6/6/2013	11/25/2013	7/16/2014	6/6/2013	11/25/2013	7/16/2014	6/5/2013	11/25/2013	7/15/2014
						Conc/Qual						Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)																				
Dichlorodifluoromethane	75-71-8	N	--	20	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl ether	60-29-7	N	11	390	--	10 U	1,000 U	5,000 U	10,000 U	5,000 U	5,000 U	**7.2 J**	**7.1 J**	**5.4 J**	NA	NA	NA	NA	NA	NA
Ethyl methacrylate	97-63-2	N	--	46	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100-41-4	C	--	1.5	700	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	--	--	--	--	5 U	500 U	2,500 U	5,000 U	2,500 U	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isobutyl alcohol	78-83-1	N	--	590	--	40 U	4,000 U	20,000 U	40,000 U	20,000 U	20,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methacrylonitrile	126-98-7	N	--	0.19	--	20 U	2,000 U	10,000 U	20,000 U	10,000 U	10,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl methacrylate	80-62-6	N	--	140	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	1634-04-4	C	--	14	--	10 U	1,000 U	5,000 U	10,000 U	5,000 U	5,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	75-09-2	N	--	11	5	5 U	500 U	2,500 U	5,000 U	2,500 U	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Heptane	142-82-5	--	--	--	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachloroethane	76-01-7	C	--	0.64	--	5 U	500 U	2,500 U	5,000 U	2,500 U	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Propionitrile	107-12-0	--	--	--	--	20 U	2,000 U	10,000 U	20,000 U	10,000 U	10,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	100-42-5	N	--	120	100	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
t-Butanol[4]	75-65-0	--	560	150	--	**38,000 D**	**37,000 D**	**21,000**	**28,000**	**40,000**	**25,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	127-18-4	N	--	4.1	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	108-88-3	N	--	110	1,000	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	156-60-5	N	--	36.0	100	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	110-57-6	C	--	0.0013	--	2 U	200 U	1,000 U	2,000 U	1,000 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethylene	79-01-6	N	--	0.28	5	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	N	--	110	--	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl acetate	108-05-4	N	--	41	--	2 U	200 U	1,000 U	2,000 U	1,000 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	75-01-4	C	--	0.019	2	1 U	100 U	500 U	1,000 U	500 U	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes, Total	1330-20-7	N	--	19	10,000	2 U	200 U	1,000 U	2,000 U	1,000 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohols and Glycols (mg/L)																				
Ethanol[4]	64-17-5	N	ND	150	--	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	67-56-1	N	1.1	4	--	5 U	5 U	5 U	5 U	5 U	5 U	NA	5 U	5 U	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (ug/L)																				
1,1'-Biphenyl	92-52-4	N	--	0.083	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	95-94-3	N	--	0.17	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	N	--	0.4	70	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	N	--	30	600	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene	99-35-4	N	--	59	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	C	--	0.48	75	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	123-91-1	C	ND	0.78	--	**2.4**	**1.4 J**	**1.7 J**	**7.4 J**	**2.1**	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Naphthoquinone	130-15-4	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Naphthalenamine	134-32-7	--	--	--	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis[1-chloropropane]	108-60-1	C	--	0.36	--	1 U	1.1 U	1.3 U *	13 U *	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 8
Groundwater Analytical Results, Reten/Aqualon Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	RAB-MW1R						RAB-MW2			RAB-MW3			RAB-MW4		
						6/6/2013	6/6/2013 (DUP)	11/26/2013	11/26/2013 (DUP)	7/16/2014	7/16/2014 (DUP)	6/6/2013	11/25/2013	7/16/2014	6/6/2013	11/25/2013	7/16/2014	6/5/2013	11/25/2013	7/15/2014
						Conc/Qual						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)																				
2,3,4,6-Tetrachlorophenol	58-90-2	N	--	24	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	N	--	120	--	1 U	1.1 U	1.3 U *	13 U *	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	N	--	1.2	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	120-83-2	N	--	4.6	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	105-67-9	N	--	36	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	51-28-5	N	--	3.9	--	10 U	11 U	13 U	130 U	9.9 U	9.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	C	--	0.24	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dichlorophenol	87-65-0	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	606-20-2	C	--	0.048	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Acetylaminofluorene	53-96-3	C	--	0.016	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	91-58-7	N	--	75	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	95-57-8	N	--	9.1	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6	N	--	3.6	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	N	--	93	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Naphthalenamine	91-59-8	C	--	0.039	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	88-74-4	N	--	19	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	88-75-5	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Picoline	109-06-8	--	--	--	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	N	--	1.5	7	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
3 & 4 Methylphenol	15831-10-4	--	--	--	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	C	--	0.12	--	20 U	23 U	26 U *	260 U *	20 U	19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine	119-93-7	C	--	0.0065	--	20 U	23 U	26 U	260 U	20 U	19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylcholanthrene	56-49-5	C	--	0.0011	--	1 U	1.1 U	1.3 U	13 U	0.99 U *	0.95 U *	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	99-09-2	--	--	--	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	N	--	0.15	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Aminobiphenyl	92-67-1	C	--	0.003	--	5 U	5.7 U	6.5 U *	66 U *	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	N	--	140	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	106-47-8	C	--	0.36	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	100-01-6	C	--	3.8	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	--	--	--	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide	56-57-5	--	--	--	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
5-Nitro-o-toluidine	99-55-8	C	--	8.1	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene	57-97-6	C	--	0.0001	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	N	--	53	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	208-96-8	--	--	--	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	98-86-2	N	--	190	--	1 U	1.1 U	1.3 U	13 U	**0.51 J B**	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha,alpha-Dimethyl phenethylamine	122-09-8	--	--	--	--	10 U	11 U	13 U	130 U	9.9 U	9.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	62-53-3	N	--	13	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	120-12-7	N	--	180	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 8
Groundwater Analytical Results, Reten/Aqualon Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	RAB-MW1R						RAB-MW2			RAB-MW3			RAB-MW4		
						6/6/2013	6/6/2013 (DUP)	11/26/2013	11/26/2013 (DUP)	7/16/2014	7/16/2014 (DUP)	6/6/2013	11/25/2013	7/16/2014	6/6/2013	11/25/2013	7/16/2014	6/5/2013	11/25/2013	7/15/2014
						Conc/Qual						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)																				
Aramite, Total	140-57-8	C	--	1.3	--	1.5 U	1.7 U	2 U	20 U	1.5 U *	1.4 U *	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	56-55-3	C	--	0.034	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	50-32-8	C	--	0.0034	0.2	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	205-99-2	C	--	0.034	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	191-24-2	--	--	--	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	207-08-9	--	--	0.34	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	100-51-6	N	--	200	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	111-91-1	N	--	5.9	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	111-44-4	C	--	0.014	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl) phthalate	117-81-7	C	--	5.6	6	2 U	2.3 U	2.6 U	26 U	2 U	**2.0 B**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	85-68-7	C	--	16	--	1 U	1.1 U	1.3 U *	13 U *	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	C	--	3.4	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diallate	2303-16-4	C	--	0.52	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	53-70-3	C	--	0.0034	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	132-64-9	N	--	0.79	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	84-66-2	N	--	1,500	--	1 U	1.1 U	**0.27 J B**	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethoate	60-51-5	N	--	0.4	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	131-11-3	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	84-74-2	N	--	90	--	1 U	1.1 U	1.3 U *	13 U *	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	117-84-0	N	--	20	--	1 U	1.1 U	**0.8 J B ***	13 U *	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Disulfoton	298-04-4	N	--	0.05	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl methanesulfonate	62-50-0	--	--	--	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl Parathion	56-38-2	N	--	8.6	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Famphur	52-85-7	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	N	--	80	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	86-73-7	N	--	29	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	C	--	0.049	1	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	C	--	0.3	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	77-47-4	N	--	3.1	50	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	N	--	0.69	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.92 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorophene	70-30-4	N	--	0.6	--	500 U	570 U	650 U *	6600 U *	500 U	480 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloropropene	1888-71-7	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	193-39-5	C	--	0.034	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	78-59-1	C	--	78	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isosafrole	120-58-1	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U *	0.95 U *	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Dinitrobenzene	99-65-0	--	--	0.2	--	1 U	1.1 U	1.3 U	13 U	0.99 U *	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methapyrilene	91-80-5	--	--	--	--	200 U	230 U	260 U	2600 U	200 U	190 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl methanesulfonate	66-27-3	C	--	0.79	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl parathion	298-00-0	N	--	0.45	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	91-20-3	C	--	0.17	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 8
Groundwater Analytical Results, Reten/Aqualon Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	RAB-MW1R						RAB-MW2			RAB-MW3			RAB-MW4		
						6/6/2013	6/6/2013 (DUP)	11/26/2013	11/26/2013 (DUP)	7/16/2014	7/16/2014 (DUP)	6/6/2013	11/25/2013	7/16/2014	6/6/2013	11/25/2013	7/16/2014	6/5/2013	11/25/2013	7/15/2014
						Conc/Qual						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)																				
Nitrobenzene	98-95-3	C	--	0.14	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiethylamine	55-18-5	C	--	0.00017	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodimethylamine	62-75-9	C	--	0.00049	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	C	--	0.0027	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	621-64-7	C	--	0.011	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	86-30-6	C	--	12	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomethylethylamine	10595-95-6	C	--	0.0035	--	2 U	2.3 U	2.6 U	26 U	2 U	1.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomorpholine	59-89-2	C	--	0.012	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopiperidine	100-75-4	C	--	0.0082	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopyrrolidine	930-55-2	C	--	0.037	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
o,o',o"-Triethylphosphorothioate	126-68-1	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Toluidine	95-53-4	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Dimethylamino azobenzene	60-11-7	C	--	0.0049	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	N	--	0.32	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachloronitrobenzene	82-68-8	C	--	0.12	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	C	--	0.04	1	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenacetin	62-44-2	C	--	34	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	--	--	--	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	108-95-2	N	--	580	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenyl ether	101-84-8	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phorate	298-02-2	N	--	0.3	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Phenylene diamine	106-50-3	N	--	380	--	200 U	230 U	260 U	2600 U	200 U *	190 U *	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pronamide	23950-58-5	--	--	120	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	129-00-0	N	--	12	--	0.2 U	0.23 U	0.26 U	2.6 U	0.2 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyridine	110-86-1	N	--	2	--	5 U	5.7 U	6.5 U	66 U	5 U	4.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Safrole, Total	94-59-7	C	--	0.095	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfotepp	3689-24-5	N	--	0.71	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thionazin	297-97-2	--	--	--	--	1 U	1.1 U	1.3 U	13 U	0.99 U	0.95 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 8
Groundwater Analytical Results, Reten/Aqualon Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	RAB-MW1R						RAB-MW2			RAB-MW3			RAB-MW4		
						6/6/2013	6/6/2013 (DUP)	11/26/2013	11/26/2013 (DUP)	7/16/2014	7/16/2014 (DUP)	6/6/2013	11/25/2013	7/16/2014	6/6/2013	11/25/2013	7/16/2014	6/5/2013	11/25/2013	7/15/2014
						Conc/Qual						Conc/Qual			Conc/Qual			Conc/Qual		
Metals (ug/L)																				
Aluminum	7429-90-5	N	24,000	2,000	--	100 U	100 U	110 U	110 U	**820**	**1,500**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	N	--	0.78	6	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	C	9.3	0.052	10	**5.5**	**6.5**	**2.9**	**2.8**	**2.7**	**2.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	N	200	380	2,000	**130**	**110**	**280**	**240**	**240**	**240**	NA	NA	NA	**190**	**230**	**15**	NA	NA	NA
Beryllium	7440-41-7	N	--	2.5	4	0.5 U	0.5 U	**0.15 J**	0.5 U	**0.32 J**	**0.31 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	0.47	0.92	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.11 J**	**0.18 J**	**1.2**	NA	NA	NA	0.5 U	**1.5**	0.5 U
Calcium	7440-70-2	--	--	--	--	**120,000**	**130,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	--	79	--	100	5 U	5 U	**5.9**	**4.5 J**	**10**	**15**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	N	150	0.6	--	**150**	**170**	**110**	**110**	**140**	**140**	**92**	**110**	**160**	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	N	--	80	1,300	5 U	5 U	7 U	7 U	**4.7 J**	**5.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	150,000	1,400	--	**130,000**	**140,000**	**100,000**	**100,000**	**82,000**	**95,000**	NA	NA	NA	**110,000**	**200,000**	**1,200**	NA	NA	NA
Lead	7439-92-1	--	11.9	--	15	1.5 U	1.5 U	1.5 U	1.5 U	**4.2**	**4.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	--	--	--	--	**86,000**	**94,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	N	12,000	43	--	**9,100**	**9,700**	**9,800**	**9,600**	**9,900**	**10,000**	**12,000**	**16,000**	**12,000**	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	N	0.52	0.063	2	0.8 U	0.8 U	0.8 U	0.8 U	**0.54 J**	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	100	39	--	**28**	**30**	**22**	**21**	**32**	**35**	**63**	**74**	**82**	NA	NA	NA	NA	NA	NA
Potassium	7440-09-7	--	--	--	--	**1,600**	**1,700**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	7782-49-2	N	--	10	50	2.5 U	2.5 U	**1.6 J**	**1.6 J**	2.5 U	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	7440-22-4	N	--	9.4	--	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	7440-23-5	--	--	--	--	**260,000**	**280,000**	**260,000**	**280,000**	**230,000**	**250,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	N	--	0.02	2	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	N	95	8.6	--	10 U	10 U	1 U	10 U	**4.5 J**	**6.2 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	N	--	600	--	**10 J**	**10 J**	**18 J**	**18 J**	**18 J**	**18 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA = Not Analyzed
ND = Constituent not detected during the 2007 site-wide sampling event; therefore, no EPC was calculated in the 2011 Human Health Risk Assessmen
ug/L = micrograms per liter; mg/L = milligrams per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limit
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EP
[1] Carcinogen/Noncarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.
[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.
[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).
[4] Surrogate compounds selected as detailed in Table 3-1 of the Human Health Risk Assessment (Attachment A to the Final RFI Report). Screening criteria for the selected surrogates have been incorporated into this table.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D = Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a I
U = Indicates the analyte was analyzed for but not detected
B = Compound was found in the blank and sample.
* = LCS or LCSD exceeds control limits

Table 9
Groundwater Analytical Results, Sludge Drying Beds
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	SDB-MW-1			SDB-MW-2			SDB-MW-3		
						6/6/2013	12/2/2013	7/16/2014	6/6/2013	12/2/2013	7/16/2014	6/6/2013	12/3/2013	7/16/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)														
Diethyl ether	60-29-7	N	0.54	390	--	NA	NA	NA	NS	NA	NA	10 U	10 U	10 U
t-Butanol[4]	75-65-0	--	3.0	150	--	**6**	5 U	**11**	NS	NA	NA	5 U	5 U	5 U
Metals (ug/L)														
Aluminum	7429-90-5	N	9,800	2,000	--	**570**	**320**	**500**	NS	NA	NA	NA	NA	NA
Arsenic	7440-38-2	C	7.3	0.052	10	**7**	**8.2**	**6.0**	NS	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	0.38	0.92	5	NA	NA	NA	NS	NA	NA	**0.66**	**0.54**	**0.66**
Chromium	7440-47-3	--	22	--	100	**3.4 J**	**3.2 J**	**3.1 J**	NS	NA	NA	NA	NA	NA
Iron	7439-89-6	N	190,000	1,400	--	**190,000**	**200,000**	**170,000**	NS	NA	NA	NA	NA	NA
Lead	7439-92-1	N	9.17	--	15	**0.96 J**	**1 J**	**0.87 J**	NS	NA	NA	NA	NA	NA
Manganese	7439-96-5	N	2,300	43	--	**1,900**	**2,200**	**1,900**	NS	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	31	30	--	**2.9 J**	**2.1 J**	**2.7 J**	NS	NA	NA	**35**	**37**	**28**
Selenium	7782-49-2	N	--	10	50	NA	NA	NA	NS	NA	NA	NA	**8.6**	**9.1**
Geochemical parameters (mg/L)														
Ammonia, Dissolved	7664-41-7	N	--	--	--	NA	NA	NA	NS	0.05 U	**0.059**	NA	NA	NA
Orthophosphate, Dissolved	14265-44-2	--	--	--	--	NA	NA	NA	NS	**0.091**	**0.071**	NA	NA	NA
Calcium, Dissolved (ug/L)	7440-70-2	--	--	--	--	NA	NA	NA	NS	**400,000**	**410,000**	NA	NA	NA
Iron, Dissolved (ug/L)	7439-89-6	N	--	1,400	--	NA	NA	NA	NS	**460**	**570**	NA	NA	NA
Magnesium, Dissolved (ug/L)	7439-95-4	--	--	--	--	NA	NA	NA	NS	**98,000**	**94,000**	NA	NA	NA
Manganese, Dissolved (ug/L)	7439-96-5	N	2,300	43	--	NA	NA	NA	NS	**1,400**	**1,300**	NA	NA	NA
Potassium, Dissolved (ug/L)	7440-09-7	--	--	--	--	NA	NA	NA	NS	**1,500**	**1,500**	NA	NA	NA
Sodium, Dissolved (ug/L)	7440-23-5	--	--	--	--	NA	NA	NA	NS	**270,000**	**250,000**	NA	NA	NA
Sulfide, Dissolved	18496-25-8	--	--	--	--	NA	NA	NA	NS	1 U	1 U	NA	NA	NA
Sulfide	18496-25-8	--	--	--	--	NA	NA	NA	NS	1 U	1 U	NA	NA	NA
Nitrate as N	14797-55-8	N	--	3,200	10,000	NA	NA	NA	NS	0.05 U	0.05 U	NA	NA	NA
Nitrite as N	14797-65-0	N	--	200	1,000	NA	NA	NA	NS	0.05 U	0.1 UH	NA	NA	NA
Chloride	16887-00-6	--	--	--	--	NA	NA	NA	NS	**120**	**120**	NA	NA	NA
Sulfate	18785-72-3	--	--	--	--	NA	NA	NA	NS	**1,300**	**1,400**	NA	NA	NA
Dissolved Organic Carbon	7440-44-0	--	--	--	--	NA	NA	NA	NS	**4.4**	**5.1**	NA	NA	NA
Alkalinity	--	--	--	--	--	NA	NA	NA	NS	**360**	**350**	NA	NA	NA
Bicarbonate Alkalinity as CaCO3	--	--	--	--	--	NA	NA	NA	NS	**360**	**350**	NA	NA	NA
Carbonate Alkalinity as CaCO3	--	--	--	--	--	NA	NA	NA	NS	5 U	5 U	NA	NA	NA
Ammonium ion as NH4	14798-03-9	--	--	--	--	NA	NA	NA	NS	0.03 U	**0.076**	NA	NA	NA

Notes:
NA = Not Analyzed; NS = Not Sampled
SDB-MW-2 was only sampled in November 2013 and July 2014 for geochemical parameters.
ug/L = micrograms per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limit
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EPA
[1] Carcinogen/Noncarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.
[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.
[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).
[4] Surrogate compounds selected as detailed in Table 3-1 of the Human Health Risk Assessment (Attachment A to the Final RFI Report). Screening criteria for the selected surrogates have been incorporated into this table.
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.

Table 10
Groundwater Analytical Results, Vacuum Filter Sludge Pile
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	VFSP-MW-1		
						6/6/2013	12/2/2013	7/18/2014
						Conc/Qual		
Volatile Organic Compounds (ug/L)								
t-Butanol[4]	75-65-0	--	ND	150	--	**17**	NA	NA
Metals (ug/L)								
Barium	7440-39-3	N	140	380	2,000	**200**	**200**	**140**
Cobalt	7440-48-4	N	2.5	0.6	--	**2.5**	**2.7**	**3.3**
Iron	7439-89-6	N	4,300	1,400	--	**4,300**	**4,600**	**1,300**
Manganese	7439-96-5	N	750	43	--	**780**	**880**	**800**
Nickel	7440-02-0	N	2.1	39	--	**2.5**	**2 J**	5 U

Notes:
NA = Not Analyzed
ND = Constituent not detected during the 2007 site-wide sampling event; therefore, no EPC was calculated in the 2011 Human Health Risk Assessment.
ug/L = micrograms per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limit
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EPA.
[1] Carcinogen/Noncarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.
[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.
[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).
[4] Surrogate compounds selected as detailed in Table 3-1 of the Human Health Risk Assessment (Attachment A to the Final RFI Report). Screening criteria for the selected surrogates have been incorporated into this table.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-1			MW-2			MW-3		
						6/5/2013	12/2/2013	7/17/2014	6/4/2013	12/2/2013	7/17/2014	6/3/2013	11/26/2013	7/17/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)														
Chloroform	67-66-3	C	0.65	0.22	80	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	C	--	0.17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl ether	60-29-7	N	4,734	390	--	NA	NA	NA	**8,400**	**9,200**	**6,100**	NA	NA	NA
t-Butanol[4]	75-65-0	--	1,652	150	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (ug/L)														
1,1'-Biphenyl	92-52-4	N	--	0.083	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,2,4,5-Tetrachlorobenzene	95-94-3	N	--	0.17	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,2,4-Trichlorobenzene	120-82-1	C	--	1.1	70	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,2-Dichlorobenzene	95-50-1	N	--	30	600	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,3,5-Trinitrobenzene	99-35-4	N	--	59	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,4-Dioxane	123-91-1	C	15.4	0.78	--	**9.5**	**19**	**6.2**	**25**	**50**	**13**	**1.8 J**	26 U	2 U
1,4 Dichlorobenzene	106-46-7	C	--	0.48	75	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1,4-Naphthoquinone	130-15-4	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
1-Naphthalenamine	134-32-7	--	--	--	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
2,2'-oxybis[1-chloropropane]	108-60-1	C	--	0.36	--	NA	NA	NA	NA	NA	NA	1 U	13 U *	0.98 U
2,3,4,6-Tetrachlorophenol	58-90-2	N	--	24	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2,4,5-Trichlorophenol	95-95-4	N	--	120	--	NA	NA	NA	NA	NA	NA	1 U	13 U *	0.98 U
2,4,6-Trichlorophenol	88-06-2	C	--	4	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2,4-Dichlorophenol	120-83-2	N	--	4.6	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2,4-Dimethylphenol	105-67-9	N	--	36	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
2,4-Dinitrophenol	51-28-5	N	--	3.9	--	NA	NA	NA	NA	NA	NA	10 U	130 U	9.8 U
2,4-Dinitrotoluene	121-14-2	C	--	0.24	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2,6-Dichlorophenol	87-65-0	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2,6-Dinitrotoluene	606-20-2	C	--	0.048	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2-Acetylaminofluorene	53-96-3	C	--	0.016	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2-Chloronaphthalene	91-58-7	N	--	75	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2-Chlorophenol	95-57-8	N	--	9.1	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2-Methylnaphthalene	91-57-6	N	--	3.6	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
2-Methylphenol	95-48-7	N	--	93	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
2-Naphthalenamine	91-59-8	C	--	0.039	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
2-Nitroaniline	88-74-4	N	--	19	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2-Nitrophenol	88-75-5	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
2-Picoline	109-06-8	--	--	--	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
2-sec-Butyl-4,6-dinitrophenol	88-85-7	N	--	1.5	7	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
3 & 4 Methylphenol	15831-10-4	--	--	--	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
3,3'-Dichlorobenzidine	91-94-1	C	--	0.12	--	NA	NA	NA	NA	NA	NA	20 U	260 U *	20 U
3,3'-Dimethylbenzidine	119-93-7	C	--	0.0065	--	NA	NA	NA	NA	NA	NA	20 U	260 U	20 U
3-Methylcholanthrene	56-49-5	C	--	0.0011	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U *
3-Nitroaniline	99-09-2	--	--	--	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
4,6-Dinitro-2-methylphenol	534-52-1	N	--	0.15	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
4-Aminobiphenyl	92-67-1	C	--	0.003	--	NA	NA	NA	NA	NA	NA	5 U	65 U *	4.9 U
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
4-Chloro-3-methylphenol	59-50-7	N	--	140	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
4-Chloroaniline	106-47-8	C	--	0.36	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
4-Nitroaniline	100-01-6	C	--	3.8	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
4-Nitrophenol	100-02-7	--	--	--	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
4-Nitroquinoline-1-oxide	56-57-5	--	--	--	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
5-Nitro-o-toluidine	99-55-8	C	--	8.1	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
7,12-Dimethylbenz(a)anthracene	57-97-6	C	--	0.0001	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Acenaphthene	83-32-9	N	--	53	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Acenaphthylene	208-96-8	--	--	--	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Acetophenone	98-86-2	N	--	190	--	NA	NA	NA	NA	NA	NA	**0.13 J**	13 U	0.98 U
alpha,alpha-Dimethyl phenethylamine	122-09-8	--	--	--	--	NA	NA	NA	NA	NA	NA	10 U	130 U	9.8 U

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-1			MW-2			MW-3		
						6/5/2013	12/2/2013	7/17/2014	6/4/2013	12/2/2013	7/17/2014	6/3/2013	11/26/2013	7/17/2014
Semivolatile Organic Compounds (ug/L)						Conc/Qual			Conc/Qual			Conc/Qual		
Aniline	62-53-3	C	--	13	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
Anthracene	120-12-7	N	--	180	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Aramite, Total	140-57-8	C	--	1.3	--	NA	NA	NA	NA	NA	NA	1.5 U	20 U	1.5 U *
Benzo[a]anthracene	56-55-3	C	--	0.034	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Benzo[a]pyrene	50-32-8	C	--	0.0034	0.2	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Benzo[b]fluoranthene	205-99-2	C	--	0.034	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Benzo[g,h,i]perylene	191-24-2	--	--	--	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Benzo[k]fluoranthene	207-08-9	C	--	0.34	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Benzyl alcohol	100-51-6	N	--	200	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Bis(2-chloroethoxy)methane	111-91-1	N	--	5.9	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Bis(2-chloroethyl)ether	111-44-4	C	--	0.014	--	NA	NA	NA	**0.27 J**	9.7 U	**0.14 J**	**0.78 J**	13 U	0.98 U
Bis(2-ethylhexyl) phthalate	117-81-7	C	--	5.6	6	NA	NA	NA	NA	NA	NA	1 U	26 U	**1.8 J B**
Butyl benzyl phthalate	85-68-7	C	--	16	--	NA	NA	NA	NA	NA	NA	1 U	13 U *	0.98 U
Chrysene	218-01-9	C	--	3.4	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Diallate	2303-16-4	C	--	0.52	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Dibenz(a,h)anthracene	53-70-3	C	--	0.0034	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Dibenzofuran	132-64-9	N	--	0.79	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Diethyl phthalate	84-66-2	N	--	1,500	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Dimethoate	60-51-5	N	--	0.4	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
Dimethyl phthalate	131-11-3	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Di-n-butyl phthalate	84-74-2	N	--	90	--	NA	NA	NA	NA	NA	NA	1 U	13 U *	0.98 U
Di-n-octyl phthalate	117-84-0	N	--	20	--	NA	NA	NA	NA	NA	NA	1 U	13 U *	0.98 U
Disulfoton	298-04-4	N	--	0.05	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Ethyl methanesulfonate	62-50-0	--	--	--	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
Ethyl Parathion	56-38-2	N	--	8.6	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
Famphur	52-85-7	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Fluoranthene	206-44-0	N	--	80	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Fluorene	86-73-7	N	--	29	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Hexachlorobenzene	118-74-1	C	--	0.049	1	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Hexachlorobutadiene	87-68-3	C	--	0.3	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Hexachlorocyclopentadiene	77-47-4	N	--	3.1	50	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
Hexachloroethane	67-72-1	C	--	0.9	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Hexachlorophene	70-30-4	N	--	0.6	--	NA	NA	NA	NA	NA	NA	500 U	6500 U *	490 U
Hexachloropropene	1888-71-7	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Indeno[1,2,3-cd]pyrene	193-39-5	C	--	0.034	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Isophorone	78-59-1	C	--	78	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Isosafrole	120-58-1	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U *
m-Dinitrobenzene	99-65-0	--	--	0.2	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Methapyrilene	91-80-5	--	--	--	--	NA	NA	NA	NA	NA	NA	200 U	2600 U	200 U
Methyl methanesulfonate	66-27-3	C	--	0.79	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U
Methyl parathion	298-00-0	N	--	0.45	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Naphthalene	91-20-3	C	--	0.17	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Nitrobenzene	98-95-3	C	--	0.14	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosodiethylamine	55-18-5	C	--	0.00017	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosodimethylamine	62-75-9	C	--	0.00049	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosodi-n-butylamine	924-16-3	C	--	0.0027	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosodi-n-propylamine	621-64-7	C	--	0.011	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosodiphenylamine	86-30-6	C	--	12	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosomethylethylamine	10595-95-6	C	--	0.0035	--	NA	NA	NA	NA	NA	NA	2 U	26 U	2 U *
N-Nitrosomorpholine	59-89-2	C	--	0.012	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosopiperidine	100-75-4	C	--	0.0082	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
N-Nitrosopyrrolidine	930-55-2	C	--	0.037	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
o,o',o''-Triethylphosphorothioate	126-68-1	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
o-Toluidine	95-53-4	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
p-Dimethylamino azobenzene	60-11-7	C	--	0.0049	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
Pentachlorobenzene	608-93-5	N	--	0.32	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Pentachloronitrobenzene	82-68-8	C	--	0.12	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Pentachlorophenol	87-86-5	C	--	0.04	1	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
Phenacetin	62-44-2	C	--	34	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Phenanthrene	85-01-8	--	--	--	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Phenol	108-95-2	N	--	580	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-1			MW-2			MW-3		
						6/5/2013	12/2/2013	7/17/2014	6/4/2013	12/2/2013	7/17/2014	6/3/2013	11/26/2013	7/17/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)														
Phenyl ether	101-84-8	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Phorate	298-02-2	N	--	0.3	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
p-Phenylene diamine	106-50-3	N	--	380	--	NA	NA	NA	NA	NA	NA	200 U	2600 U	200 U
Pronamide	23950-58-5	N	--	120	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Pyrene	129-00-0	N	--	12	--	NA	NA	NA	NA	NA	NA	0.2 U	2.6 U	0.2 U
Pyridine	110-86-1	N	--	2	--	NA	NA	NA	NA	NA	NA	5 U	65 U	4.9 U
Safrole, Total	94-59-7	C	--	0.095	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Sulfotepp	3689-24-5	N	--	0.71	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Thionazin	297-97-2	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	13 U	0.98 U
Alcohols and Glycols (mg/L)														
Ethanol	64-17-5	--	--	--	--	NA	NA	NA	5 U	**9.3**	**7.0**	NA	NA	NA
Methanol	67-56-1	N	1.775	4.0	--	NA	NA	NA	5 U	5 U	5 U	NA	NA	NA
Metals (ug/L)														
Aluminum	7429-90-5	N	574	2,000	--	NA	NA	NA	**160**	**110**	**400**	NA	NA	NA
Arsenic	7440-38-2	C	21.4	0.052	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	N	628	380	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	N	--	2.5	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	2.5	0.92	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	--	12.5	--	100	**13**	**3.8 J**	**9.8**	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	N	104	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	N	--	80	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	75,872	1,400	--	NA	NA	NA	**110,000**	**160,000**	**180,000**	NA	NA	NA
Lead	7439-92-1	--	0.77	--	15	NA	1.5 U	**1.0 J**	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	N	9,071	43	--	NA	NA	NA	**8,600**	**11,000**	**13,000**	NA	NA	NA
Mercury	7439-97-6	N	0.8	0.063	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	47.3	39	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Parameters (mg/L)														
Ammonia, Dissolved	7664-41-7	N	--	--	--	NA	**0.044 J**	**0.12**	NA	**0.38**	**0.19**	NA	**2.7**	**2.0**
Orthophosphate, Dissolved	14265-44-2	--	--	--	--	NA	**0.42**	**0.41**	NA	**0.19**	0.05 U	NA	**0.021 J**	**0.088**
Calcium, Dissolved (ug/L)	7440-70-2	--	--	--	--	NA	**170,000**	**170,000**	NA	**270,000**	**250,000**	NA	**49,000**	**40,000**
Iron, Dissolved (ug/L)	7439-89-6	N	--	1,400	--	NA	**6,400**	**8,800**	NA	**150,000**	**150,000**	NA	**13,000**	**11,000**
Magnesium, Dissolved (ug/L)	7439-95-4	--	--	--	--	NA	**49,000**	**46,000**	NA	**92,000**	**85,000**	NA	**6,600**	**4,600**
Manganese, Dissolved (ug/L)	7439-96-5	N	--	43	--	NA	**2,700**	**2,700**	NA	**10,000**	**11,000**	NA	**530**	**410**
Potassium, Dissolved (ug/L)	7440-09-7	--	--	--	--	NA	**3,600**	**3,500**	NA	**3,900**	**4,100**	NA	**4,400**	**2,900**
Sodium, Dissolved (ug/L)	7440-23-5	N	--	--	--	NA	**250,000**	**230,000**	NA	**350,000**	**290,000**	NA	**76,000**	**20,000**
Sulfide, Dissolved	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	**1.1**	1 U	NA	1 U	1 U
Sulfide	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	**2.2**	1 U	NA	1 U	1 U
Nitrate as N	14797-55-8	N	--	3,200	10,000	NA	0.05 U	**0.053**	NA	**0.062 J**	0.1 U	NA	0.1 U H	**0.076 J**
Nitrite as N	14797-65-0	N	--	200	1,000	NA	0.05 U	0.05 U	NA	0.1 U	0.1 U	NA	0.1 U H	0.1 U
Chloride	16887-00-6	--	--	--	--	NA	**220**	**210**	NA	**1,000**	**1,100**	NA	**50**	**6.1**
Sulfate	18758-72-3	--	--	--	--	NA	**800**	**850**	NA	**470**	**470**	NA	**24**	**0.53 J**
Dissolved Organic Carbon	7440-44-0	--	--	--	--	NA	**3.4**	**8.7**	NA	**5**	**5.1**	NA	**5**	**3.5**
Alkalinity	--	--	--	--	--	NA	**110**	**120**	NA	**150**	**160**	NA	**210**	**160**
Bicarbonate Alkalinity as CaCO3	--	--	--	--	--	NA	**110**	**120**	NA	**150**	**160**	NA	**210**	**160**
Carbonate Alkalinity as CaCO3	--	--	--	--	--	NA	5 U	5 U	NA	5 U	5 U	NA	5 U	5 U
Ammonium ion as NH4	14798-03-9	--	--	--	--	NA	**0.057**	**0.15**	NA	**0.49**	**0.24**	NA	**3.5**	**2.6**

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-4			MW-4U			MW-5		
						6/3/2013	11/26/2013	7/16/2014	6/3/2013	11/26/2013	7/16/2014	6/3/2013	12/3/2013	7/15/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)														
Chloroform	67-66-3	C	0.65	0.22	80	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	C	--	0.17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl ether	60-29-7	N	4,734	390	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
t-Butanol[4]	75-65-0	--	1,652	150	--	**3,000**	**4,200**	**2,300**	**3,500**	**5,000**	**3,100**	NA	NA	NA
Semivolatile Organic Compounds (ug/L)														
1,1'-Biphenyl	92-52-4	N	--	0.083	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	95-94-3	N	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	C	--	1.1	70	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	N	--	30	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene	99-35-4	N	--	59	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	123-91-1	C	15.4	0.78	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4 Dichlorobenzene	106-46-7	C	--	0.48	75	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Naphthoquinone	130-15-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Naphthalenamine	134-32-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis[1-chloropropane]	108-60-1	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol	58-90-2	N	--	24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	C	--	4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	120-83-2	N	--	4.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	105-67-9	N	--	36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	51-28-5	N	--	3.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	C	--	0.24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dichlorophenol	87-65-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	606-20-2	C	--	0.048	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Acetylaminofluorene	53-96-3	C	--	0.016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	91-58-7	N	--	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	95-57-8	N	--	9.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6	N	--	3.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	N	--	93	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Naphthalenamine	91-59-8	C	--	0.039	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	88-74-4	N	--	19	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	88-75-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Picoline	109-06-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	N	--	1.5	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
3 & 4 Methylphenol	15831-10-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine	119-93-7	C	--	0.0065	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylcholanthrene	56-49-5	C	--	0.0011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	99-09-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	N	--	0.15	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Aminobiphenyl	92-67-1	C	--	0.003	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	N	--	140	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	106-47-8	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	100-01-6	C	--	3.8	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide	56-57-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
5-Nitro-o-toluidine	99-55-8	C	--	8.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene	57-97-6	C	--	0.0001	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	N	--	53	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	208-96-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	98-86-2	N	--	190	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha,alpha-Dimethyl phenethylamine	122-09-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-4			MW-4U			MW-5		
						6/3/2013	11/26/2013	7/16/2014	6/3/2013	11/26/2013	7/16/2014	6/3/2013	12/3/2013	7/15/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)														
Aniline	62-53-3	C	--	13	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	120-12-7	N	--	180	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aramite, Total	140-57-8	C	--	1.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	56-55-3	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	50-32-8	C	--	0.0034	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	205-99-2	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	191-24-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	207-08-9	C	--	0.34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	100-51-6	N	--	200	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	111-91-1	N	--	5.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	111-44-4	C	--	0.014	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl) phthalate	117-81-7	C	--	5.6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	85-68-7	C	--	16	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	C	--	3.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diallate	2303-16-4	C	--	0.52	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	53-70-3	C	--	0.0034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	132-64-9	N	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	84-66-2	N	--	1,500	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethoate	60-51-5	N	--	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	131-11-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	84-74-2	N	--	90	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	117-84-0	N	--	20	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Disulfoton	298-04-4	N	--	0.05	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl methanesulfonate	62-50-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl Parathion	56-38-2	N	--	8.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Famphur	52-85-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	N	--	80	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	86-73-7	N	--	29	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	C	--	0.049	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	C	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	77-47-4	N	--	3.1	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	C	--	0.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorophene	70-30-4	N	--	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloropropene	1888-71-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	193-39-5	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	78-59-1	C	--	78	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isosafrole	120-58-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Dinitrobenzene	99-65-0	--	--	0.2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methapyrilene	91-80-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl methanesulfonate	66-27-3	C	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl parathion	298-00-0	N	--	0.45	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	91-20-3	C	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	C	--	0.14	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiethylamine	55-18-5	C	--	0.00017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodimethylamine	62-75-9	C	--	0.00049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	C	--	0.0027	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	621-64-7	C	--	0.011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	86-30-6	C	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomethylethylamine	10595-95-6	C	--	0.0035	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomorpholine	59-89-2	C	--	0.012	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopiperidine	100-75-4	C	--	0.0082	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopyrrolidine	930-55-2	C	--	0.037	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
o,o',o"-Triethylphosphorothioate	126-68-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Toluidine	95-53-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Dimethylamino azobenzene	60-11-7	C	--	0.0049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	N	--	0.32	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachloronitrobenzene	82-68-8	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	C	--	0.04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenacetin	62-44-2	C	--	34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	108-95-2	N	--	580	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-4			MW-4U			MW-5		
						6/3/2013	11/26/2013	7/16/2014	6/3/2013	11/26/2013	7/16/2014	6/3/2013	12/3/2013	7/15/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)														
Phenyl ether	101-84-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phorate	298-02-2	N	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Phenylene diamine	106-50-3	N	--	380	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pronamide	23950-58-5	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	129-00-0	N	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyridine	110-86-1	N	--	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Safrole, Total	94-59-7	C	--	0.095	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfotepp	3689-24-5	N	--	0.71	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thionazin	297-97-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohols and Glycols (mg/L)														
Ethanol	64-17-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	67-56-1	N	1.775	4.0	--	5 U	5 U	**1.3 J**	NA	5 U	5 U	NA	NA	NA
Metals (ug/L)														
Aluminum	7429-90-5	N	574	2,000	--	**360**	**150**	**580**	**260**	**160**	100 U	**190**	**250**	**630**
Arsenic	7440-38-2	C	21.4	0.052	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	N	628	380	2,000	**800**	**720**	**820**	**960**	**900**	**940**	**1,000**	**1,200**	**1,000**
Beryllium	7440-41-7	N	--	2.5	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	2.5	0.92	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	--	12.5	--	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	N	104	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	N	--	80	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	75,872	1,400	--	NA	NA	NA	**83,000**	**71,000**	**81,000**	**69,000**	**80,000**	**69,000**
Lead	7439-92-1	--	0.77	--	15	NA	**0.51 J**	**0.69 J**	**0.98 J**	1.5 U	1.5 U	NA	NA	NA
Manganese	7439-96-5	N	9,071	43	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	N	0.8	0.063	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	47.3	39	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Parameters (mg/L)														
Ammonia, Dissolved	7664-41-7	N	--	--	--	NA	**1.9**	**2.7**	NA	**8.9**	**13**	NA	**1.1**	**2.7**
Orthophosphate, Dissolved	14265-44-2	--	--	--	--	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U
Calcium, Dissolved (ug/L)	7440-70-2	--	--	--	--	NA	**110,000**	**110,000**	NA	**100,000**	**98,000**	NA	**200,000**	**180,00**
Iron, Dissolved (ug/L)	7439-89-6	N	--	1,400	--	NA	**60,000**	**55,000**	NA	**74,000**	**71,000**	NA	**74,000**	**64,000**
Magnesium, Dissolved (ug/L)	7439-95-4	--	--	--	--	NA	**34,000**	**33,000**	NA	**42,000**	**41,000**	NA	**40,000**	**250**
Manganese, Dissolved (ug/L)	7439-96-5	N	--	43	--	NA	**2,300**	**2,100**	NA	**2,300**	**1,400**	NA	**3,600**	**3,200**
Potassium, Dissolved (ug/L)	7440-09-7	--	--	--	--	NA	**4,700**	**4,500**	NA	**8,700**	**10,000**	NA	**5,900**	**5,300**
Sodium, Dissolved (ug/L)	7440-23-5	N	--	--	--	NA	**400,000**	**370,000**	NA	**460,000**	**590,000**	NA	**640,000**	**710,000**
Sulfide, Dissolved	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	**1.1**	1 U	NA	1 U	1 U
Sulfide	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	**1.1**	1 U	NA	1 U	1 U
Nitrate as N	14797-55-8	N	--	3,200	10,000	NA	0.1 U H	0.1 U	NA	0.1 U H	0.1 U	NA	**0.26 J**	0.5 U
Nitrite as N	14797-65-0	N	--	200	1,000	NA	0.1 U H	0.1 U	NA	0.1 U H	0.1 U	NA	0.5 U	0.5 U *
Chloride	16887-00-6	--	--	--	--	NA	**530**	**510**	NA	**670**	**690**	NA	**1,100**	**1,200**
Sulfate	18758-72-3	--	--	--	--	NA	2.5 U	**1.3 J**	NA	2.5 U	2.5 U	NA	**61**	**95**
Dissolved Organic Carbon	7440-44-0	--	--	--	--	NA	**35**	**31**	NA	**39**	**44**	NA	**16**	**18**
Alkalinity	--	--	--	--	--	NA	**560**	**600**	NA	**580**	**790**	NA	**250**	**320**
Bicarbonate Alkalinity as CaCO3	--	--	--	--	--	NA	**560**	**600**	NA	**580**	**790**	NA	**250**	**320**
Carbonate Alkalinity as CaCO3	--	--	--	--	--	NA	5 U	5 U	NA	5 U	5 U	NA	5 U	5 U
Ammonium ion as NH4	14798-03-9	--	--	--	--	NA	**2.4**	**3.5**	NA	**11**	**17**	NA	**1.4**	**3.5**

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-5U 6/4/2013 Conc/Qual	MW-5U 12/3/2013 Conc/Qual	MW-5U 7/15/2014 Conc/Qual	MW-6 6/3/2013 Conc/Qual	MW-6 11/27/2013 Conc/Qual	MW-6 7/17/2014 Conc/Qual	MW-7L 6/5/2013 Conc/Qual	MW-7L 11/27/2013 Conc/Qual	MW-7L 7/18/2014 Conc/Qual
Volatile Organic Compounds (ug/L)														
Chloroform	67-66-3	C	0.65	0.22	80	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	C	--	0.17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl ether	60-29-7	N	4,734	390	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
t-Butanol[4]	75-65-0	--	1,652	150	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (ug/L)														
1,1'-Biphenyl	92-52-4	N	--	0.083	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	95-94-3	N	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	C	--	1.1	70	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	N	--	30	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene	99-35-4	N	--	59	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	123-91-1	C	15.4	0.78	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4 Dichlorobenzene	106-46-7	C	--	0.48	75	NA	0.97 U	0.99 U	NA	NA	NA	NA	NA	NA
1,4-Naphthoquinone	130-15-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Naphthalenamine	134-32-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis[1-chloropropane]	108-60-1	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol	58-90-2	N	--	24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	C	--	4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	120-83-2	N	--	4.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	105-67-9	N	--	36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	51-28-5	N	--	3.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	C	--	0.24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dichlorophenol	87-65-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	606-20-2	C	--	0.048	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Acetylaminofluorene	53-96-3	C	--	0.016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	91-58-7	N	--	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	95-57-8	N	--	9.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6	N	--	3.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	N	--	93	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Naphthalenamine	91-59-8	C	--	0.039	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	88-74-4	N	--	19	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	88-75-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Picoline	109-06-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	N	--	1.5	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
3 & 4 Methylphenol	15831-10-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine	119-93-7	C	--	0.0065	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylcholanthrene	56-49-5	C	--	0.0011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	99-09-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	N	--	0.15	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Aminobiphenyl	92-67-1	C	--	0.003	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	N	--	140	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	106-47-8	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	100-01-6	C	--	3.8	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide	56-57-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
5-Nitro-o-toluidine	99-55-8	C	--	8.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene	57-97-6	C	--	0.0001	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	N	--	53	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	208-96-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	98-86-2	N	--	190	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha,alpha-Dimethyl phenethylamine	122-09-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-5U			MW-6			MW-7L		
						6/4/2013	12/3/2013	7/15/2014	6/3/2013	11/27/2013	7/17/2014	6/5/2013	11/27/2013	7/18/2014
Semivolatile Organic Compounds (ug/L)						Conc/Qual			Conc/Qual			Conc/Qual		
Aniline	62-53-3	C	--	13	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	120-12-7	N	--	180	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aramite, Total	140-57-8	C	--	1.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	56-55-3	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	50-32-8	C	--	0.0034	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	205-99-2	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	191-24-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	207-08-9	C	--	0.34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	100-51-6	N	--	200	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	111-91-1	N	--	5.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	111-44-4	C	--	0.014	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl) phthalate	117-81-7	C	--	5.6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	85-68-7	C	--	16	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	C	--	3.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diallate	2303-16-4	C	--	0.52	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	53-70-3	C	--	0.0034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	132-64-9	N	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	84-66-2	N	--	1,500	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethoate	60-51-5	N	--	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	131-11-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	84-74-2	N	--	90	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	117-84-0	N	--	20	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Disulfoton	298-04-4	N	--	0.05	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl methanesulfonate	62-50-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl Parathion	56-38-2	N	--	8.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Famphur	52-85-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	N	--	80	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	86-73-7	N	--	29	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	C	--	0.049	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	C	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	77-47-4	N	--	3.1	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	C	--	0.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorophene	70-30-4	N	--	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloropropene	1888-71-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	193-39-5	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	78-59-1	C	--	78	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isosafrole	120-58-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Dinitrobenzene	99-65-0	--	--	0.2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methapyrilene	91-80-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl methanesulfonate	66-27-3	C	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl parathion	298-00-0	N	--	0.45	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	91-20-3	C	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	C	--	0.14	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiethylamine	55-18-5	C	--	0.00017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodimethylamine	62-75-9	C	--	0.00049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	C	--	0.0027	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	621-64-7	C	--	0.011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	86-30-6	C	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomethylethylamine	10595-95-6	C	--	0.0035	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomorpholine	59-89-2	C	--	0.012	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopiperidine	100-75-4	C	--	0.0082	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopyrrolidine	930-55-2	C	--	0.037	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
o,o',o"-Triethylphosphorothioate	126-68-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Toluidine	95-53-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Dimethylamino azobenzene	60-11-7	C	--	0.0049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	N	--	0.32	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachloronitrobenzene	82-68-8	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	C	--	0.04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenacetin	62-44-2	C	--	34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	108-95-2	N	--	580	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-5U 6/4/2013 Conc/Qual	MW-5U 12/3/2013 Conc/Qual	MW-5U 7/15/2014 Conc/Qual	MW-6 6/3/2013 Conc/Qual	MW-6 11/27/2013 Conc/Qual	MW-6 7/17/2014 Conc/Qual	MW-7L 6/5/2013 Conc/Qual	MW-7L 11/27/2013 Conc/Qual	MW-7L 7/18/2014 Conc/Qual
Semivolatile Organic Compounds (ug/L)														
Phenyl ether	101-84-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phorate	298-02-2	N	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Phenylene diamine	106-50-3	N	--	380	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pronamide	23950-58-5	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	129-00-0	N	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyridine	110-86-1	N	--	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Safrole, Total	94-59-7	C	--	0.095	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfotepp	3689-24-5	N	--	0.71	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thionazin	297-97-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohols and Glycols (mg/L)														
Ethanol	64-17-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	67-56-1	N	1.775	4.0	--	5 U	5 U	**2.5 J**	NA	NA	NA	5 U	**2.2 J**	5 U
Metals (ug/L)														
Aluminum	7429-90-5	N	574	2,000	--	NA	NA	NA	**330**	**1,100**	**1,200**	**120**	**89 J**	**470**
Arsenic	7440-38-2	C	21.4	0.052	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	N	628	380	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	N	--	2.5	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	2.5	0.92	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	--	12.5	--	100	NA	NA	NA	NA	NA	NA	5 U	5 U	**24**
Cobalt	7440-48-4	N	104	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	N	--	80	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	75,872	1,400	--	NA	NA	NA	NA	NA	NA	**2,600**	NA	NA
Lead	7439-92-1	--	0.77	--	15	NA	NA	NA	**0.92 J**	**0.66 J**	**0.82 J**	1.5 U	1.5 U	**1.1 J**
Manganese	7439-96-5	N	9,071	43	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	N	0.8	0.063	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	47.3	39	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Parameters (mg/L)														
Ammonia, Dissolved	7664-41-7	N	--	--	--	NA	**0.72**	**0.90**	NA	NA	NA	NA	NA	NA
Orthophosphate, Dissolved	14265-44-2	--	--	--	--	NA	**0.097**	0.05 U	NA	NA	NA	NA	NA	NA
Calcium, Dissolved (ug/L)	7440-70-2	--	--	--	--	NA	**170,000**	**150,000**	NA	NA	NA	NA	NA	NA
Iron, Dissolved (ug/L)	7439-89-6	N	--	1,400	--	NA	**14,000**	**12,000**	NA	NA	NA	NA	NA	NA
Magnesium, Dissolved (ug/L)	7439-95-4	--	--	--	--	NA	**43,000**	**38,000**	NA	NA	NA	NA	NA	NA
Manganese, Dissolved (ug/L)	7439-96-5	N	--	43	--	NA	**2,700**	**2,300**	NA	NA	NA	NA	NA	NA
Potassium, Dissolved (ug/L)	7440-09-7	--	--	--	--	NA	**5,800**	**5,100**	NA	NA	NA	NA	NA	NA
Sodium, Dissolved (ug/L)	7440-23-5	N	--	--	--	NA	**1,900,000**	**1,900,000**	NA	NA	NA	NA	NA	NA
Sulfide, Dissolved	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	NA	NA	NA	NA	NA
Sulfide	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	NA	NA	NA	NA	NA
Nitrate as N	14797-55-8	N	--	3,200	10,000	NA	0.2 U	0.5 U	NA	NA	NA	NA	NA	NA
Nitrite as N	14797-65-0	N	--	200	1,000	NA	0.2 U	0.5 U *	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	--	--	--	--	NA	**2,400**	**2,400**	NA	NA	NA	NA	NA	NA
Sulfate	18758-72-3	--	--	--	--	NA	**380**	**430**	NA	NA	NA	NA	NA	NA
Dissolved Organic Carbon	7440-44-0	--	--	--	--	NA	**27**	**35**	NA	NA	NA	NA	NA	NA
Alkalinity	--	--	--	--	--	NA	**930**	**1,100**	NA	NA	NA	NA	NA	NA
Bicarbonate Alkalinity as CaCO3	--	--	--	--	--	NA	**930**	**1,100**	NA	NA	NA	NA	NA	NA
Carbonate Alkalinity as CaCO3	--	--	--	--	--	NA	5 U	5 U	NA	NA	NA	NA	NA	NA
Ammonium ion as NH4	14798-03-9	--	--	--	--	NA	**0.92**	**1.2**	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-7U					MW-8D			MW-8L-R		
						6/5/2013	11/27/2013	11/27/2013 (DUP)	7/18/2014	7/18/2014 (DUP)	6/3/2013	12/2/2013	7/18/2014	6/3/2013	12/2/2013	7/17/2014
						Conc/Qual					Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)																
Chloroform	67-66-3	C	0.65	0.22	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	C	--	0.17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl ether	60-29-7	N	4,734	390	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
t-Butanol[4]	75-65-0	--	1,652	150	--	NA	NA	NA	NA	NA	NA	NA	NA	**4,800**	**5,500**	**2,600**
Semivolatile Organic Compounds (ug/L)																
1,1'-Biphenyl	92-52-4	N	--	0.083	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	95-94-3	N	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	C	--	1.1	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	N	--	30	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene	99-35-4	N	--	59	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	123-91-1	C	15.4	0.78	--	NA	NA	NA	NA	NA	NA	NA	NA	**16**	**15**	**12**
1,4 Dichlorobenzene	106-46-7	C	--	0.48	75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Naphthoquinone	130-15-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Naphthalenamine	134-32-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis[1-chloropropane]	108-60-1	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol	58-90-2	N	--	24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	C	--	4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	120-83-2	N	--	4.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	105-67-9	N	--	36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	51-28-5	N	--	3.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	C	--	0.24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dichlorophenol	87-65-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	606-20-2	C	--	0.048	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Acetylaminofluorene	53-96-3	C	--	0.016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	91-58-7	N	--	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	95-57-8	N	--	9.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6	N	--	3.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	N	--	93	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Naphthalenamine	91-59-8	C	--	0.039	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	88-74-4	N	--	19	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	88-75-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Picoline	109-06-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	N	--	1.5	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3 & 4 Methylphenol	15831-10-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine	119-93-7	C	--	0.0065	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylcholanthrene	56-49-5	C	--	0.0011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	99-09-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	N	--	0.15	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Aminobiphenyl	92-67-1	C	--	0.003	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	N	--	140	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	106-47-8	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	100-01-6	C	--	3.8	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide	56-57-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5-Nitro-o-toluidine	99-55-8	C	--	8.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene	57-97-6	C	--	0.0001	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	N	--	53	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	208-96-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	98-86-2	N	--	190	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha,alpha-Dimethyl phenethylamine	122-09-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-7U					MW-8D			MW-8L-R		
						6/5/2013	11/27/2013	11/27/2013 (DUP)	7/18/2014	7/18/2014 (DUP)	6/3/2013	12/2/2013	7/18/2014	6/3/2013	12/2/2013	7/17/2014
						Conc/Qual					Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)																
Aniline	62-53-3	C	--	13	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	120-12-7	N	--	180	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aramite, Total	140-57-8	C	--	1.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	56-55-3	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	50-32-8	C	--	0.0034	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	205-99-2	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	191-24-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	207-08-9	C	--	0.34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	100-51-6	N	--	200	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	111-91-1	N	--	5.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	111-44-4	C	--	0.014	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl) phthalate	117-81-7	C	--	5.6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	85-68-7	C	--	16	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	C	--	3.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diallate	2303-16-4	C	--	0.52	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	53-70-3	C	--	0.0034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	132-64-9	N	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	84-66-2	N	--	1,500	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethoate	60-51-5	N	--	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	131-11-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	84-74-2	N	--	90	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	117-84-0	N	--	20	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Disulfoton	298-04-4	N	--	0.05	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl methanesulfonate	62-50-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl Parathion	56-38-2	N	--	8.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Famphur	52-85-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	N	--	80	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	86-73-7	N	--	29	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	C	--	0.049	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	C	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	77-47-4	N	--	3.1	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	C	--	0.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorophene	70-30-4	N	--	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloropropene	1888-71-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	193-39-5	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	78-59-1	C	--	78	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isosafrole	120-58-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Dinitrobenzene	99-65-0	--	--	0.2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methapyrilene	91-80-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl methanesulfonate	66-27-3	C	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl parathion	298-00-0	N	--	0.45	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	91-20-3	C	--	0.17	--	**0.15 J**	**0.26 J**	NA	**0.17 J**	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	C	--	0.14	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiethylamine	55-18-5	C	--	0.00017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodimethylamine	62-75-9	C	--	0.00049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	C	--	0.0027	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	621-64-7	C	--	0.011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	86-30-6	C	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomethylethylamine	10595-95-6	C	--	0.0035	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomorpholine	59-89-2	C	--	0.012	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopiperidine	100-75-4	C	--	0.0082	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopyrrolidine	930-55-2	C	--	0.037	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o,o',o"-Triethylphosphorothioate	126-68-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Toluidine	95-53-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Dimethylamino azobenzene	60-11-7	C	--	0.0049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	N	--	0.32	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachloronitrobenzene	82-68-8	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	C	--	0.04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenacetin	62-44-2	C	--	34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	108-95-2	N	--	580	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-7U					MW-8D			MW-8L-R		
						6/5/2013	11/27/2013	11/27/2013 (DUP)	7/18/2014	7/18/2014 (DUP)	6/3/2013	12/2/2013	7/18/2014	6/3/2013	12/2/2013	7/17/2014
						Conc/Qual					Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)																
Phenyl ether	101-84-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phorate	298-02-2	N	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Phenylene diamine	106-50-3	N	--	380	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pronamide	23950-58-5	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	129-00-0	N	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyridine	110-86-1	N	--	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Safrole, Total	94-59-7	C	--	0.095	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfotepp	3689-24-5	N	--	0.71	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thionazin	297-97-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohols and Glycols (mg/L)																
Ethanol	64-17-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	67-56-1	N	1.775	4.0	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (ug/L)																
Aluminum	7429-90-5	N	574	2,000	--	NA	**240**	**240**	**380**	**96 J**	**780**	**170**	100 U	**85 J**	**110**	**110**
Arsenic	7440-38-2	C	21.4	0.052	10	NA	NA	NA	NA	NA	NA	NA	NA	**34**	**38**	**33**
Barium	7440-39-3	N	628	380	2,000	NA	NA	NA	NA	NA	NA	NA	NA	**600**	NA	NA
Beryllium	7440-41-7	N	--	2.5	4	NA	**1.2**	**1.1**	**3.4**	0.5 U	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	2.5	0.92	5	**6.6**	**5.7**	**4.7**	**6.7**	**0.15 J**	**29**	**0.64**	**0.40 J**	NA	NA	NA
Chromium	7440-47-3	--	12.5	--	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	N	104	0.6	--	**390**	**200**	**190**	**540**	**4.9**	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	N	--	80	1,300	NA	**58**	**57**	**65**	**2.2 J**	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	75,872	1,400	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	--	0.77	--	15	**1.7**	**0.75 J**	**0.73 J**	**1.3 J**	1.5 U	**3**	1.5 U	1.5 U	NA	NA	NA
Manganese	7439-96-5	N	9,071	43	--	**42,000**	**23,000**	**22,000**	**62,000**	**570**	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	N	0.8	0.063	2	**1**	0.8 U	0.8 U	0.8 U	0.8 U	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	47.3	39	--	**130**	**63**	**59**	**190**	**7.3**	NA	NA	NA	NA	NA	NA
Geochemical Parameters (mg/L)																
Ammonia, Dissolved	7664-41-7	N	--	--	--	NA	NA	NA	NA	NA	NA	**0.05**	**0.097**	NA	NA	NA
Orthophosphate, Dissolved	14265-44-2	--	--	--	--	NA	NA	NA	NA	NA	NA	**0.19**	**0.097 H**	NA	NA	NA
Calcium, Dissolved (ug/L)	7440-70-2	--	--	--	--	NA	NA	NA	NA	NA	NA	**35,000**	**30,000**	NA	NA	NA
Iron, Dissolved (ug/L)	7439-89-6	N	--	1,400	--	NA	NA	NA	NA	NA	NA	**460**	**490**	NA	NA	NA
Magnesium, Dissolved (ug/L)	7439-95-4	--	--	--	--	NA	NA	NA	NA	NA	NA	**3,200**	**2,400**	NA	NA	NA
Manganese, Dissolved (ug/L)	7439-96-5	N	--	43	--	NA	NA	NA	NA	NA	NA	**230**	**170**	NA	NA	NA
Potassium, Dissolved (ug/L)	7440-09-7	--	--	--	--	NA	NA	NA	NA	NA	NA	**4,400**	**3,200**	NA	NA	NA
Sodium, Dissolved (ug/L)	7440-23-5	N	--	--	--	NA	NA	NA	NA	NA	NA	**12,000**	**10,000**	NA	NA	NA
Sulfide, Dissolved	18496-25-8	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	NA	NA
Sulfide	18496-25-8	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	NA	NA
Nitrate as N	14797-55-8	N	--	3,200	10,000	NA	NA	NA	NA	NA	NA	**0.026 J**	**0.075 H**	NA	NA	NA
Nitrite as N	14797-65-0	N	--	200	1,000	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U H	NA	NA	NA
Chloride	16887-00-6	--	--	--	--	NA	NA	NA	NA	NA	NA	**3.8**	**4.1**	NA	NA	NA
Sulfate	18758-72-3	--	--	--	--	NA	NA	NA	NA	NA	NA	**5.1**	**5.9**	NA	NA	NA
Dissolved Organic Carbon	7440-44-0	--	--	--	--	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	NA	NA
Alkalinity	--	--	--	--	--	NA	NA	NA	NA	NA	NA	**100**	**130**	NA	NA	NA
Bicarbonate Alkalinity as CaCO3	--	--	--	--	--	NA	NA	NA	NA	NA	NA	**100**	**130**	NA	NA	NA
Carbonate Alkalinity as CaCO3	--	--	--	--	--	NA	NA	NA	NA	NA	NA	5 U	5 U	NA	NA	NA
Ammonium ion as NH4	14798-03-9	--	--	--	--	NA	NA	NA	NA	NA	NA	0.03 U	**0.12**	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-8U			MW-9			MW-10		
						6/3/2013	12/2/2013	7/17/2014	6/4/2013	11/27/2013	7/18/2014	6/6/2013	11/26/2013	7/15/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Volatile Organic Compounds (ug/L)														
Chloroform	67-66-3	C	0.65	0.22	80	NA	NA	NA	NA	NA	NA	**0.78 J**	**0.82 J**	**0.82 J**
1,2-Dichloroethane	107-06-2	C	--	0.17	5	NA	NA	NA	NA	NA	NA	1 U	**0.24 J**	**0.18 J**
Diethyl ether	60-29-7	N	4,734	390	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
t-Butanol[4]	75-65-0	--	1,652	150	--	**900**	130 U	**650**	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (ug/L)														
1,1'-Biphenyl	92-52-4	N	--	0.083	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	95-94-3	N	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	C	--	1.1	70	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	N	--	30	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trinitrobenzene	99-35-4	N	--	59	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	123-91-1	C	15.4	0.78	--	NA	NA	NA	NA	NA	NA	**27**	**58**	**24**
1,4 Dichlorobenzene	106-46-7	C	--	0.48	75	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Naphthoquinone	130-15-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Naphthalenamine	134-32-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis[1-chloropropane]	108-60-1	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol	58-90-2	N	--	24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	C	--	4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	120-83-2	N	--	4.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	105-67-9	N	--	36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	51-28-5	N	--	3.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	C	--	0.24	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dichlorophenol	87-65-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	606-20-2	C	--	0.048	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Acetylaminofluorene	53-96-3	C	--	0.016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	91-58-7	N	--	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	95-57-8	N	--	9.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6	N	--	3.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	N	--	93	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Naphthalenamine	91-59-8	C	--	0.039	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	88-74-4	N	--	19	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	88-75-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Picoline	109-06-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	N	--	1.5	7	NA	NA	NA	NA	NA	NA	NA	NA	NA
3 & 4 Methylphenol	15831-10-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dimethylbenzidine	119-93-7	C	--	0.0065	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylcholanthrene	56-49-5	C	--	0.0011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	99-09-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	N	--	0.15	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Aminobiphenyl	92-67-1	C	--	0.003	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	N	--	140	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	106-47-8	C	--	0.36	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	100-01-6	C	--	3.8	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroquinoline-1-oxide	56-57-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
5-Nitro-o-toluidine	99-55-8	C	--	8.1	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene	57-97-6	C	--	0.0001	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	N	--	53	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	208-96-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	98-86-2	N	--	190	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha,alpha-Dimethyl phenethylamine	122-09-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-8U			MW-9			MW-10		
						6/3/2013	12/2/2013	7/17/2014	6/4/2013	11/27/2013	7/18/2014	6/6/2013	11/26/2013	7/15/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)														
Aniline	62-53-3	C	--	13	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	120-12-7	N	--	180	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aramite, Total	140-57-8	C	--	1.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	56-55-3	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	50-32-8	C	--	0.0034	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	205-99-2	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	191-24-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	207-08-9	C	--	0.34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	100-51-6	N	--	200	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	111-91-1	N	--	5.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	111-44-4	C	--	0.014	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl) phthalate	117-81-7	C	--	5.6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	85-68-7	C	--	16	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	C	--	3.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diallate	2303-16-4	C	--	0.52	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	53-70-3	C	--	0.0034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	132-64-9	N	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	84-66-2	N	--	1,500	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethoate	60-51-5	N	--	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	131-11-3	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	84-74-2	N	--	90	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	117-84-0	N	--	20	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Disulfoton	298-04-4	N	--	0.05	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl methanesulfonate	62-50-0	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethyl Parathion	56-38-2	N	--	8.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Famphur	52-85-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	N	--	80	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	86-73-7	N	--	29	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	C	--	0.049	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	C	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	77-47-4	N	--	3.1	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	C	--	0.9	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorophene	70-30-4	N	--	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloropropene	1888-71-7	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	193-39-5	C	--	0.034	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	78-59-1	C	--	78	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isosafrole	120-58-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Dinitrobenzene	99-65-0	--	--	0.2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methapyrilene	91-80-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl methanesulfonate	66-27-3	C	--	0.79	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl parathion	298-00-0	N	--	0.45	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	91-20-3	C	--	0.17	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	C	--	0.14	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiethylamine	55-18-5	C	--	0.00017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodimethylamine	62-75-9	C	--	0.00049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	C	--	0.0027	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	621-64-7	C	--	0.011	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	86-30-6	C	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomethylethylamine	10595-95-6	C	--	0.0035	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosomorpholine	59-89-2	C	--	0.012	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopiperidine	100-75-4	C	--	0.0082	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosopyrrolidine	930-55-2	C	--	0.037	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
o,o',o''-Triethylphosphorothioate	126-68-1	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Toluidine	95-53-4	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Dimethylamino azobenzene	60-11-7	C	--	0.0049	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	N	--	0.32	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachloronitrobenzene	82-68-8	C	--	0.12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	C	--	0.04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenacetin	62-44-2	C	--	34	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	108-95-2	N	--	580	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11
Groundwater Analytical Results, Main Holding Basin
2013/2014 Semi-annual Groundwater Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	[1]C or N	[2]EPC	[3]Tapwater	MCL	MW-8U			MW-9			MW-10		
						6/3/2013	12/2/2013	7/17/2014	6/4/2013	11/27/2013	7/18/2014	6/6/2013	11/26/2013	7/15/2014
						Conc/Qual			Conc/Qual			Conc/Qual		
Semivolatile Organic Compounds (ug/L)														
Phenyl ether	101-84-8	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phorate	298-02-2	N	--	0.3	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Phenylene diamine	106-50-3	N	--	380	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pronamide	23950-58-5	N	--	120	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	129-00-0	N	--	12	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyridine	110-86-1	N	--	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Safrole, Total	94-59-7	C	--	0.095	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfotepp	3689-24-5	N	--	0.71	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thionazin	297-97-2	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohols and Glycols (mg/L)														
Ethanol	64-17-5	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	67-56-1	N	1.775	4.0	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (ug/L)														
Aluminum	7429-90-5	N	574	2,000	--	**160**	**240**	**390**	**110**	**270**	**590**	**80 J**	**570**	**460**
Arsenic	7440-38-2	C	21.4	0.052	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	N	628	380	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	N	--	2.5	4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	N	2.5	0.92	5	NA	NA	NA	NA	NA	NA	**3.8**	**3.8**	**3.7**
Chromium	7440-47-3	--	12.5	--	100	NA	NA	**2.7 J**	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	N	104	0.6	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	N	--	80	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	N	75,872	1,400	--	NA	NA	NA	**100,000**	**120,000**	**110,000**	NA	NA	NA
Lead	7439-92-1	--	0.77	--	15	1.5 U	1.5 U	1.5 U	**0.71 J**	1.5 U	**1.1 J**	NA	1.5 U	1.5 U
Manganese	7439-96-5	N	9,071	43	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	N	0.8	0.063	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	N	47.3	39	--	NA	NA	NA	NA	NA	NA	**58**	**65**	**63**
Geochemical Parameters (mg/L)														
Ammonia, Dissolved	7664-41-7	N	--	--	--	NA	**12**	12	NA	NA	NA	NA	NA	NA
Orthophosphate, Dissolved	14265-44-2	--	--	--	--	NA	0.05 U	0.05 U	NA	NA	NA	NA	NA	NA
Calcium, Dissolved (ug/L)	7440-70-2	--	--	--	--	NA	**180,000**	**170,000**	NA	NA	NA	NA	NA	NA
Iron, Dissolved (ug/L)	7439-89-6	N	--	1,400	--	NA	**61,000**	**58,000**	NA	NA	NA	NA	NA	NA
Magnesium, Dissolved (ug/L)	7439-95-4	--	--	--	--	NA	**51,000**	**47,000**	NA	NA	NA	NA	NA	NA
Manganese, Dissolved (ug/L)	7439-96-5	N	--	43	--	NA	**1,500**	**1,600**	NA	NA	NA	NA	NA	NA
Potassium, Dissolved (ug/L)	7440-09-7	--	--	--	--	NA	**34,000**	**31,000**	NA	NA	NA	NA	NA	NA
Sodium, Dissolved (ug/L)	7440-23-5	N	--	--	--	NA	**430,000**	**390,000**	NA	NA	NA	NA	NA	NA
Sulfide, Dissolved	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	NA	NA	NA	NA	NA
Sulfide	18496-25-8	--	--	--	--	NA	1 U	1 U	NA	NA	NA	NA	NA	NA
Nitrate as N	14797-55-8	N	--	3,200	10,000	NA	**0.18 J**	0.25 U	NA	NA	NA	NA	NA	NA
Nitrite as N	14797-65-0	N	--	200	1,000	NA	0.25 U	0.25 U	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	--	--	--	--	NA	**450**	**460**	NA	NA	NA	NA	NA	NA
Sulfate	18758-72-3	--	--	--	--	NA	**530**	**560**	NA	NA	NA	NA	NA	NA
Dissolved Organic Carbon	7440-44-0	--	--	--	--	NA	**12**	**13**	NA	NA	NA	NA	NA	NA
Alkalinity	--	--	--	--	--	NA	**460**	**490**	NA	NA	NA	NA	NA	NA
Bicarbonate Alkalinity as CaCO3	--	--	--	--	--	NA	**460**	**490**	NA	NA	NA	NA	NA	NA
Carbonate Alkalinity as CaCO3	--	--	--	--	--	NA	5 U	5 U	NA	NA	NA	NA	NA	NA
Ammonium ion as NH4	14798-03-9	--	--	--	--	NA	**15**	**15**	NA	NA	NA	NA	NA	NA

Notes:
NA = Not Analyzed
ug/L = micrograms per liter; mg/L = milligrams per liter; MCL = USEPA Maximum Contaminant Level; RL = Reporting limit; MDL = Method detection limit
November 2014 Regional Screening Table developed by Oakridge National Laboratory under an Interagency Agreement with the EPA.
[1] Carcinogen/Noncarcinogen (C or N) taken from Oakridge National Laboratory under an Interagency Agreement with EPA.
[2] Exposure Point Concentration calculated in the 2011 Human Health Risk Assessment.
[3] Factor of 0.1 multiplied by the Noncarcinogenic Screening Values (Screening Levels Only).
[4] Surrogate compounds selected as detailed in Table 3-1 of the Human Health Risk Assessment (Attachment A to the Final RFI Report). Screening criteria for the selected surrogates have been incorporated into this table.
* = LCS or LCSD exceeds the control limits
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.
H = sample

Table 12
Geochemical Parameter Comparison Table
2011, 2013 and 2014 Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	MW-1			MW-2		
		5/2/2011	12/2/2013	7/17/2014	4/29/2011	12/2/2013	7/17/2014
		Conc/Qual			Conc/Qual		
Natural Attenuation Parameters							
pH (standard units)	--	5.81	5.50	5.96	5.65	5.44	5.38
Specific Conductivity (mS/cm)	--	2.153	2.145	1.952	3.491	3.936	3.570
Dissolved Oxygen (mg/L)	--	0.42	1.52	2.21	1.24	0.90	1.42
Temperature (ºC)	--	18.93	19.26	20.50	19.45	19.84	20.32
Oxidation Reduction Potential (mV)	--	33.7	46.6	39.8	16.8	-33.5	-9.4
Final Turbidity (NTU)	--	6.12	9.43	5.72	8.95	8.82	9.5
Geochemical Parameters (mg/L)							
Ammonia, Dissolved	7664-41-7	**0.19**	**0.044 J**	**0.12**	**0.12**	**0.38**	**0.19**
Orthophosphate, Dissolved	14265-44-2	**0.38**	**0.42**	**0.41**	0.05 U H	**0.19**	0.05 U
Calcium, Dissolved (ug/L)	7440-70-2	**170,000**	**170,000**	**170,000**	**230,000**	**270,000**	**250,000**
Iron, Dissolved (ug/L)	7439-89-6	**8,000**	**6,400**	**8,800**	**130,000**	**150,000**	**150,000**
Magnesium, Dissolved (ug/L)	7439-95-4	**48,000**	**49,000**	**46,000**	**77,000**	**92,000**	**85,000**
Manganese, Dissolved (ug/L)	7439-96-5	**50,000**	**2,700**	**2,700**	**88,000**	**10,000**	**11,000**
Potassium, Dissolved (ug/L)	7440-09-7	**2,900**	**3,600**	**3,500**	**8,600**	**3,900**	**4,100**
Sulfide	18496-25-8	1 U	1 U	1 U	1 U	**2.2**	1 U
Nitrate as N	14797-55-8	**0.019 J**	0.05 U	**0.053**	**0.15**	**0.062 J**	0.1 U
Nitrite as N	14797-65-0	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
Chloride	16887-00-6	**220**	**220**	**210**	**1,000**	**1,000**	**1,100**
Sulfate	18758-72-3	**710**	**800**	**850**	**420**	**470**	**470**
Sodium, Dissolved (ug/L)	7440-23-5	**250,000**	**250,000**	**230,000**	**340,000**	**350,000**	**290,000**
Dissolved Organic Carbon	7440-44-0	**3.3**	**3.4**	**8.7**	**4.7**	**5**	**5.1**
Alkalinity	--	**95**	**110**	**120**	**140**	**150**	**160**
Bicarbonate Alkalinity as CaCO3	--	**95**	**110**	**120**	**140**	**150**	**160**
Carbonate Alkalinity as CaCO3	--	5 U	5 U	5 U	5 U	5 U	5 U
Ammonium ion as NH4	14798-03-9	**0.13**	**0.057**	**0.15**	**0.21**	**0.49**	**0.24**

Table 12
Geochemical Parameter Comparison Table
2011, 2013 and 2014 Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	MW-3			MW-4		
		4/26/2013	11/26/2013	7/17/2014	4/29/2011	11/26/2013	7/16/2014
		Conc/Qual			Conc/Qual		
Natural Attenuation Parameters							
pH (standard units)	--	6.54	6.46	6.23	6.28	6.10	6.11
Specific Conductivity (mS/cm)	--	0.521	0.349	0.320	2.450	2.638	2.062
Dissolved Oxygen (mg/L)	--	0.49	3.59	1.33	0.77	2.60	1.03
Temperature (ºC)	--	18.78	17.07	18.47	17.42	18.15	19.12
Oxidation Reduction Potential (mV)	--	-90.7	-67.9	-74.2	-57.1	-64.1	-68.1
Final Turbidity (NTU)	--	4.66	9.60	25.4	5.58	9.70	9.7
Geochemical Parameters (mg/L)							
Ammonia, Dissolved	7664-41-7	**4.3**	**2.7**	**2.0**	**1.7**	**1.9**	**2.7**
Orthophosphate, Dissolved	14265-44-2	**0.22 H**	**0.021 J**	**0.088**	0.05 U	0.05 U	0.05 U
Calcium, Dissolved (ug/L)	7440-70-2	**59,000**	**49,000**	**40,000**	**120,000**	**110,000**	**110,000**
Iron, Dissolved (ug/L)	7439-89-6	**15,000**	**13,000**	**11,000**	**64,000**	**60,000**	**55,000**
Magnesium, Dissolved (ug/L)	7439-95-4	**9,900**	**6,600**	**4,600**	**38,000**	**34,000**	**33,000**
Manganese, Dissolved (ug/L)	7439-96-5	**12,000**	**530**	**410**	**2,400**	**2,300**	**2,100**
Potassium, Dissolved (ug/L)	7440-09-7	**640**	**4,400**	**2,900**	**6,600**	**4,700**	**4,500**
Sulfide	18496-25-8	**2.7**	1 U	1 U	3.3	1 U	1 U
Nitrate as N	14797-55-8	**0.31 H**	0.1 U H	**0.076 J**	0.05 U	0.1 U H	0.1 U
Nitrite as N	14797-65-0	0.05 U H	0.1 U H	0.1 U	**0.012** J	0.1 U H	0.1 U
Chloride	16887-00-6	**110**	**50**	**6.1**	**540**	2.5 U	**510**
Sulfate	18758-72-3	**37**	**24**	**0.53 J**	50 U	**530**	**1.3 J**
Sodium, Dissolved (ug/L)	7440-23-5	**190,000**	**76,000**	**20,000**	**490,000**	**400,000**	**370,000**
Dissolved Organic Carbon	7440-44-0	**10**	**5**	**3.5**	**31**	**35**	**31**
Alkalinity	--	**260**	**210**	**160**	**670**	**560**	**600**
Bicarbonate Alkalinity as CaCO3	--	**260**	**210**	**160**	**670**	**560**	**600**
Carbonate Alkalinity as CaCO3	--	5 U	5 U	5 U	5 U	5 U	5 U
Ammonium ion as NH4	14798-03-9	**4.5**	**3.5**	**2.6**	**4**	**2.4**	**3.5**

Table 12
Geochemical Parameter Comparison Table
2011, 2013 and 2014 Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	MW-4U			MW-5		
		4/29/2011	11/26/2013	7/16/2014	4/29/2013	12/3/2013	7/15/2014
		Conc/Qual			Conc/Qual		
Natural Attenuation Parameters							
pH (standard units)	--	6.28	6.03	6.08	6.54	6.66	6.37
Specific Conductivity (mS/cm)	--	3.315	3.197	3.054	2.772	3.501	3.280
Dissolved Oxygen (mg/L)	--	0.23	3.33	1.26	1.32	0.20	0.73
Temperature (ºC)	--	18.90	16.70	20.94	19.10	19.40	19.28
Oxidation Reduction Potential (mV)	--	-61.6	-36.8	-54.4	-106.9	-134.6	-107.7
Final Turbidity (NTU)	--	6.72	9.96	8.6	9.81	9.70	9.8
Geochemical Parameters (mg/L)							
Ammonia, Dissolved	7664-41-7	**3.7**	**8.9**	**13**	**0.7**	**1.1**	**2.7**
Orthophosphate, Dissolved	14265-44-2	0.05 U H	0.05 U	0.05 U	0.05 U H	0.05 U	0.05 U
Calcium, Dissolved (ug/L)	7440-70-2	**100,000**	**100,000**	**98,000**	**170,000**	**200,000**	**180,00**
Iron, Dissolved (ug/L)	7439-89-6	**92,000**	**74,000**	**71,000**	**47,000**	**74,000**	**64,000**
Magnesium, Dissolved (ug/L)	7439-95-4	**42,000**	**42,000**	**41,000**	**37,000**	**40,000**	**250**
Manganese, Dissolved (ug/L)	7439-96-5	**1,800**	**2,300**	**1,400**	**2,800**	**3,600**	**3,200**
Potassium, Dissolved (ug/L)	7440-09-7	**10,000**	**8,700**	**10,000**	**6,200**	**5,900**	**5,300**
Sulfide	18496-25-8	**4.6**	**1.1**	1 U	**2.1**	1 U	1 U
Nitrate as N	14797-55-8	0.05 U	0.1 U H	0.1 U	**1**	**0.26 J**	0.5 U
Nitrite as N	14797-65-0	**0.022 J**	0.1 U H	0.1 U	0.05 U	0.5 U	0.5 U *
Chloride	16887-00-6	**650**	2.5 U	**690**	**1,200**	**1,100**	**1,200**
Sulfate	18758-72-3	5 U	**670**	2.5 U	**150**	**61**	**95**
Sodium, Dissolved (ug/L)	7440-23-5	**520,000**	**460,000**	**590,000**	**700,000**	**640,000**	**710,000**
Dissolved Organic Carbon	7440-44-0	**35**	**39**	**44**	**16**	**16**	**18**
Alkalinity	--	**680**	**580**	**790**	**370**	**250**	**320**
Bicarbonate Alkalinity as CaCO3	--	**680**	**580**	**790**	**370**	**250**	**320**
Carbonate Alkalinity as CaCO3	--	5 U	5 U	5 U	5 U	5 U	5 U
Ammonium ion as NH4	14798-03-9	**4.4**	**11**	**17**	**1.3**	**1.4**	**3.5**

Table 12
Geochemical Parameter Comparison Table
2011, 2013 and 2014 Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	MW-5U			MW-8U		
		4/29/2011	12/3/2013	7/15/2014	4/26/2011	12/2/2013	7/17/2014
		Conc/Qual			Conc/Qual		
Natural Attenuation Parameters							
pH (standard units)	--	6.91	6.97	6.68	6.54	6.59	6.37
Specific Conductivity (mS/cm)	--	7.800	8.450	8.504	0.207	3.122	2.942
Dissolved Oxygen (mg/L)	--	0.92	0.31	1.23	0.27	0.22	0.89
Temperature (ºC)	--	19.74	20.54	20.61	19.80	21.55	21.51
Oxidation Reduction Potential (mV)	--	-128.9	-119.4	-103.2	-46.4	-113.4	-133.5
Final Turbidity (NTU)	--	3.52	2.01	4.74	15.90	9.40	8.7
Geochemical Parameters (mg/L)							
Ammonia, Dissolved	7664-41-7	**0.8**	**0.72**	**0.90**	**9.6**	**12**	**12**
Orthophosphate, Dissolved	14265-44-2	**0.038 J H**	**0.097**	0.05 U	0.05 U H	0.05 U	0.05 U
Calcium, Dissolved (ug/L)	7440-70-2	**140,000**	**170,000**	**150,000**	**210,000**	**180,000**	**170,000**
Iron, Dissolved (ug/L)	7439-89-6	**13,000**	**14,000**	**12,000**	**34,000**	**61,000**	**58,000**
Magnesium, Dissolved (ug/L)	7439-95-4	**35,000**	**43,000**	**38,000**	**54,000**	**51,000**	**47,000**
Manganese, Dissolved (ug/L)	7439-96-5	**2,200**	**2,700**	**2,300**	**2,600**	**1,500**	**1,600**
Potassium, Dissolved (ug/L)	7440-09-7	**6,300**	**5,800**	**5,100**	**26,000**	**34,000**	**31,000**
Sulfide	18496-25-8	1 U	1 U	1 U	**2.5**	1 U	1 U
Nitrate as N	14797-55-8	**0.028 J**	0.2 U	0.5 U	**0.018 J H**	**0.18 J**	0.25 U
Nitrite as N	14797-65-0	0.05 U	0.2 U	0.5 U *	0.05 U H	0.25 U	0.25 U
Chloride	16887-00-6	**2,000**	**2,400**	**2,400**	**480**	**450**	**460**
Sulfate	18758-72-3	**390**	**380**	**430**	**340**	**530**	**560**
Sodium, Dissolved (ug/L)	7440-23-5	**1,800,000**	**1,900,000**	**1,900,000**	**450,000**	**430,000**	**390,000**
Dissolved Organic Carbon	7440-44-0	**29**	**27**	**35**	**12**	**12**	**13**
Alkalinity	--	**970**	**930**	**1,100**	**460**	**460**	**490**
Bicarbonate Alkalinity as CaCO3	--	**970**	**930**	**1,100**	**460**	**460**	**490**
Carbonate Alkalinity as CaCO3	--	5 U	5 U	5 U	5 U	5 U	5 U
Ammonium ion as NH4	14798-03-9	**1.4**	**0.92**	**1.2**	**12**	**15**	**15**

Table 12
Geochemical Parameter Comparison Table
2011, 2013 and 2014 Sampling Events
Hercules - Aqualon
Hopewell, Virginia

	CAS Number	MW-8D			SDB-MW-2		
		4/26/2011	12/2/2013	7/18/2014	6/4/2013	12/2/2013	7/16/2014
		Conc/Qual			Conc/Qual		
Natural Attenuation Parameters							
pH (standard units)	--	6.83	6.70	6.80	5.97	5.99	6.49
Specific Conductivity (mS/cm)	--	0.207	0.237	0.226	2.260	2.712	2.186
Dissolved Oxygen (mg/L)	--	0.27	0.37	0.47	0.81	1.54	2.52
Temperature (ºC)	--	19.80	19.34	21.00	17.16	17.78	17.70
Oxidation Reduction Potential (mV)	--	-46.4	-68.4	8.1	84.3	43.7	118.90
Final Turbidity (NTU)	--	15.90	8.34	9.07	3.12	7.30	5.89
Geochemical Parameters (mg/L)							
Ammonia, Dissolved	7664-41-7	**0.037 J**	**0.05**	**0.097**	**0.061**	0.05 U	**0.059**
Orthophosphate, Dissolved	14265-44-2	**0.1 H**	**0.19**	**0.097 H**	0.05 U H	**0.091**	**0.071**
Calcium, Dissolved (ug/L)	7440-70-2	**35,000**	**35,000**	**30,000**	**420,000**	**400,000**	**410,000**
Iron, Dissolved (ug/L)	7439-89-6	**64 J**	**460**	**490**	**450**	**460**	**570**
Magnesium, Dissolved (ug/L)	7439-95-4	**3,100**	**3,200**	**2,400**	**110,000**	**98,000**	**94,000**
Manganese, Dissolved (ug/L)	7439-96-5	**220**	**230**	**170**	**1,500**	**1,400**	**1,300**
Potassium, Dissolved (ug/L)	7440-09-7	**4,400**	**4,400**	**3,200**	**1,900**	**1,500**	**1,500**
Sulfide	18496-25-8	**2.8**	1 U	1 U	1 U	1 U	1 U
Nitrate as N	14797-55-8	**0.097 H**	**0.026 J**	**0.075 H**	0.05 U H	0.05 U	0.05 U
Nitrite as N	14797-65-0	0.05 U H	0.05 U	0.05 U H	0.05 U H	0.05 U	0.1 U H
Chloride	16887-00-6	**3.6**	**3.8**	**4.1**	**130**	**120**	**120**
Sulfate	18758-72-3	**4.8 J**	**5.1**	**5.9**	**1200**	**1,300**	**1,400**
Sodium, Dissolved (ug/L)	7440-23-5	**12,000**	**12,000**	**10,000**	**300,000**	**270,000**	**250,000**
Dissolved Organic Carbon	7440-44-0	1 U	1 U	1 U	**5.8**	**4.4**	**5.1**
Alkalinity	--	**100**	**100**	**130**	**300**	**360**	**350**
Bicarbonate Alkalinity as CaCO3	--	**99**	**100**	**130**	**300**	**360**	**350**
Carbonate Alkalinity as CaCO3	--	5 U	5 U	5 U	5 U	5 U	5 U
Ammonium ion as NH4	14798-03-9	**0.17**	0.03 U	**0.12**	**0.21**	0.03 U	**0.076**

Notes:
ug/L = micrograms per liter; mg/L = milligrams per liter
mS/cm = milli-siemens per centimeter
mV = millivolts
NTU = Nephelometric turbidity units
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.
H = sample was prepped or analyzed beyond the specifie

ATTACHMENTS

ATTACHMENT A

JUNE 2013 SITE-WIDE GROUNDWATER SAMPLING EVENT LABORATORY ANALYTICAL DATA (ON CD)

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: 680-91019-1
TestAmerica Sample Delivery Group: HAQ039
Client Project/Site: Hercules Aqualon CA - GW June 2013

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Authorized for release by:
7/12/2013 12:18:10 PM

Lidya Gulizia, Project Manager II
lidya.gulizia@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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.
X	Surrogate is outside control limits
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
A	The tentatively identified compound is a suspected aldol-condensation product.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

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

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-91019-1	MW-4	Water	06/03/13 12:35	06/05/13 10:01
680-91019-2	Field Blank #1	Water	06/03/13 12:55	06/05/13 10:01
680-91019-3	MW-4U	Water	06/03/13 14:15	06/05/13 10:01
680-91019-4	MW-5	Water	06/03/13 15:50	06/05/13 10:01
680-91019-5	MW-5U	Water	06/04/13 09:15	06/05/13 10:01
680-91019-6	Equipment Blank #1	Water	06/04/13 09:30	06/05/13 10:01
680-91019-7	MW-9	Water	06/04/13 11:10	06/05/13 10:01
680-91019-8	WWL-3U	Water	06/04/13 13:05	06/05/13 10:01
680-91019-9	WWL-3L	Water	06/04/13 14:30	06/05/13 10:01
680-91019-10	MW-2	Water	06/04/13 16:10	06/05/13 10:01
680-91019-11	Trip Blank (Lot # 040913)	Water	06/04/13 00:00	06/05/13 10:01
680-91019-12	Trip Blank (Lot # 050613)	Water	06/03/13 00:00	06/05/13 10:01
680-91019-13	MW-8U	Water	06/03/13 12:00	06/05/13 10:01
680-91019-14	MW-8L-R	Water	06/03/13 12:35	06/05/13 10:01
680-91019-15	MW-8D	Water	06/03/13 13:15	06/05/13 10:01
680-91019-16	MW-6	Water	06/03/13 14:30	06/05/13 10:01
680-91019-17	MW-3	Water	06/03/13 15:45	06/05/13 10:01
680-91019-18	NAT-1	Water	06/04/13 09:25	06/05/13 10:01
680-91019-19	NAT-3	Water	06/04/13 11:25	06/05/13 10:01
680-91019-20	NAT-2	Water	06/04/13 12:45	06/05/13 10:01
680-91019-21	LF-5	Water	06/04/13 14:30	06/05/13 10:01
680-91019-22	LF-3	Water	06/04/13 15:15	06/05/13 10:01

Job ID: 680-91019-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon CA - GW June 2013

Report Number: 680-91019-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/05/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.6º C, 3.8º C and 4.2º C.

The chain of custody and the container labels for the following samples did not match: MW-8D (680-91019-15), MW-8U (680-91019-13). Per the client Katherine Hall, the IDs on the container labels are correct.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-4 (680-91019-1), Field Blank #1 (680-91019-2), MW-4U (680-91019-3), Equipment Blank #1 (680-91019-6), WWL-3L (680-91019-9), MW-2 (680-91019-10), Trip Blank (Lot # 040913) (680-91019-11), MW-8U (680-91019-13), MW-8L-R (680-91019-14), NAT-1 (680-91019-18), NAT-3 (680-91019-19) and LF-5 (680-91019-21) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/10/2013, 06/16/2013 and 06/17/2013.

Samples MW-4 (680-91019-1)[50X], MW-4U (680-91019-3)[50X], WWL-3L (680-91019-9)[100X], MW-2 (680-91019-10)[100X], MW-8U (680-91019-13)[25X], MW-8L-R (680-91019-14)[50X] and NAT-3 (680-91019-19)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the volatiles analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples Field Blank #1 (680-91019-2), Equipment Blank #1 (680-91019-6), MW-2 (680-91019-10), MW-8L-R (680-91019-14) and MW-3 (680-91019-17) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 06/08/2013 and 06/10/2013 and analyzed on 06/21/2013, 06/28/2013 and 06/29/2013.

The following sample(s) contained one acid and/or one base surrogate outside acceptance limits: MW-8L-R (680-91019-14). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for batch 279737 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Job ID: 680-91019-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Famphur, 1,4-Napthaquinone, Methane sulfonate, Benzaldehyde, 1-naphthylamine, 2-naphthylamine, p-Dimethylamino azobenzene, p-phenylenediamine, a,a-dimethylphenethylamine, Methapyriline, 2-picoline (2-methylpyridine), 3,3'-dimethylbenzidine, 3,3'-dichlorobenzidine, Benzidine, Benzaldehyde, Benzoic acid, Dinoseb, Hexachlorophene, Hexachlorocyclopentadiene, o,o,o-triethylphosphoro-thioate. These analytes may have a %D>60% if the average %D of all the analytes in the initial calibration verification (ICV) is 30%.

The initial calibration curve analyzed in batch 282481 was outside method criteria for the following analyte(s): 4nitroquinoline-1-oxide and 1,4 naphthoquinone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

The continuing calibration verification (CCV) analyzed in batch 282521 was outside the method criteria for the following analyte(s): 4 nitroquinoline-1-oxide. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 282757 was outside the method criteria for the following analyte(s): pyridine, n-nitrosodimethylamine, hexachlorocyclopentadiene 4nitroaniline, carbazole, and hexachloropropene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No other difficulties were encountered during the SVOAs analysis.

All other quality control parameters were within the acceptance limits.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples MW-4 (680-91019-1), Field Blank #1 (680-91019-2), MW-5U (680-91019-5), Equipment Blank #1 (680-91019-6), MW-2 (680-91019-10), Trip Blank (Lot # 050613) (680-91019-12), NAT-2 (680-91019-20) and LF-3 (680-91019-22) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 06/13/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples MW-4 (680-91019-1), Field Blank #1 (680-91019-2), MW-4U (680-91019-3), MW-5 (680-91019-4), Equipment Blank #1 (680-91019-6), MW-9 (680-91019-7), WWL-3U (680-91019-8), WWL-3L (680-91019-9), MW-2 (680-91019-10), MW-8U (680-91019-13), MW-8L-R (680-91019-14), MW-8D (680-91019-15), MW-6 (680-91019-16), NAT-1 (680-91019-18), NAT-3 (680-91019-19), NAT-2 (680-91019-20), LF-5 (680-91019-21) and LF-3 (680-91019-22) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 06/07/2013 and 06/11/2013 and analyzed on 06/11/2013 and 06/12/2013.

Due to the high concentration of barium, iron,and manganese, the matrix spike / matrix spike duplicate (MS/MSD) for batch 279597 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The interference check standard solution (ICSA) associated with batch 279931 showed results for one or more elements at a level greater than 2 times the limit of detection (LOD). The initial ICSA result(s) was >2X LOD for cadmium and chromium, and the closing ICSA result(s) was >2X LOD for cadmium and chromium. It is believed that the solution contains trace impurities of this element / these elements and the results are not due to matrix interference. These results are consistent with those found by the manufacturer of the ICSA solution.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-4 — Lab Sample ID: 680-91019-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	3000		250	130	ug/L	50		8260B	Total/NA
Aluminum	360		100	50	ug/L	1		6020A	Total/NA
Barium	800		5.0	1.4	ug/L	1		6020A	Total/NA

Client Sample ID: Field Blank #1 — Lab Sample ID: 680-91019-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	5.2		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: MW-4U — Lab Sample ID: 680-91019-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	3500		250	130	ug/L	50		8260B	Total/NA
Aluminum	260		100	50	ug/L	1		6020A	Total/NA
Barium	960		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	83000		100	44	ug/L	1		6020A	Total/NA
Lead	0.98	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 680-91019-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	190		100	50	ug/L	1		6020A	Total/NA
Barium	1000		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	69000		100	44	ug/L	1		6020A	Total/NA

Client Sample ID: MW-5U — Lab Sample ID: 680-91019-5

No Detections.

Client Sample ID: Equipment Blank #1 — Lab Sample ID: 680-91019-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetophenone	0.40	J	0.95	0.095	ug/L	1		8270D LL	Total/NA
Benzyl alcohol	0.15	J	0.95	0.13	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	0.33	J	0.95	0.10	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 680-91019-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	110		100	50	ug/L	1		6020A	Total/NA
Iron	100000		100	44	ug/L	1		6020A	Total/NA
Lead	0.71	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-3U — Lab Sample ID: 680-91019-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	140		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.17	J	0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-3L — Lab Sample ID: 680-91019-9

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample ID: WWL-3L (Continued) — Lab Sample ID: 680-91019-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	170		100	50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 680-91019-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl ether	8400		1000	100	ug/L	100		8260B	Total/NA
1,4-Dioxane	25		1.9	0.30	ug/L	1		8270D LL	Total/NA
Bis(2-chloroethyl)ether	0.27	J	0.95	0.095	ug/L	1		8270D LL	Total/NA
Aluminum	160		100	50	ug/L	1		6020A	Total/NA
Iron	110000		100	44	ug/L	1		6020A	Total/NA
Manganese	8600		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank (Lot # 040913) — Lab Sample ID: 680-91019-11

No Detections.

Client Sample ID: Trip Blank (Lot # 050613) — Lab Sample ID: 680-91019-12

No Detections.

Client Sample ID: MW-8U — Lab Sample ID: 680-91019-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	900		130	65	ug/L	25		8260B	Total/NA
Aluminum	160		100	50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-8L-R — Lab Sample ID: 680-91019-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	4800		250	130	ug/L	50		8260B	Total/NA
1,4-Dioxane	16		1.9	0.30	ug/L	1		8270D LL	Total/NA
Aluminum	85	J	100	50	ug/L	1		6020A	Total/NA
Arsenic	34		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	600		5.0	1.4	ug/L	1		6020A	Total/NA

Client Sample ID: MW-8D — Lab Sample ID: 680-91019-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	780		100	50	ug/L	1		6020A	Total/NA
Cadmium	29		0.50	0.13	ug/L	1		6020A	Total/NA
Lead	3.0		1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 680-91019-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	330		100	50	ug/L	1		6020A	Total/NA
Lead	0.92	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 680-91019-17

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-3 (Continued) — Lab Sample ID: 680-91019-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetophenone	0.13	J	1.0	0.10	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	0.78	J	2.0	0.64	ug/L	1		8270D LL	Total/NA
1,4-Dioxane	1.8	J	2.0	0.31	ug/L	1		8270D LL	Total/NA

Client Sample ID: NAT-1 — Lab Sample ID: 680-91019-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	39		1.0	0.13	ug/L	1		8260B	Total/NA
Cadmium	0.57		0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	14		0.50	0.12	ug/L	1		6020A	Total/NA
Lead	0.62	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-3 — Lab Sample ID: 680-91019-19

No Detections.

Client Sample ID: NAT-2 — Lab Sample ID: 680-91019-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.80	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: LF-5 — Lab Sample ID: 680-91019-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.9		1.0	0.25	ug/L	1		8260B	Total/NA

Client Sample ID: LF-3 — Lab Sample ID: 680-91019-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	87	J	100	50	ug/L	1		6020A	Total/NA
Barium	170		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	9.0		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	4700		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	13		5.0	2.0	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-4
Date Collected: 06/03/13 12:35
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	3000		250	130	ug/L			06/10/13 17:21	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/10/13 17:21*	*50*
Dibromofluoromethane	*96*		*70 - 130*		*06/10/13 17:21*	*50*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/10/13 17:21*	*50*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 15:42	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	360		100	50	ug/L		06/07/13 16:32	06/11/13 00:20	1
Barium	800		5.0	1.4	ug/L		06/07/13 16:32	06/11/13 00:20	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Field Blank #1
Date Collected: 06/03/13 12:55
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/10/13 14:49	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/10/13 14:49	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/10/13 14:49	1
Diethyl ether	10	U	10	1.0	ug/L			06/10/13 14:49	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/10/13 14:49	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/10/13 14:49	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/10/13 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/10/13 14:49*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*06/10/13 14:49*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/10/13 14:49*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Acenaphthylene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Acetophenone	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Acetylaminofluorene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
alpha,alpha-Dimethyl phenethylamine	9.9	U	9.9	3.4	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Aminobiphenyl	4.9	U	4.9	0.31	ug/L		06/10/13 15:22	06/28/13 13:53	1
Aniline	2.0	U	2.0	0.96	ug/L		06/10/13 15:22	06/28/13 13:53	1
Anthracene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		06/10/13 15:22	06/28/13 13:53	1
Benzo[a]anthracene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Benzo[a]pyrene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Benzo[b]fluoranthene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Benzo[k]fluoranthene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Benzyl alcohol	0.99	U	0.99	0.14	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,1'-Biphenyl	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Bis(2-chloroethoxy)methane	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Bis(2-chloroethyl)ether	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.63	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Bromophenyl phenyl ether	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
Butyl benzyl phthalate	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Chloroaniline	2.0	U	2.0	0.35	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Chloro-3-methylphenol	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Chloronaphthalene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Chlorophenol	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Chlorophenyl phenyl ether	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Chrysene	0.20	U	0.20	0.044	ug/L		06/10/13 15:22	06/28/13 13:53	1
Diallate	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Dibenzofuran	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,2-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,3-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,4-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,4-Dichlorophenol	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Field Blank #1
Date Collected: 06/03/13 12:55
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dichlorophenol	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Diethyl phthalate	0.99	U	0.99	0.11	ug/L		06/10/13 15:22	06/28/13 13:53	1
Dimethoate	2.0	U	2.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
7,12-Dimethylbenz(a)anthracene	0.99	U	0.99	0.20	ug/L		06/10/13 15:22	06/28/13 13:53	1
3,3'-Dimethylbenzidine	20	U	20	4.9	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,4-Dimethylphenol	2.0	U	2.0	0.68	ug/L		06/10/13 15:22	06/28/13 13:53	1
Dimethyl phthalate	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Di-n-butyl phthalate	0.99	U	0.99	0.38	ug/L		06/10/13 15:22	06/28/13 13:53	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,4-Dinitrophenol	9.9	U	9.9	1.1	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,4-Dinitrotoluene	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,6-Dinitrotoluene	0.99	U	0.99	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
Di-n-octyl phthalate	0.99	U	0.99	0.17	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		06/10/13 15:22	06/28/13 13:53	1
Disulfoton	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Ethyl methanesulfonate	2.0	U	2.0	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Ethyl Parathion	2.0	U	2.0	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Famphur	0.99	U	0.99	0.16	ug/L		06/10/13 15:22	06/28/13 13:53	1
Fluoranthene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Fluorene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Hexachlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Hexachlorobutadiene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
Hexachloroethane	0.99	U	0.99	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
Hexachlorophene	490	U	490	25	ug/L		06/10/13 15:22	06/28/13 13:53	1
Hexachloropropene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Isophorone	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Isosafrole	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
m-Dinitrobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Methapyrilene	200	U	200	1.3	ug/L		06/10/13 15:22	06/28/13 13:53	1
3-Methylcholanthrene	0.99	U	0.99	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
Methyl methanesulfonate	2.0	U	2.0	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Methylnaphthalene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Methyl parathion	0.99	U	0.99	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Methylphenol	2.0	U	2.0	0.73	ug/L		06/10/13 15:22	06/28/13 13:53	1
3 & 4 Methylphenol	2.0	U	2.0	0.65	ug/L		06/10/13 15:22	06/28/13 13:53	1
1-Naphthalenamine	4.9	U	4.9	1.3	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Naphthalenamine	4.9	U	4.9	1.3	ug/L		06/10/13 15:22	06/28/13 13:53	1
Naphthalene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,4-Naphthoquinone	0.99	U	0.99	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Nitroaniline	0.99	U	0.99	0.16	ug/L		06/10/13 15:22	06/28/13 13:53	1
3-Nitroaniline	4.9	U	4.9	0.16	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Nitroaniline	4.9	U	4.9	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
Nitrobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
5-Nitro-o-toluidine	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Nitrophenol	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Nitrophenol	4.9	U	4.9	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		06/10/13 15:22	06/28/13 13:53	1

Client Sample ID: Field Blank #1
Date Collected: 06/03/13 12:55
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiethylamine	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosodimethylamine	0.99	U	0.99	0.25	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosodi-n-butylamine	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosodi-n-propylamine	0.99	U	0.99	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosodiphenylamine	0.99	U	0.99	0.36	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosomorpholine	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosopiperidine	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
N-Nitrosopyrrolidine	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
o,o',o''-Triethylphosphorothioate	0.99	U	0.99	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
o-Toluidine	0.99	U	0.99	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,2'-oxybis[1-chloropropane]	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
p-Dimethylamino azobenzene	4.9	U	4.9	0.15	ug/L		06/10/13 15:22	06/28/13 13:53	1
Pentachlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Pentachloronitrobenzene	0.99	U	0.99	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1
Pentachlorophenol	4.9	U	4.9	0.39	ug/L		06/10/13 15:22	06/28/13 13:53	1
Phenacetin	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Phenanthrene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Phenol	0.99	U	0.99	0.13	ug/L		06/10/13 15:22	06/28/13 13:53	1
Phenyl ether	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Phorate	0.99	U	0.99	0.20	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-Picoline	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:53	1
p-Phenylene diamine	200	U	200	16	ug/L		06/10/13 15:22	06/28/13 13:53	1
Pronamide	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
Pyrene	0.20	U	0.20	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Pyridine	4.9	U	4.9	0.72	ug/L		06/10/13 15:22	06/28/13 13:53	1
Safrole, Total	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:53	1
Sulfotepp	0.99	U	0.99	0.14	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,2,4,5-Tetrachlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,3,4,6-Tetrachlorophenol	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
Thionazin	0.99	U	0.99	0.20	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,2,4-Trichlorobenzene	0.99	U	0.99	0.099	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,4,5-Trichlorophenol	0.99	U	0.99	0.12	ug/L		06/10/13 15:22	06/28/13 13:53	1
2,4,6-Trichlorophenol	0.99	U	0.99	0.17	ug/L		06/10/13 15:22	06/28/13 13:53	1
1,3,5-Trinitrobenzene	0.99	U	0.99	0.49	ug/L		06/10/13 15:22	06/28/13 13:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown Aldol Condensate	*9.1*	*T J A*	*ug/L*		*3.98*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Unknown	*0.25*	*T J*	*ug/L*		*4.48*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Unknown	*0.25*	*T J*	*ug/L*		*4.88*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*4.92*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Unknown	*3.2*	*T J*	*ug/L*		*4.98*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Unknown	*0.26*	*T J*	*ug/L*		*6.10*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Cyclohexasiloxane, dodecamethyl-	*0.26*	*T J N*	*ug/L*		*7.24*	*540-97-6*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
Unknown	*0.73*	*T J*	*ug/L*		*8.27*		*06/10/13 15:22*	*06/28/13 13:53*	*1*
Hexadecanoic acid	*0.29*	*T J N*	*ug/L*		*10.92*	*57-10-3*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
Oleic Acid	*3.4*	*T J N*	*ug/L*		*11.79*	*112-80-1*	*06/10/13 15:22*	*06/28/13 13:53*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Field Blank #1
Date Collected: 06/03/13 12:55
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*34 - 130*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
2-Fluorophenol	*48*		*25 - 130*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
Nitrobenzene-d5	*50*		*32 - 130*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
Phenol-d5	*46*		*27 - 130*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
Terphenyl-d14	*58*		*36 - 130*	*06/10/13 15:22*	*06/28/13 13:53*	*1*
2,4,6-Tribromophenol	*56*		*30 - 130*	*06/10/13 15:22*	*06/28/13 13:53*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/13/13 16:06	1
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 16:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/07/13 16:32	06/11/13 00:27	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/07/13 16:32	06/11/13 00:27	1
Barium	5.0	U	5.0	1.4	ug/L		06/07/13 16:32	06/11/13 00:27	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/07/13 16:32	06/11/13 00:27	1
Chromium	5.0	U	5.0	2.5	ug/L		06/07/13 16:32	06/11/13 00:27	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/07/13 16:32	06/11/13 00:27	1
Iron	100	U	100	44	ug/L		06/07/13 16:32	06/11/13 00:27	1
Lead	1.5	U	1.5	0.50	ug/L		06/07/13 16:32	06/11/13 00:27	1
Manganese	5.0	U	5.0	2.0	ug/L		06/07/13 16:32	06/11/13 00:27	1
Nickel	**5.2**		5.0	2.0	ug/L		06/07/13 16:32	06/11/13 00:27	1
Vanadium	10	U	10	3.2	ug/L		06/07/13 16:32	06/11/13 00:27	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-4U
Date Collected: 06/03/13 14:15
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	3500		250	130	ug/L			06/10/13 17:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/10/13 17:51*	*50*
Dibromofluoromethane	*97*		*70 - 130*		*06/10/13 17:51*	*50*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/10/13 17:51*	*50*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	260		100	50	ug/L		06/07/13 16:32	06/11/13 00:34	1
Barium	960		5.0	1.4	ug/L		06/07/13 16:32	06/11/13 00:34	1
Iron	83000		100	44	ug/L		06/07/13 16:32	06/11/13 00:34	1
Lead	0.98	J	1.5	0.50	ug/L		06/07/13 16:32	06/11/13 00:34	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-5
Date Collected: 06/03/13 15:50
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-4
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	190		100	50	ug/L		06/07/13 16:32	06/11/13 00:40	1
Barium	1000		5.0	1.4	ug/L		06/07/13 16:32	06/11/13 00:40	1
Iron	69000		100	44	ug/L		06/07/13 16:32	06/11/13 00:40	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-5U
Date Collected: 06/04/13 09:15
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-5
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 16:30	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Equipment Blank #1

Date Collected: 06/04/13 09:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/10/13 15:19	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/10/13 15:19	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/10/13 15:19	1
Diethyl ether	10	U	10	1.0	ug/L			06/10/13 15:19	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/10/13 15:19	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/10/13 15:19	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/10/13 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/10/13 15:19*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*06/10/13 15:19*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/10/13 15:19*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Acenaphthylene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Acetophenone	**0.40**	**J**	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Acetylaminofluorene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
alpha,alpha-Dimethyl phenethylamine	9.5	U	9.5	3.2	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Aminobiphenyl	4.8	U	4.8	0.30	ug/L		06/10/13 15:22	06/29/13 17:46	1
Aniline	1.9	U	1.9	0.93	ug/L		06/10/13 15:22	06/29/13 17:46	1
Anthracene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Aramite, Total	1.4	U	1.4	0.10	ug/L		06/10/13 15:22	06/29/13 17:46	1
Benzo[a]anthracene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Benzo[a]pyrene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Benzo[b]fluoranthene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Benzo[k]fluoranthene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Benzyl alcohol	**0.15**	**J**	0.95	0.13	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,1'-Biphenyl	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Bis(2-chloroethoxy)methane	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	0.61	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Bromophenyl phenyl ether	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
Butyl benzyl phthalate	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Chloroaniline	1.9	U	1.9	0.34	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Chloro-3-methylphenol	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Chloronaphthalene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Chlorophenol	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Chlorophenyl phenyl ether	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Chrysene	0.19	U	0.19	0.043	ug/L		06/10/13 15:22	06/29/13 17:46	1
Diallate	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Dibenzofuran	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,2-Dichlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,3-Dichlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,4-Dichlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
3,3'-Dichlorobenzidine	19	U	19	1.9	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,4-Dichlorophenol	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Equipment Blank #1
Date Collected: 06/04/13 09:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dichlorophenol	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Diethyl phthalate	**0.33**	**J**	0.95	0.10	ug/L		06/10/13 15:22	06/29/13 17:46	1
Dimethoate	1.9	U	1.9	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
7,12-Dimethylbenz(a)anthracene	0.95	U	0.95	0.19	ug/L		06/10/13 15:22	06/29/13 17:46	1
3,3'-Dimethylbenzidine	19	U	19	4.8	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,4-Dimethylphenol	1.9	U	1.9	0.66	ug/L		06/10/13 15:22	06/29/13 17:46	1
Dimethyl phthalate	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Di-n-butyl phthalate	0.95	U	0.95	0.37	ug/L		06/10/13 15:22	06/29/13 17:46	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,4-Dinitrophenol	9.5	U	9.5	1.0	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,4-Dinitrotoluene	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,6-Dinitrotoluene	0.95	U	0.95	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
Di-n-octyl phthalate	0.95	U	0.95	0.16	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,4-Dioxane	1.9	U	1.9	0.30	ug/L		06/10/13 15:22	06/29/13 17:46	1
Disulfoton	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Ethyl methanesulfonate	1.9	U	1.9	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Ethyl Parathion	1.9	U	1.9	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Famphur	0.95	U	0.95	0.15	ug/L		06/10/13 15:22	06/29/13 17:46	1
Fluoranthene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Fluorene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Hexachlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Hexachlorobutadiene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Hexachlorocyclopentadiene	1.9	U	1.9	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
Hexachloroethane	0.95	U	0.95	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
Hexachlorophene	480	U	480	24	ug/L		06/10/13 15:22	06/29/13 17:46	1
Hexachloropropene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Isophorone	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Isosafrole	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
m-Dinitrobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Methapyrilene	190	U	190	1.2	ug/L		06/10/13 15:22	06/29/13 17:46	1
3-Methylcholanthrene	0.95	U	0.95	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
Methyl methanesulfonate	1.9	U	1.9	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Methylnaphthalene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Methyl parathion	0.95	U	0.95	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Methylphenol	1.9	U	1.9	0.71	ug/L		06/10/13 15:22	06/29/13 17:46	1
3 & 4 Methylphenol	1.9	U	1.9	0.63	ug/L		06/10/13 15:22	06/29/13 17:46	1
1-Naphthalenamine	4.8	U	4.8	1.2	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Naphthalenamine	4.8	U	4.8	1.2	ug/L		06/10/13 15:22	06/29/13 17:46	1
Naphthalene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,4-Naphthoquinone	0.95	U	0.95	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Nitroaniline	0.95	U	0.95	0.15	ug/L		06/10/13 15:22	06/29/13 17:46	1
3-Nitroaniline	4.8	U	4.8	0.15	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Nitroaniline	4.8	U	4.8	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
Nitrobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
5-Nitro-o-toluidine	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Nitrophenol	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Nitrophenol	4.8	U	4.8	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
4-Nitroquinoline-1-oxide	1.9	U	1.9	1.0	ug/L		06/10/13 15:22	06/29/13 17:46	1

Client Sample ID: Equipment Blank #1

Date Collected: 06/04/13 09:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-6

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiethylamine	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosodimethylamine	0.95	U	0.95	0.24	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosodi-n-butylamine	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosodi-n-propylamine	0.95	U	0.95	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosodiphenylamine	0.95	U	0.95	0.35	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosomethylethylamine	1.9	U	1.9	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosomorpholine	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosopiperidine	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
N-Nitrosopyrrolidine	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
o,o',o''-Triethylphosphorothioate	0.95	U	0.95	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
o-Toluidine	0.95	U	0.95	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,2'-oxybis[1-chloropropane]	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
p-Dimethylamino azobenzene	4.8	U	4.8	0.14	ug/L		06/10/13 15:22	06/29/13 17:46	1
Pentachlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Pentachloronitrobenzene	0.95	U	0.95	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1
Pentachlorophenol	4.8	U	4.8	0.38	ug/L		06/10/13 15:22	06/29/13 17:46	1
Phenacetin	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Phenanthrene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Phenol	0.95	U	0.95	0.12	ug/L		06/10/13 15:22	06/29/13 17:46	1
Phenyl ether	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Phorate	0.95	U	0.95	0.19	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-Picoline	1.9	U	1.9	0.14	ug/L		06/10/13 15:22	06/29/13 17:46	1
p-Phenylene diamine	190	U	190	15	ug/L		06/10/13 15:22	06/29/13 17:46	1
Pronamide	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
Pyrene	0.19	U	0.19	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Pyridine	4.8	U	4.8	0.70	ug/L		06/10/13 15:22	06/29/13 17:46	1
Safrole, Total	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2-sec-Butyl-4,6-dinitrophenol	1.9	U	1.9	0.14	ug/L		06/10/13 15:22	06/29/13 17:46	1
Sulfotepp	0.95	U	0.95	0.13	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,2,4,5-Tetrachlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,3,4,6-Tetrachlorophenol	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
Thionazin	0.95	U	0.95	0.19	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,2,4-Trichlorobenzene	0.95	U	0.95	0.095	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,4,5-Trichlorophenol	0.95	U	0.95	0.11	ug/L		06/10/13 15:22	06/29/13 17:46	1
2,4,6-Trichlorophenol	0.95	U	0.95	0.16	ug/L		06/10/13 15:22	06/29/13 17:46	1
1,3,5-Trinitrobenzene	0.95	U	0.95	0.48	ug/L		06/10/13 15:22	06/29/13 17:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown Aldol Condensate	*8.7*	*T A J*	*ug/L*		*3.92*		*06/10/13 15:22*	*06/29/13 17:46*	*1*
Unknown	*0.73*	*T J*	*ug/L*		*3.96*		*06/10/13 15:22*	*06/29/13 17:46*	*1*
Unknown Organic Acid	*1.2*	*T J*	*ug/L*		*4.86*		*06/10/13 15:22*	*06/29/13 17:46*	*1*
Unknown	*1.8*	*T J*	*ug/L*		*4.93*		*06/10/13 15:22*	*06/29/13 17:46*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*5.52*		*06/10/13 15:22*	*06/29/13 17:46*	*1*
Benzoic acid	*0.63*	*J*	*ug/L*		*6.36*	*65-85-0*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
Caprolactam	*0.40*	*J*	*ug/L*		*7.03*	*105-60-2*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*10.68*		*06/10/13 15:22*	*06/29/13 17:46*	*1*
Oleic Acid	*3.4*	*T J N*	*ug/L*		*11.72*	*112-80-1*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
Unknown	*2.0*	*T J*	*ug/L*		*14.35*		*06/10/13 15:22*	*06/29/13 17:46*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Equipment Blank #1
Date Collected: 06/04/13 09:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*44*		*34 - 130*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
2-Fluorophenol	*37*		*25 - 130*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
Nitrobenzene-d5	*48*		*32 - 130*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
Phenol-d5	*40*		*27 - 130*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
Terphenyl-d14	*53*		*36 - 130*	*06/10/13 15:22*	*06/29/13 17:46*	*1*
2,4,6-Tribromophenol	*46*		*30 - 130*	*06/10/13 15:22*	*06/29/13 17:46*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/13/13 16:54	1
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 16:54	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/07/13 16:32	06/11/13 01:14	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/07/13 16:32	06/11/13 01:14	1
Barium	5.0	U	5.0	1.4	ug/L		06/07/13 16:32	06/11/13 01:14	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/07/13 16:32	06/11/13 01:14	1
Chromium	5.0	U	5.0	2.5	ug/L		06/07/13 16:32	06/11/13 01:14	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/07/13 16:32	06/11/13 01:14	1
Iron	100	U	100	44	ug/L		06/07/13 16:32	06/11/13 01:14	1
Lead	1.5	U	1.5	0.50	ug/L		06/07/13 16:32	06/11/13 01:14	1
Manganese	5.0	U	5.0	2.0	ug/L		06/07/13 16:32	06/11/13 01:14	1
Nickel	5.0	U	5.0	2.0	ug/L		06/07/13 16:32	06/11/13 01:14	1
Vanadium	10	U	10	3.2	ug/L		06/07/13 16:32	06/11/13 01:14	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-9
Date Collected: 06/04/13 11:10
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-7
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	110		100	50	ug/L		06/07/13 16:32	06/11/13 01:34	1
Iron	100000		100	44	ug/L		06/07/13 16:32	06/11/13 01:34	1
Lead	0.71	J	1.5	0.50	ug/L		06/07/13 16:32	06/11/13 01:34	1

Client Sample Results

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: WWL-3U
Date Collected: 06/04/13 13:05
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-8
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**140**		100	50	ug/L		06/07/13 16:32	06/11/13 01:41	1
Cadmium	**0.17**	**J**	0.50	0.13	ug/L		06/07/13 16:32	06/11/13 01:41	1
Vanadium	10	U	10	3.2	ug/L		06/07/13 16:32	06/11/13 01:41	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: WWL-3L
Date Collected: 06/04/13 14:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	500	U	500	260	ug/L			06/10/13 18:22	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/10/13 18:22*	*100*
Dibromofluoromethane	*98*		*70 - 130*		*06/10/13 18:22*	*100*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/10/13 18:22*	*100*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**170**		100	50	ug/L		06/07/13 16:32	06/11/13 01:47	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/07/13 16:32	06/11/13 01:47	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-2

Date Collected: 06/04/13 16:10
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	8400		1000	100	ug/L			06/17/13 16:55	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*06/17/13 16:55*	*100*
Dibromofluoromethane	*100*		*70 - 130*		*06/17/13 16:55*	*100*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/17/13 16:55*	*100*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	25		1.9	0.30	ug/L		06/08/13 17:08	06/21/13 00:47	1
Bis(2-chloroethyl)ether	0.27	J	0.95	0.095	ug/L		06/08/13 17:08	06/21/13 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*87*		*30 - 130*	*06/08/13 17:08*	*06/21/13 00:47*	*1*
2-Fluorobiphenyl	*78*		*34 - 130*	*06/08/13 17:08*	*06/21/13 00:47*	*1*
2-Fluorophenol (Surr)	*59*		*25 - 130*	*06/08/13 17:08*	*06/21/13 00:47*	*1*
Terphenyl-d14 (Surr)	*84*		*36 - 130*	*06/08/13 17:08*	*06/21/13 00:47*	*1*
Phenol-d5 (Surr)	*56*		*27 - 130*	*06/08/13 17:08*	*06/21/13 00:47*	*1*
Nitrobenzene-d5 (Surr)	*74*		*32 - 130*	*06/08/13 17:08*	*06/21/13 00:47*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/13/13 17:18	1
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 17:18	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	160		100	50	ug/L		06/07/13 16:32	06/11/13 01:54	1
Iron	110000		100	44	ug/L		06/07/13 16:32	06/11/13 01:54	1
Manganese	8600		5.0	2.0	ug/L		06/07/13 16:32	06/11/13 01:54	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Trip Blank (Lot # 040913)
Date Collected: 06/04/13 00:00
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/10/13 13:49	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/10/13 13:49	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/10/13 13:49	1
Diethyl ether	10	U	10	1.0	ug/L			06/10/13 13:49	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/10/13 13:49	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/10/13 13:49	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/10/13 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*06/10/13 13:49*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*06/10/13 13:49*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/10/13 13:49*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: Trip Blank (Lot # 050613)
Date Collected: 06/03/13 00:00
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-12
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/13/13 15:18	1
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 15:18	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-8U
Date Collected: 06/03/13 12:00
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	900		130	65	ug/L			06/16/13 19:30	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/16/13 19:30*	*25*
Dibromofluoromethane	*103*		*70 - 130*		*06/16/13 19:30*	*25*
Toluene-d8 (Surr)	*96*		*70 - 130*		*06/16/13 19:30*	*25*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	160		100	50	ug/L		06/07/13 16:32	06/11/13 02:01	1
Lead	1.5	U	1.5	0.50	ug/L		06/07/13 16:32	06/11/13 02:01	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-8L-R
Date Collected: 06/03/13 12:35
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	4800		250	130	ug/L			06/16/13 19:52	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*06/16/13 19:52*	*50*
Dibromofluoromethane	*101*		*70 - 130*		*06/16/13 19:52*	*50*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/16/13 19:52*	*50*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	16		1.9	0.30	ug/L		06/08/13 17:08	06/21/13 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*30 - 130*	*06/08/13 17:08*	*06/21/13 01:11*	*1*
2-Fluorobiphenyl	*73*		*34 - 130*	*06/08/13 17:08*	*06/21/13 01:11*	*1*
2-Fluorophenol (Surr)	*60*		*25 - 130*	*06/08/13 17:08*	*06/21/13 01:11*	*1*
Terphenyl-d14 (Surr)	*71*		*36 - 130*	*06/08/13 17:08*	*06/21/13 01:11*	*1*
Phenol-d5 (Surr)	*12*	*X*	*27 - 130*	*06/08/13 17:08*	*06/21/13 01:11*	*1*
Nitrobenzene-d5 (Surr)	*56*		*32 - 130*	*06/08/13 17:08*	*06/21/13 01:11*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	85	J	100	50	ug/L		06/07/13 16:32	06/11/13 02:08	1
Arsenic	34		2.5	1.3	ug/L		06/07/13 16:32	06/11/13 02:08	1
Barium	600		5.0	1.4	ug/L		06/07/13 16:32	06/11/13 02:08	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-8D
Date Collected: 06/03/13 13:15
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-15
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	780		100	50	ug/L		06/11/13 09:18	06/12/13 21:12	1
Cadmium	29		0.50	0.13	ug/L		06/11/13 09:18	06/12/13 21:12	1
Lead	3.0		1.5	0.50	ug/L		06/11/13 09:18	06/12/13 21:12	1

Client Sample Results

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-6
Date Collected: 06/03/13 14:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-16
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	330		100	50	ug/L		06/11/13 09:18	06/12/13 21:19	1
Lead	0.92	J	1.5	0.50	ug/L		06/11/13 09:18	06/12/13 21:19	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-3
Date Collected: 06/03/13 15:45
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-17
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Acetophenone	**0.13**	**J**	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		06/10/13 15:22	06/29/13 18:10	1
Aniline	2.0	U	2.0	0.97	ug/L		06/10/13 15:22	06/29/13 18:10	1
Anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		06/10/13 15:22	06/29/13 18:10	1
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Bis(2-ethylhexyl) phthalate	**0.78**	**J**	2.0	0.64	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Chrysene	0.20	U	0.20	0.045	ug/L		06/10/13 15:22	06/29/13 18:10	1
Diallate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Diethyl phthalate	1.0	U	1.0	0.11	ug/L		06/10/13 15:22	06/29/13 18:10	1
Dimethoate	2.0	U	2.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/29/13 18:10	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		06/10/13 15:22	06/29/13 18:10	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		06/10/13 15:22	06/29/13 18:10	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
Di-n-octyl phthalate	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,4-Dioxane	**1.8**	**J**	2.0	0.31	ug/L		06/10/13 15:22	06/29/13 18:10	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-3
Date Collected: 06/03/13 15:45
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-17
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Famphur	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/29/13 18:10	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Fluorene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
Hexachlorophene	500	U	500	25	ug/L		06/10/13 15:22	06/29/13 18:10	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Isophorone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Isosafrole	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Methapyrilene	200	U	200	1.3	ug/L		06/10/13 15:22	06/29/13 18:10	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		06/10/13 15:22	06/29/13 18:10	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		06/10/13 15:22	06/29/13 18:10	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/29/13 18:10	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/29/13 18:10	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		06/10/13 15:22	06/29/13 18:10	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-3
Date Collected: 06/03/13 15:45
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-17
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		06/10/13 15:22	06/29/13 18:10	1
Phenacetin	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Phenol	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:10	1
Phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Phorate	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-Picoline	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/29/13 18:10	1
p-Phenylene diamine	200	U	200	16	ug/L		06/10/13 15:22	06/29/13 18:10	1
Pronamide	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
Pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Pyridine	5.0	U	5.0	0.73	ug/L		06/10/13 15:22	06/29/13 18:10	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/29/13 18:10	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
Thionazin	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:10	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/29/13 18:10	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown Aldol Condensate	*5.5*	*T A J*	*ug/L*		*3.92*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*4.7*	*T J*	*ug/L*		*7.40*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*56*	*T J*	*ug/L*		*7.51*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*2.9*	*T J*	*ug/L*		*8.95*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*3.6*	*T J*	*ug/L*		*9.03*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*28*	*T J*	*ug/L*		*9.06*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*5.1*	*T J*	*ug/L*		*9.15*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
Unknown	*6.3*	*T J*	*ug/L*		*10.48*		*06/10/13 15:22*	*06/29/13 18:10*	*1*
9-Hexadecenoic acid	*8.6*	*T J N*	*ug/L*		*10.79*	*2091-29-4*	*06/10/13 15:22*	*06/29/13 18:10*	*1*
Oleic Acid	*10*	*T J N*	*ug/L*		*11.73*	*112-80-1*	*06/10/13 15:22*	*06/29/13 18:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*40*		*34 - 130*	*06/10/13 15:22*	*06/29/13 18:10*	*1*
2-Fluorophenol	*36*		*25 - 130*	*06/10/13 15:22*	*06/29/13 18:10*	*1*
Nitrobenzene-d5	*48*		*32 - 130*	*06/10/13 15:22*	*06/29/13 18:10*	*1*
Phenol-d5	*35*		*27 - 130*	*06/10/13 15:22*	*06/29/13 18:10*	*1*
Terphenyl-d14	*52*		*36 - 130*	*06/10/13 15:22*	*06/29/13 18:10*	*1*
2,4,6-Tribromophenol	*50*		*30 - 130*	*06/10/13 15:22*	*06/29/13 18:10*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: NAT-1
Date Collected: 06/04/13 09:25
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	39		1.0	0.13	ug/L			06/10/13 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/10/13 15:50*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*06/10/13 15:50*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/10/13 15:50*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.57		0.50	0.13	ug/L		06/11/13 09:18	06/12/13 21:25	1
Cobalt	14		0.50	0.12	ug/L		06/11/13 09:18	06/12/13 21:25	1
Lead	0.62	J	1.5	0.50	ug/L		06/11/13 09:18	06/12/13 21:25	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: NAT-3
Date Collected: 06/04/13 11:25
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	200	U	200	30	ug/L			06/17/13 11:06	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*06/17/13 11:06*	*200*
Dibromofluoromethane	*103*		*70 - 130*		*06/17/13 11:06*	*200*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/17/13 11:06*	*200*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U	0.50	0.13	ug/L		06/11/13 09:18	06/12/13 21:32	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: NAT-2
Date Collected: 06/04/13 12:45
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-20
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 17:42	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.80**	**J**	1.5	0.50	ug/L		06/11/13 09:18	06/12/13 21:39	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: LF-5
Date Collected: 06/04/13 14:30
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	2.9		1.0	0.25	ug/L			06/10/13 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*06/10/13 16:20*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*06/10/13 16:20*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/10/13 16:20*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		06/11/13 09:18	06/12/13 21:46	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: LF-3
Date Collected: 06/04/13 15:15
Date Received: 06/05/13 10:01

Lab Sample ID: 680-91019-22
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 18:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**87**	**J**	100	50	ug/L		06/11/13 09:18	06/12/13 21:52	1
Barium	**170**		5.0	1.4	ug/L		06/11/13 09:18	06/12/13 21:52	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/11/13 09:18	06/12/13 21:52	1
Cobalt	**9.0**		0.50	0.12	ug/L		06/11/13 09:18	06/12/13 21:52	1
Manganese	**4700**		5.0	2.0	ug/L		06/11/13 09:18	06/12/13 21:52	1
Nickel	**13**		5.0	2.0	ug/L		06/11/13 09:18	06/12/13 21:52	1
Vanadium	10	U	10	3.2	ug/L		06/11/13 09:18	06/12/13 21:52	1

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-91019-1	MW-4	96	96	102
680-91019-2	Field Blank #1	96	99	100
680-91019-3	MW-4U	96	97	102
680-91019-6	Equipment Blank #1	96	99	99
680-91019-9	WWL-3L	96	98	102
680-91019-10	MW-2	97	100	102
680-91019-11	Trip Blank (Lot # 040913)	97	102	101
680-91019-13	MW-8U	96	103	96
680-91019-14	MW-8L-R	94	101	102
680-91019-18	NAT-1	96	100	100
680-91019-19	NAT-3	97	103	99
680-91019-21	LF-5	97	99	102
LCS 680-279777/4	Lab Control Sample	105	110	108
LCS 680-280710/4	Lab Control Sample	96	103	101
LCS 680-280759/4	Lab Control Sample	97	107	103
LCSD 680-279777/5	Lab Control Sample Dup	102	103	107
LCSD 680-280710/5	Lab Control Sample Dup	95	104	101
LCSD 680-280759/5	Lab Control Sample Dup	96	103	101
MB 680-279777/7	Method Blank	95	103	100
MB 680-280710/7	Method Blank	92	103	101
MB 680-280759/6	Method Blank	94	104	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	TPH	PHL	NBZ
Lab Sample ID	Client Sample ID	(30-130)	(34-130)	(25-130)	(36-130)	(27-130)	(32-130)
680-91019-2	Field Blank #1	56	48	48	58	46	50
680-91019-6	Equipment Blank #1	46	44	37	53	40	48
680-91019-10	MW-2	87	78	59	84	56	74
680-91019-14	MW-8L-R	76	73	60	71	12 X	56
680-91019-17	MW-3	50	40	36	52	35	48
680-91019-17 MS	MW-3	57	47	42	43	42	53
680-91019-17 MSD	MW-3	49	43	39	43	32	49
LCS 680-279650/14-A	Lab Control Sample	88	78	62	90	70	79
LCS 680-279737/7-A	Lab Control Sample	66	53	49	61	49	51
MB 680-279650/13-A	Method Blank	82	81	66	100	70	84
MB 680-279737/6-A	Method Blank	51	52	46	64	46	50

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-279777/7
Matrix: Water
Analysis Batch: 279777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/10/13 13:18	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/10/13 13:18	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/10/13 13:18	1
Diethyl ether	10	U	10	1.0	ug/L			06/10/13 13:18	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/10/13 13:18	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/10/13 13:18	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/10/13 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*06/10/13 13:18*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*06/10/13 13:18*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/10/13 13:18*	*1*

Lab Sample ID: LCS 680-279777/4
Matrix: Water
Analysis Batch: 279777

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	56.1		ug/L		112	76 - 128		
1,1-Dichloroethane			50.0	56.1		ug/L		112	69 - 132		
1,2-Dichloroethane			50.0	52.9		ug/L		106	75 - 120		
Diethyl ether			50.0	49.0		ug/L		98	40 - 160		
t-Butanol			50.0	64.1		ug/L		128	49 - 148		
Tetrachloroethene			50.0	55.5		ug/L		111	77 - 128		
Trichloroethene			50.0	55.7		ug/L		111	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane	*110*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 680-279777/5
Matrix: Water
Analysis Batch: 279777

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
Chloroform			50.0	52.8		ug/L		106	76 - 128	6	30
1,1-Dichloroethane			50.0	52.2		ug/L		104	69 - 132	7	30
1,2-Dichloroethane			50.0	53.2		ug/L		106	75 - 120	1	30
Diethyl ether			50.0	48.9		ug/L		98	40 - 160	0	50
t-Butanol			50.0	66.3		ug/L		133	49 - 148	3	50
Tetrachloroethene			50.0	53.0		ug/L		106	77 - 128	5	30
Trichloroethene			50.0	53.7		ug/L		107	80 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*103*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-279777/5
Matrix: Water
Analysis Batch: 279777

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	107		70 - 130

Lab Sample ID: MB 680-280710/7
Matrix: Water
Analysis Batch: 280710

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/16/13 13:19	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/16/13 13:19	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/16/13 13:19	1
Diethyl ether	10	U	10	1.0	ug/L			06/16/13 13:19	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/16/13 13:19	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/16/13 13:19	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/16/13 13:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		70 - 130		06/16/13 13:19	1
Dibromofluoromethane	103		70 - 130		06/16/13 13:19	1
Toluene-d8 (Surr)	101		70 - 130		06/16/13 13:19	1

Lab Sample ID: LCS 680-280710/4
Matrix: Water
Analysis Batch: 280710

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	47.6		ug/L		95	76 - 128
1,1-Dichloroethane	50.0	45.9		ug/L		92	69 - 132
1,2-Dichloroethane	50.0	49.8		ug/L		100	75 - 120
Diethyl ether	50.0	52.9		ug/L		106	40 - 160
t-Butanol	50.0	43.8		ug/L		88	49 - 148
Tetrachloroethene	50.0	48.4		ug/L		97	77 - 128
Trichloroethene	50.0	47.7		ug/L		95	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	96		70 - 130
Dibromofluoromethane	103		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 680-280710/5
Matrix: Water
Analysis Batch: 280710

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
Chloroform	50.0	48.1		ug/L		96	76 - 128	1	30
1,1-Dichloroethane	50.0	45.7		ug/L		91	69 - 132	0	30
1,2-Dichloroethane	50.0	48.9		ug/L		98	75 - 120	2	30
Diethyl ether	50.0	54.1		ug/L		108	40 - 160	2	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-280710/5
Matrix: Water
Analysis Batch: 280710

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
t-Butanol			50.0	49.8		ug/L		100	49 - 148	13	50
Tetrachloroethene			50.0	48.3		ug/L		97	77 - 128	0	30
Trichloroethene			50.0	47.2		ug/L		94	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 680-280759/6
Matrix: Water
Analysis Batch: 280759

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/17/13 10:18	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/17/13 10:18	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/17/13 10:18	1
Diethyl ether	10	U	10	1.0	ug/L			06/17/13 10:18	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/17/13 10:18	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/17/13 10:18	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/17/13 10:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*06/17/13 10:18*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*06/17/13 10:18*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*06/17/13 10:18*	*1*

Lab Sample ID: LCS 680-280759/4
Matrix: Water
Analysis Batch: 280759

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform			50.0	49.6		ug/L		99	76 - 128
1,1-Dichloroethane			50.0	48.2		ug/L		96	69 - 132
1,2-Dichloroethane			50.0	49.7		ug/L		99	75 - 120
Diethyl ether			50.0	55.8		ug/L		112	40 - 160
t-Butanol			50.0	47.2		ug/L		94	49 - 148
Tetrachloroethene			50.0	49.0		ug/L		98	77 - 128
Trichloroethene			50.0	48.3		ug/L		97	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*70 - 130*
Dibromofluoromethane	*107*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-280759/5
Matrix: Water
Analysis Batch: 280759

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
Chloroform			50.0	47.3		ug/L		95	76 - 128	5	30
1,1-Dichloroethane			50.0	45.8		ug/L		92	69 - 132	5	30
1,2-Dichloroethane			50.0	49.3		ug/L		99	75 - 120	1	30
Diethyl ether			50.0	56.4		ug/L		113	40 - 160	1	50
t-Butanol			50.0	46.3		ug/L		93	49 - 148	2	50
Tetrachloroethene			50.0	48.2		ug/L		96	77 - 128	2	30
Trichloroethene			50.0	46.7		ug/L		93	80 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*70 - 130*
Dibromofluoromethane	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-279650/13-A
Matrix: Water
Analysis Batch: 281776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279650

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/08/13 17:08	06/20/13 23:59	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		06/08/13 17:08	06/20/13 23:59	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/08/13 17:08	06/20/13 23:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 130*	*06/08/13 17:08*	*06/20/13 23:59*	*1*
2-Fluorophenol (Surr)	*66*		*25 - 130*	*06/08/13 17:08*	*06/20/13 23:59*	*1*
Nitrobenzene-d5 (Surr)	*84*		*32 - 130*	*06/08/13 17:08*	*06/20/13 23:59*	*1*
Phenol-d5 (Surr)	*70*		*27 - 130*	*06/08/13 17:08*	*06/20/13 23:59*	*1*
Terphenyl-d14 (Surr)	*100*		*36 - 130*	*06/08/13 17:08*	*06/20/13 23:59*	*1*
2,4,6-Tribromophenol (Surr)	*82*		*30 - 130*	*06/08/13 17:08*	*06/20/13 23:59*	*1*

Lab Sample ID: LCS 680-279650/14-A
Matrix: Water
Analysis Batch: 281776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279650

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether			10.0	8.27		ug/L		83	36 - 130
1,4-Dioxane			10.0	6.67		ug/L		67	10 - 130
Naphthalene			10.0	7.01		ug/L		70	35 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*34 - 130*
2-Fluorophenol (Surr)	*62*		*25 - 130*
Nitrobenzene-d5 (Surr)	*79*		*32 - 130*
Phenol-d5 (Surr)	*70*		*27 - 130*
Terphenyl-d14 (Surr)	*90*		*36 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-279650/14-A
Matrix: Water
Analysis Batch: 281776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279650

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*88*		*30 - 130*

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Acetophenone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		06/10/13 15:22	06/28/13 13:03	1
Aniline	2.0	U	2.0	0.97	ug/L		06/10/13 15:22	06/28/13 13:03	1
Anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.64	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Chrysene	0.20	U	0.20	0.045	ug/L		06/10/13 15:22	06/28/13 13:03	1
Diallate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Diethyl phthalate	1.0	U	1.0	0.11	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dimethoate	2.0	U	2.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/28/13 13:03	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		06/10/13 15:22	06/28/13 13:03	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		06/10/13 15:22	06/28/13 13:03	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
Di-n-octyl phthalate	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		06/10/13 15:22	06/28/13 13:03	1
Disulfoton	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Famphur	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/28/13 13:03	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Fluorene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorophene	500	U	500	25	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Isophorone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Isosafrole	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Methapyrilene	200	U	200	1.3	ug/L		06/10/13 15:22	06/28/13 13:03	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		06/10/13 15:22	06/28/13 13:03	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		06/10/13 15:22	06/28/13 13:03	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/28/13 13:03	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/28/13 13:03	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		06/10/13 15:22	06/28/13 13:03	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenacetin	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenol	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phorate	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Picoline	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:03	1
p-Phenylene diamine	200	U	200	16	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pronamide	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pyridine	5.0	U	5.0	0.73	ug/L		06/10/13 15:22	06/28/13 13:03	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:03	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Thionazin	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown Aldol Condensate	*10.6*	*T A J*	*ug/L*		*3.98*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.584*	*T J*	*ug/L*		*4.02*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.302*	*T J*	*ug/L*		*4.48*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*1.62*	*T J*	*ug/L*		*4.92*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*3.02*	*T J*	*ug/L*		*4.98*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.267*	*T J*	*ug/L*		*5.67*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.350*	*T J*	*ug/L*		*6.10*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.640*	*T J*	*ug/L*		*8.27*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.253*	*T J*	*ug/L*		*10.74*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Oleic Acid	*0.368*	*T J N*	*ug/L*		*11.78*	*112-80-1*	*06/10/13 15:22*	*06/28/13 13:03*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*34 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*
2-Fluorophenol	*46*		*25 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	50		32 - 130	06/10/13 15:22	06/28/13 13:03	1
Phenol-d5	46		27 - 130	06/10/13 15:22	06/28/13 13:03	1
Terphenyl-d14	64		36 - 130	06/10/13 15:22	06/28/13 13:03	1
2,4,6-Tribromophenol	51		30 - 130	06/10/13 15:22	06/28/13 13:03	1

Lab Sample ID: LCS 680-279737/7-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	6.40		ug/L		64	42 - 130
Acenaphthylene	10.0	7.08		ug/L		71	45 - 130
Acetophenone	10.0	6.20		ug/L		62	45 - 130
Aniline	10.0	6.03		ug/L		60	10 - 130
Anthracene	10.0	6.98		ug/L		70	58 - 130
Benzo[a]anthracene	10.0	7.35		ug/L		73	42 - 143
Benzo[a]pyrene	10.0	7.23		ug/L		72	45 - 151
Benzo[b]fluoranthene	10.0	7.72		ug/L		77	41 - 140
Benzo[g,h,i]perylene	10.0	6.30		ug/L		63	27 - 134
Benzo[k]fluoranthene	10.0	7.27		ug/L		73	45 - 140
Benzyl alcohol	10.0	6.56		ug/L		66	34 - 130
1,1'-Biphenyl	10.0	6.05		ug/L		60	50 - 130
Bis(2-chloroethoxy)methane	10.0	6.34		ug/L		63	47 - 130
Bis(2-chloroethyl)ether	10.0	5.74		ug/L		57	36 - 130
Bis(2-ethylhexyl) phthalate	10.0	7.23		ug/L		72	10 - 158
4-Bromophenyl phenyl ether	10.0	7.12		ug/L		71	44 - 130
Butyl benzyl phthalate	10.0	6.95		ug/L		69	60 - 130
4-Chloroaniline	10.0	6.53		ug/L		65	17 - 130
4-Chloro-3-methylphenol	10.0	6.98		ug/L		70	54 - 130
2-Chloronaphthalene	10.0	5.95		ug/L		59	48 - 130
2-Chlorophenol	10.0	6.50		ug/L		65	45 - 130
4-Chlorophenyl phenyl ether	10.0	6.52		ug/L		65	52 - 130
Chrysene	10.0	7.25		ug/L		73	40 - 142
Dibenz(a,h)anthracene	10.0	6.22		ug/L		62	38 - 130
Dibenzofuran	10.0	6.85		ug/L		68	56 - 130
1,2-Dichlorobenzene	10.0	5.08		ug/L		51	36 - 130
1,3-Dichlorobenzene	10.0	4.79		ug/L		48	31 - 130
1,4-Dichlorobenzene	10.0	4.89		ug/L		49	34 - 130
3,3'-Dichlorobenzidine	10.0	6.09	J	ug/L		61	10 - 158
2,4-Dichlorophenol	10.0	7.05		ug/L		70	58 - 130
Diethyl phthalate	10.0	6.83		ug/L		68	60 - 130
2,4-Dimethylphenol	10.0	5.58		ug/L		56	41 - 130
Dimethyl phthalate	10.0	6.64		ug/L		66	58 - 130
Di-n-butyl phthalate	10.0	7.97		ug/L		80	59 - 130
4,6-Dinitro-2-methylphenol	10.0	5.98		ug/L		60	10 - 182
2,4-Dinitrophenol	10.0	4.72	J	ug/L		47	10 - 200
2,4-Dinitrotoluene	10.0	7.09		ug/L		71	57 - 130
2,6-Dinitrotoluene	10.0	7.07		ug/L		71	53 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-279737/7-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	10.0	7.30		ug/L		73	19 - 130
1,4-Dioxane	10.0	5.51		ug/L		55	10 - 130
Fluoranthene	10.0	7.58		ug/L		76	46 - 136
Fluorene	10.0	7.00		ug/L		70	48 - 130
Hexachlorobenzene	10.0	7.25		ug/L		72	49 - 130
Hexachlorobutadiene	10.0	5.61		ug/L		56	36 - 130
Hexachlorocyclopentadiene	10.0	2.25		ug/L		22	16 - 130
Hexachloroethane	10.0	4.71		ug/L		47	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	5.91		ug/L		59	12 - 130
Isophorone	10.0	6.70		ug/L		67	45 - 130
2-Methylnaphthalene	10.0	6.13		ug/L		61	51 - 130
2-Methylphenol	10.0	6.38		ug/L		64	49 - 130
3 & 4 Methylphenol	10.0	6.42		ug/L		64	55 - 130
Naphthalene	10.0	5.90		ug/L		59	35 - 130
2-Nitroaniline	10.0	6.13		ug/L		61	48 - 130
3-Nitroaniline	10.0	6.63		ug/L		66	18 - 147
4-Nitroaniline	10.0	7.89		ug/L		79	31 - 147
Nitrobenzene	10.0	6.17		ug/L		62	45 - 130
2-Nitrophenol	10.0	6.86		ug/L		69	49 - 130
4-Nitrophenol	10.0	6.12		ug/L		61	36 - 132
N-Nitrosodimethylamine	10.0	5.37		ug/L		54	29 - 130
N-Nitrosodi-n-propylamine	10.0	6.32		ug/L		63	42 - 130
N-Nitrosodiphenylamine	10.0	6.13		ug/L		61	38 - 130
2,2'-oxybis[1-chloropropane]	10.0	5.25		ug/L		52	39 - 130
Pentachlorophenol	10.0	7.27		ug/L		73	12 - 156
Phenanthrene	10.0	6.99		ug/L		70	45 - 134
Phenol	10.0	6.25		ug/L		62	44 - 130
Pyrene	10.0	7.39		ug/L		74	47 - 143
Pyridine	10.0	5.04		ug/L		50	10 - 130
1,2,4-Trichlorobenzene	10.0	5.31		ug/L		53	39 - 130
2,4,5-Trichlorophenol	10.0	6.67		ug/L		67	61 - 130
2,4,6-Trichlorophenol	10.0	6.94		ug/L		69	61 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*53*		*34 - 130*
2-Fluorophenol	*49*		*25 - 130*
Nitrobenzene-d5	*51*		*32 - 130*
Phenol-d5	*49*		*27 - 130*
Terphenyl-d14	*61*		*36 - 130*
2,4,6-Tribromophenol	*66*		*30 - 130*

Lab Sample ID: 680-91019-17 MS
Matrix: Water
Analysis Batch: 282757

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.20	U	9.85	6.18		ug/L		63	42 - 130
Acenaphthylene	0.20	U	9.85	6.64		ug/L		67	45 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-91019-17 MS
Matrix: Water
Analysis Batch: 282757

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetophenone	0.13	J	9.85	6.92		ug/L		69	45 - 130
Aniline	2.0	U	9.85	5.46		ug/L		55	10 - 130
Anthracene	0.20	U	9.85	7.10		ug/L		72	58 - 130
Benzo[a]anthracene	0.20	U	9.85	7.72		ug/L		78	42 - 143
Benzo[a]pyrene	0.20	U	9.85	7.17		ug/L		73	45 - 151
Benzo[b]fluoranthene	0.20	U	9.85	7.16		ug/L		73	41 - 140
Benzo[g,h,i]perylene	0.20	U	9.85	6.82		ug/L		69	27 - 134
Benzo[k]fluoranthene	0.20	U	9.85	7.10		ug/L		72	45 - 140
Benzyl alcohol	1.0	U	9.85	7.05		ug/L		72	34 - 130
1,1'-Biphenyl	1.0	U	9.85	5.42		ug/L		55	50 - 130
Bis(2-chloroethoxy)methane	1.0	U	9.85	6.98		ug/L		71	47 - 130
Bis(2-chloroethyl)ether	1.0	U	9.85	6.23		ug/L		63	36 - 130
Bis(2-ethylhexyl) phthalate	0.78	J	9.85	7.60		ug/L		69	10 - 158
4-Bromophenyl phenyl ether	1.0	U	9.85	7.29		ug/L		74	44 - 130
Butyl benzyl phthalate	1.0	U	9.85	7.13		ug/L		72	60 - 130
4-Chloroaniline	2.0	U	9.85	5.84		ug/L		59	17 - 130
4-Chloro-3-methylphenol	1.0	U	9.85	8.26		ug/L		84	54 - 130
2-Chloronaphthalene	1.0	U	9.85	5.55		ug/L		56	48 - 130
2-Chlorophenol	1.0	U	9.85	6.16		ug/L		63	45 - 130
4-Chlorophenyl phenyl ether	1.0	U	9.85	6.51		ug/L		66	52 - 130
Chrysene	0.20	U	9.85	7.62		ug/L		77	40 - 142
Dibenz(a,h)anthracene	0.20	U	9.85	6.63		ug/L		67	38 - 130
Dibenzofuran	1.0	U	9.85	6.75		ug/L		68	56 - 130
1,2-Dichlorobenzene	1.0	U	9.85	4.08		ug/L		41	36 - 130
1,3-Dichlorobenzene	1.0	U	9.85	3.72		ug/L		38	31 - 130
1,4-Dichlorobenzene	1.0	U	9.85	3.81		ug/L		39	34 - 130
3,3'-Dichlorobenzidine	20	U	9.85	20	U F	ug/L		0	10 - 158
2,4-Dichlorophenol	1.0	U	9.85	7.60		ug/L		77	58 - 130
Diethyl phthalate	1.0	U	9.85	7.28		ug/L		74	60 - 130
2,4-Dimethylphenol	2.0	U	9.85	7.87		ug/L		80	41 - 130
Dimethyl phthalate	1.0	U	9.85	6.73		ug/L		68	58 - 130
Di-n-butyl phthalate	1.0	U	9.85	8.84		ug/L		90	59 - 130
4,6-Dinitro-2-methylphenol	5.0	U	9.85	8.20		ug/L		83	10 - 182
2,4-Dinitrophenol	10	U	9.85	8.30	J	ug/L		84	10 - 200
2,4-Dinitrotoluene	1.0	U	9.85	8.01		ug/L		81	57 - 130
2,6-Dinitrotoluene	1.0	U	9.85	7.55		ug/L		77	53 - 130
Di-n-octyl phthalate	1.0	U	9.85	8.37		ug/L		85	19 - 130
1,4-Dioxane	1.8	J	9.85	7.27		ug/L		56	10 - 130
Fluoranthene	0.20	U	9.85	8.49		ug/L		86	46 - 136
Fluorene	0.20	U	9.85	7.11		ug/L		72	48 - 130
Hexachlorobenzene	1.0	U	9.85	7.24		ug/L		73	49 - 130
Hexachlorobutadiene	1.0	U	9.85	4.93		ug/L		50	36 - 130
Hexachlorocyclopentadiene	2.0	U	9.85	2.96		ug/L		30	16 - 130
Hexachloroethane	1.0	U	9.85	3.64		ug/L		37	32 - 130
Indeno[1,2,3-cd]pyrene	0.20	U	9.85	7.09		ug/L		72	12 - 130
Isophorone	1.0	U	9.85	7.84		ug/L		80	45 - 130
2-Methylnaphthalene	0.20	U	9.85	5.72		ug/L		58	51 - 130
2-Methylphenol	2.0	U	9.85	2.45	F	ug/L		25	49 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-91019-17 MS
Matrix: Water
Analysis Batch: 282757

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	2.0	U	9.85	6.48		ug/L		66	55 - 130
Naphthalene	0.20	U	9.85	5.55		ug/L		56	35 - 130
2-Nitroaniline	1.0	U	9.85	7.69		ug/L		78	48 - 130
3-Nitroaniline	5.0	U	9.85	5.01		ug/L		51	18 - 147
4-Nitroaniline	5.0	U	9.85	4.67	J	ug/L		47	31 - 147
Nitrobenzene	1.0	U	9.85	7.41		ug/L		75	45 - 130
2-Nitrophenol	1.0	U	9.85	7.26		ug/L		74	49 - 130
4-Nitrophenol	5.0	U	9.85	8.20		ug/L		83	36 - 132
N-Nitrosodimethylamine	1.0	U	9.85	8.91		ug/L		90	29 - 130
N-Nitrosodi-n-propylamine	1.0	U	9.85	7.27		ug/L		74	42 - 130
N-Nitrosodiphenylamine	1.0	U	9.85	4.02		ug/L		41	38 - 130
2,2'-oxybis[1-chloropropane]	1.0	U	9.85	7.01		ug/L		71	39 - 130
Pentachlorophenol	5.0	U	9.85	9.21		ug/L		93	12 - 156
Phenanthrene	0.20	U	9.85	7.65		ug/L		78	45 - 134
Phenol	1.0	U	9.85	5.63		ug/L		57	44 - 130
Pyrene	0.20	U	9.85	7.54		ug/L		77	47 - 143
Pyridine	5.0	U	9.85	6.94		ug/L		70	10 - 130
1,2,4-Trichlorobenzene	1.0	U	9.85	4.67		ug/L		47	39 - 130
2,4,5-Trichlorophenol	1.0	U	9.85	6.72		ug/L		68	61 - 130
2,4,6-Trichlorophenol	1.0	U	9.85	7.52		ug/L		76	61 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*47*		*34 - 130*
2-Fluorophenol	*42*		*25 - 130*
Nitrobenzene-d5	*53*		*32 - 130*
Phenol-d5	*42*		*27 - 130*
Terphenyl-d14	*43*		*36 - 130*
2,4,6-Tribromophenol	*57*		*30 - 130*

Lab Sample ID: 680-91019-17 MSD
Matrix: Water
Analysis Batch: 282757

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.20	U	9.41	5.52		ug/L		59	42 - 130	11	50
Acenaphthylene	0.20	U	9.41	4.37		ug/L		46	45 - 130	41	50
Acetophenone	0.13	J	9.41	5.66		ug/L		59	45 - 130	20	50
Aniline	2.0	U	9.41	3.76		ug/L		40	10 - 130	37	50
Anthracene	0.20	U	9.41	5.77		ug/L		61	58 - 130	21	50
Benzo[a]anthracene	0.20	U	9.41	6.06		ug/L		64	42 - 143	24	50
Benzo[a]pyrene	0.20	U	9.41	5.64		ug/L		60	45 - 151	24	50
Benzo[b]fluoranthene	0.20	U	9.41	6.58		ug/L		70	41 - 140	8	50
Benzo[g,h,i]perylene	0.20	U	9.41	5.52		ug/L		59	27 - 134	21	50
Benzo[k]fluoranthene	0.20	U	9.41	6.35		ug/L		68	45 - 140	11	50
Benzyl alcohol	1.0	U	9.41	5.03		ug/L		53	34 - 130	33	50
1,1'-Biphenyl	1.0	U	9.41	4.89		ug/L		52	50 - 130	10	50
Bis(2-chloroethoxy)methane	1.0	U	9.41	2.56	F	ug/L		27	47 - 130	93	50
Bis(2-chloroethyl)ether	1.0	U	9.41	5.50		ug/L		58	36 - 130	12	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-91019-17 MSD
Matrix: Water
Analysis Batch: 282757

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	0.78	J	9.41	6.08		ug/L		56	10 - 158	22	50
4-Bromophenyl phenyl ether	1.0	U	9.41	6.37		ug/L		68	44 - 130	13	50
Butyl benzyl phthalate	1.0	U	9.41	5.46	F	ug/L		58	60 - 130	26	50
4-Chloroaniline	2.0	U	9.41	1.55	J F	ug/L		16	17 - 130	116	50
4-Chloro-3-methylphenol	1.0	U	9.41	6.26		ug/L		66	54 - 130	28	50
2-Chloronaphthalene	1.0	U	9.41	4.90		ug/L		52	48 - 130	12	50
2-Chlorophenol	1.0	U	9.41	5.38		ug/L		57	45 - 130	14	50
4-Chlorophenyl phenyl ether	1.0	U	9.41	5.81		ug/L		62	52 - 130	11	50
Chrysene	0.20	U	9.41	6.10		ug/L		65	40 - 142	22	50
Dibenz(a,h)anthracene	0.20	U	9.41	5.78		ug/L		61	38 - 130	14	50
Dibenzofuran	1.0	U	9.41	5.98		ug/L		64	56 - 130	12	50
1,2-Dichlorobenzene	1.0	U	9.41	3.90		ug/L		41	36 - 130	4	50
1,3-Dichlorobenzene	1.0	U	9.41	3.70		ug/L		39	31 - 130	1	50
1,4-Dichlorobenzene	1.0	U	9.41	3.80		ug/L		40	34 - 130	0	50
3,3'-Dichlorobenzidine	20	U	9.41	19	U F	ug/L		0	10 - 158	NC	50
2,4-Dichlorophenol	1.0	U	9.41	6.31		ug/L		67	58 - 130	19	50
Diethyl phthalate	1.0	U	9.41	6.07		ug/L		64	60 - 130	18	50
2,4-Dimethylphenol	2.0	U	9.41	6.55		ug/L		70	41 - 130	18	50
Dimethyl phthalate	1.0	U	9.41	5.85		ug/L		62	58 - 130	14	50
Di-n-butyl phthalate	1.0	U	9.41	7.02		ug/L		75	59 - 130	23	50
4,6-Dinitro-2-methylphenol	5.0	U	9.41	7.00		ug/L		74	10 - 182	16	50
2,4-Dinitrophenol	10	U	9.41	7.00	J	ug/L		74	10 - 200	17	50
2,4-Dinitrotoluene	1.0	U	9.41	6.77		ug/L		72	57 - 130	17	50
2,6-Dinitrotoluene	1.0	U	9.41	6.83		ug/L		73	53 - 130	10	50
Di-n-octyl phthalate	1.0	U	9.41	6.41		ug/L		68	19 - 130	27	50
1,4-Dioxane	1.8	J	9.41	7.82		ug/L		64	10 - 130	7	50
Fluoranthene	0.20	U	9.41	6.67		ug/L		71	46 - 136	24	50
Fluorene	0.20	U	9.41	6.27		ug/L		67	48 - 130	13	50
Hexachlorobenzene	1.0	U	9.41	6.43		ug/L		68	49 - 130	12	50
Hexachlorobutadiene	1.0	U	9.41	4.59		ug/L		49	36 - 130	7	50
Hexachlorocyclopentadiene	2.0	U	9.41	3.12		ug/L		33	16 - 130	5	50
Hexachloroethane	1.0	U	9.41	3.90		ug/L		41	32 - 130	7	50
Indeno[1,2,3-cd]pyrene	0.20	U	9.41	4.90		ug/L		52	12 - 130	37	50
Isophorone	1.0	U	9.41	6.63		ug/L		70	45 - 130	17	50
2-Methylnaphthalene	0.20	U	9.41	4.73	F	ug/L		50	51 - 130	19	50
2-Methylphenol	2.0	U	9.41	1.55	J F	ug/L		16	49 - 130	45	50
3 & 4 Methylphenol	2.0	U	9.41	5.78		ug/L		61	55 - 130	12	50
Naphthalene	0.20	U	9.41	4.55		ug/L		48	35 - 130	20	50
2-Nitroaniline	1.0	U	9.41	3.13	F	ug/L		33	48 - 130	84	50
3-Nitroaniline	5.0	U	9.41	0.163	J F	ug/L		2	18 - 147	187	50
4-Nitroaniline	5.0	U	9.41	4.7	U F	ug/L		0	31 - 147	NC	50
Nitrobenzene	1.0	U	9.41	6.58		ug/L		70	45 - 130	12	50
2-Nitrophenol	1.0	U	9.41	6.16		ug/L		65	49 - 130	16	50
4-Nitrophenol	5.0	U	9.41	6.54		ug/L		70	36 - 132	22	50
N-Nitrosodimethylamine	1.0	U	9.41	6.28		ug/L		67	29 - 130	35	50
N-Nitrosodi-n-propylamine	1.0	U	9.41	6.19		ug/L		66	42 - 130	16	50
N-Nitrosodiphenylamine	1.0	U	9.41	1.49	F	ug/L		16	38 - 130	92	50
2,2'-oxybis[1-chloropropane]	1.0	U	9.41	5.79		ug/L		62	39 - 130	19	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-91019-17 MSD — **Client Sample ID: MW-3**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 282757 — **Prep Batch: 279737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	5.0	U	9.41	7.63		ug/L		81	12 - 156	19	50
Phenanthrene	0.20	U	9.41	6.42		ug/L		68	45 - 134	18	50
Phenol	1.0	U	9.41	4.37		ug/L		46	44 - 130	25	50
Pyrene	0.20	U	9.41	6.12		ug/L		65	47 - 143	21	50
Pyridine	5.0	U	9.41	4.7	U F	ug/L		0	10 - 130	NC	50
1,2,4-Trichlorobenzene	1.0	U	9.41	4.23		ug/L		45	39 - 130	10	50
2,4,5-Trichlorophenol	1.0	U	9.41	6.57		ug/L		70	61 - 130	2	50
2,4,6-Trichlorophenol	1.0	U	9.41	6.71		ug/L		71	61 - 130	11	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*43*		*34 - 130*
2-Fluorophenol	*39*		*25 - 130*
Nitrobenzene-d5	*49*		*32 - 130*
Phenol-d5	*32*		*27 - 130*
Terphenyl-d14	*43*		*36 - 130*
2,4,6-Tribromophenol	*49*		*30 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-280541/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/13/13 12:30	1
Methanol	5.0	U	5.0	1.0	mg/L			06/13/13 12:30	1

Lab Sample ID: LCS 680-280541/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethanol	20.0	21.7		mg/L		109	38 - 156
Methanol	20.0	18.8		mg/L		94	43 - 143

Lab Sample ID: LCSD 680-280541/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 280541

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethanol	20.0	21.5		mg/L		107	38 - 156	1	50
Methanol	20.0	18.8		mg/L		94	43 - 143	0	50

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-279597/1-A
Matrix: Water
Analysis Batch: 279931

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279597

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/07/13 16:32	06/11/13 11:08	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/07/13 16:32	06/11/13 11:08	1
Barium	5.0	U	5.0	1.4	ug/L		06/07/13 16:32	06/11/13 11:08	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/07/13 16:32	06/11/13 11:08	1
Chromium	5.0	U	5.0	2.5	ug/L		06/07/13 16:32	06/11/13 11:08	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/07/13 16:32	06/11/13 11:08	1
Iron	100	U	100	44	ug/L		06/07/13 16:32	06/11/13 11:08	1
Lead	1.5	U	1.5	0.50	ug/L		06/07/13 16:32	06/11/13 11:08	1
Manganese	5.0	U	5.0	2.0	ug/L		06/07/13 16:32	06/11/13 11:08	1
Nickel	5.0	U	5.0	2.0	ug/L		06/07/13 16:32	06/11/13 11:08	1
Vanadium	10	U	10	3.2	ug/L		06/07/13 16:32	06/11/13 11:08	1

Lab Sample ID: LCS 680-279597/2-A
Matrix: Water
Analysis Batch: 279931

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4990		ug/L		100	75 - 125
Arsenic	100	103		ug/L		103	75 - 125
Barium	100	99.9		ug/L		100	75 - 125
Cadmium	50.0	49.7		ug/L		99	75 - 125
Chromium	100	99.8		ug/L		100	75 - 125
Cobalt	50.0	47.6		ug/L		95	75 - 125
Iron	5000	4980		ug/L		100	75 - 125
Lead	50.0	47.4		ug/L		95	75 - 125
Manganese	500	508		ug/L		102	75 - 125
Nickel	100	102		ug/L		102	75 - 125
Vanadium	100	99.3		ug/L		99	75 - 125

Lab Sample ID: 680-91019-4 MS
Matrix: Water
Analysis Batch: 279931

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 279597

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	190		5000	5170		ug/L		100	75 - 125
Arsenic	2.5		100	102		ug/L		102	75 - 125
Barium	1000		100	1240	4	ug/L		241	75 - 125
Cadmium	0.50		50.0	48.6		ug/L		97	75 - 125
Chromium	4.3		100	109		ug/L		104	75 - 125
Cobalt	1.2		50.0	49.1		ug/L		96	75 - 125
Iron	69000		5000	76800	4	ug/L		148	75 - 125
Lead	0.69		50.0	47.6		ug/L		94	75 - 125
Manganese	3400		500	4210	4	ug/L		162	75 - 125
Nickel	3.7		100	106		ug/L		102	75 - 125
Vanadium	10		100	105		ug/L		105	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-91019-4 MSD
Matrix: Water
Analysis Batch: 279931

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 279597

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	190		5000	4890		ug/L		94	75 - 125	6	20
Arsenic	2.5		100	103		ug/L		103	75 - 125	1	20
Barium	1000		100	1290	4	ug/L		289	75 - 125	4	20
Cadmium	0.50		50.0	48.7		ug/L		97	75 - 125	0	20
Chromium	4.3		100	108		ug/L		104	75 - 125	0	20
Cobalt	1.2		50.0	48.4		ug/L		94	75 - 125	1	20
Iron	69000		5000	82600	4	ug/L		264	75 - 125	7	20
Lead	0.69		50.0	47.7		ug/L		94	75 - 125	0	20
Manganese	3400		500	4330	4	ug/L		187	75 - 125	3	20
Nickel	3.7		100	112		ug/L		109	75 - 125	6	20
Vanadium	10		100	108		ug/L		108	75 - 125	3	20

Lab Sample ID: MB 680-279878/1-A
Matrix: Water
Analysis Batch: 280358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/11/13 09:18	06/12/13 19:52	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/11/13 09:18	06/12/13 19:52	1
Barium	5.0	U	5.0	1.4	ug/L		06/11/13 09:18	06/12/13 19:52	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/11/13 09:18	06/12/13 19:52	1
Chromium	5.0	U	5.0	2.5	ug/L		06/11/13 09:18	06/12/13 19:52	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/11/13 09:18	06/12/13 19:52	1
Iron	100	U	100	44	ug/L		06/11/13 09:18	06/12/13 19:52	1
Lead	1.5	U	1.5	0.50	ug/L		06/11/13 09:18	06/12/13 19:52	1
Manganese	5.0	U	5.0	2.0	ug/L		06/11/13 09:18	06/12/13 19:52	1
Nickel	5.0	U	5.0	2.0	ug/L		06/11/13 09:18	06/12/13 19:52	1
Vanadium	10	U	10	3.2	ug/L		06/11/13 09:18	06/12/13 19:52	1

Lab Sample ID: LCS 680-279878/2-A
Matrix: Water
Analysis Batch: 280358

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4940		ug/L		99	75 - 125
Arsenic	100	99.0		ug/L		99	75 - 125
Barium	100	97.7		ug/L		98	75 - 125
Cadmium	50.0	46.7		ug/L		93	75 - 125
Chromium	100	93.9		ug/L		94	75 - 125
Cobalt	50.0	45.0		ug/L		90	75 - 125
Iron	5000	4860		ug/L		97	75 - 125
Lead	50.0	45.1		ug/L		90	75 - 125
Manganese	500	476		ug/L		95	75 - 125
Nickel	100	93.9		ug/L		94	75 - 125
Vanadium	100	94.6		ug/L		95	75 - 125

GC/MS VOA

Analysis Batch: 279777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-1	MW-4	Total/NA	Water	8260B	
680-91019-2	Field Blank #1	Total/NA	Water	8260B	
680-91019-3	MW-4U	Total/NA	Water	8260B	
680-91019-6	Equipment Blank #1	Total/NA	Water	8260B	
680-91019-9	WWL-3L	Total/NA	Water	8260B	
680-91019-11	Trip Blank (Lot # 040913)	Total/NA	Water	8260B	
680-91019-18	NAT-1	Total/NA	Water	8260B	
680-91019-21	LF-5	Total/NA	Water	8260B	
LCS 680-279777/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-279777/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-279777/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 280710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-13	MW-8U	Total/NA	Water	8260B	
680-91019-14	MW-8L-R	Total/NA	Water	8260B	
LCS 680-280710/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-280710/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-280710/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 280759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-10	MW-2	Total/NA	Water	8260B	
680-91019-19	NAT-3	Total/NA	Water	8260B	
LCS 680-280759/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-280759/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-280759/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 279650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-10	MW-2	Total/NA	Water	3520C	
680-91019-14	MW-8L-R	Total/NA	Water	3520C	
LCS 680-279650/14-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-279650/13-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 279737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-2	Field Blank #1	Total/NA	Water	3520C	
680-91019-6	Equipment Blank #1	Total/NA	Water	3520C	
680-91019-17	MW-3	Total/NA	Water	3520C	
680-91019-17 MS	MW-3	Total/NA	Water	3520C	
680-91019-17 MSD	MW-3	Total/NA	Water	3520C	
LCS 680-279737/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-279737/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 281776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-10	MW-2	Total/NA	Water	8270D LL	279650

GC/MS Semi VOA (Continued)

Analysis Batch: 281776 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-14	MW-8L-R	Total/NA	Water	8270D LL	279650
LCS 680-279650/14-A	Lab Control Sample	Total/NA	Water	8270D LL	279650
MB 680-279650/13-A	Method Blank	Total/NA	Water	8270D LL	279650

Analysis Batch: 282521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-2	Field Blank #1	Total/NA	Water	8270D LL	279737
LCS 680-279737/7-A	Lab Control Sample	Total/NA	Water	8270D LL	279737
MB 680-279737/6-A	Method Blank	Total/NA	Water	8270D LL	279737

Analysis Batch: 282757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-6	Equipment Blank #1	Total/NA	Water	8270D LL	279737
680-91019-17	MW-3	Total/NA	Water	8270D LL	279737
680-91019-17 MS	MW-3	Total/NA	Water	8270D LL	279737
680-91019-17 MSD	MW-3	Total/NA	Water	8270D LL	279737

GC VOA

Analysis Batch: 280541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-1	MW-4	Total/NA	Water	8015C	
680-91019-2	Field Blank #1	Total/NA	Water	8015C	
680-91019-5	MW-5U	Total/NA	Water	8015C	
680-91019-6	Equipment Blank #1	Total/NA	Water	8015C	
680-91019-10	MW-2	Total/NA	Water	8015C	
680-91019-12	Trip Blank (Lot # 050613)	Total/NA	Water	8015C	
680-91019-20	NAT-2	Total/NA	Water	8015C	
680-91019-22	LF-3	Total/NA	Water	8015C	
LCS 680-280541/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-280541/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-280541/3	Method Blank	Total/NA	Water	8015C	

Metals

Prep Batch: 279597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-1	MW-4	Total/NA	Water	3010A	
680-91019-2	Field Blank #1	Total/NA	Water	3010A	
680-91019-3	MW-4U	Total/NA	Water	3010A	
680-91019-4	MW-5	Total/NA	Water	3010A	
680-91019-4 MS	MW-5	Total/NA	Water	3010A	
680-91019-4 MSD	MW-5	Total/NA	Water	3010A	
680-91019-6	Equipment Blank #1	Total/NA	Water	3010A	
680-91019-7	MW-9	Total/NA	Water	3010A	
680-91019-8	WWL-3U	Total/NA	Water	3010A	
680-91019-9	WWL-3L	Total/NA	Water	3010A	
680-91019-10	MW-2	Total/NA	Water	3010A	
680-91019-13	MW-8U	Total/NA	Water	3010A	
680-91019-14	MW-8L-R	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 279597 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-279597/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-279597/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 279878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-15	MW-8D	Total/NA	Water	3010A	
680-91019-16	MW-6	Total/NA	Water	3010A	
680-91019-18	NAT-1	Total/NA	Water	3010A	
680-91019-19	NAT-3	Total/NA	Water	3010A	
680-91019-20	NAT-2	Total/NA	Water	3010A	
680-91019-21	LF-5	Total/NA	Water	3010A	
680-91019-22	LF-3	Total/NA	Water	3010A	
LCS 680-279878/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-279878/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 279931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-1	MW-4	Total/NA	Water	6020A	279597
680-91019-2	Field Blank #1	Total/NA	Water	6020A	279597
680-91019-3	MW-4U	Total/NA	Water	6020A	279597
680-91019-4	MW-5	Total/NA	Water	6020A	279597
680-91019-4 MS	MW-5	Total/NA	Water	6020A	279597
680-91019-4 MSD	MW-5	Total/NA	Water	6020A	279597
680-91019-6	Equipment Blank #1	Total/NA	Water	6020A	279597
680-91019-7	MW-9	Total/NA	Water	6020A	279597
680-91019-8	WWL-3U	Total/NA	Water	6020A	279597
680-91019-9	WWL-3L	Total/NA	Water	6020A	279597
680-91019-10	MW-2	Total/NA	Water	6020A	279597
680-91019-13	MW-8U	Total/NA	Water	6020A	279597
680-91019-14	MW-8L-R	Total/NA	Water	6020A	279597
LCS 680-279597/2-A	Lab Control Sample	Total/NA	Water	6020A	279597
MB 680-279597/1-A	Method Blank	Total/NA	Water	6020A	279597

Analysis Batch: 280358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91019-15	MW-8D	Total/NA	Water	6020A	279878
680-91019-16	MW-6	Total/NA	Water	6020A	279878
680-91019-18	NAT-1	Total/NA	Water	6020A	279878
680-91019-19	NAT-3	Total/NA	Water	6020A	279878
680-91019-20	NAT-2	Total/NA	Water	6020A	279878
680-91019-21	LF-5	Total/NA	Water	6020A	279878
680-91019-22	LF-3	Total/NA	Water	6020A	279878
LCS 680-279878/2-A	Lab Control Sample	Total/NA	Water	6020A	279878
MB 680-279878/1-A	Method Blank	Total/NA	Water	6020A	279878

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-4

Lab Sample ID: 680-91019-1

Date Collected: 06/03/13 12:35
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	279777	06/10/13 17:21	AJMC	TAL SAV
Total/NA	Analysis	8015C		1	280541	06/13/13 15:42	JNC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 00:20	BR	TAL SAV

Client Sample ID: Field Blank #1

Lab Sample ID: 680-91019-2

Date Collected: 06/03/13 12:55
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	279777	06/10/13 14:49	AJMC	TAL SAV
Total/NA	Prep	3520C			279737	06/10/13 15:22	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	282521	06/28/13 13:53	ND	TAL SAV
Total/NA	Analysis	8015C		1	280541	06/13/13 16:06	JNC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 00:27	BR	TAL SAV

Client Sample ID: MW-4U

Lab Sample ID: 680-91019-3

Date Collected: 06/03/13 14:15
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	279777	06/10/13 17:51	AJMC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 00:34	BR	TAL SAV

Client Sample ID: MW-5

Lab Sample ID: 680-91019-4

Date Collected: 06/03/13 15:50
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 00:40	BR	TAL SAV

Client Sample ID: MW-5U

Lab Sample ID: 680-91019-5

Date Collected: 06/04/13 09:15
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	280541	06/13/13 16:30	JNC	TAL SAV

Client Sample ID: Equipment Blank #1

Lab Sample ID: 680-91019-6

Date Collected: 06/04/13 09:30
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	279777	06/10/13 15:19	AJMC	TAL SAV
Total/NA	Prep	3520C			279737	06/10/13 15:22	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	282757	06/29/13 17:46	ND	TAL SAV
Total/NA	Analysis	8015C		1	280541	06/13/13 16:54	JNC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 01:14	BR	TAL SAV

Client Sample ID: MW-9

Lab Sample ID: 680-91019-7

Date Collected: 06/04/13 11:10
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 01:34	BR	TAL SAV

Client Sample ID: WWL-3U

Lab Sample ID: 680-91019-8

Date Collected: 06/04/13 13:05
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 01:41	BR	TAL SAV

Client Sample ID: WWL-3L

Lab Sample ID: 680-91019-9

Date Collected: 06/04/13 14:30
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	279777	06/10/13 18:22	AJMC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 01:47	BR	TAL SAV

Client Sample ID: MW-2

Lab Sample ID: 680-91019-10

Date Collected: 06/04/13 16:10
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	280759	06/17/13 16:55	AJMC	TAL SAV
Total/NA	Prep	3520C			279650	06/08/13 17:08	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	281776	06/21/13 00:47	ND	TAL SAV
Total/NA	Analysis	8015C		1	280541	06/13/13 17:18	JNC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV

Client Sample ID: MW-2

Lab Sample ID: 680-91019-10

Date Collected: 06/04/13 16:10

Matrix: Water

Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		1	279931	06/11/13 01:54	BR	TAL SAV

Client Sample ID: Trip Blank (Lot # 040913)

Lab Sample ID: 680-91019-11

Date Collected: 06/04/13 00:00

Matrix: Water

Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	279777	06/10/13 13:49	AJMC	TAL SAV

Client Sample ID: Trip Blank (Lot # 050613)

Lab Sample ID: 680-91019-12

Date Collected: 06/03/13 00:00

Matrix: Water

Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	280541	06/13/13 15:18	JNC	TAL SAV

Client Sample ID: MW-8U

Lab Sample ID: 680-91019-13

Date Collected: 06/03/13 12:00

Matrix: Water

Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	280710	06/16/13 19:30	AJMC	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 02:01	BR	TAL SAV

Client Sample ID: MW-8L-R

Lab Sample ID: 680-91019-14

Date Collected: 06/03/13 12:35

Matrix: Water

Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	280710	06/16/13 19:52	AJMC	TAL SAV
Total/NA	Prep	3520C			279650	06/08/13 17:08	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	281776	06/21/13 01:11	ND	TAL SAV
Total/NA	Prep	3010A			279597	06/07/13 16:32	BB	TAL SAV
Total/NA	Analysis	6020A		1	279931	06/11/13 02:08	BR	TAL SAV

Client Sample ID: MW-8D

Lab Sample ID: 680-91019-15

Date Collected: 06/03/13 13:15

Matrix: Water

Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: MW-8D
Lab Sample ID: 680-91019-15
Date Collected: 06/03/13 13:15
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		1	280358	06/12/13 21:12	BR	TAL SAV

Client Sample ID: MW-6
Lab Sample ID: 680-91019-16
Date Collected: 06/03/13 14:30
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV
Total/NA	Analysis	6020A		1	280358	06/12/13 21:19	BR	TAL SAV

Client Sample ID: MW-3
Lab Sample ID: 680-91019-17
Date Collected: 06/03/13 15:45
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			279737	06/10/13 15:22	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	282757	06/29/13 18:10	ND	TAL SAV

Client Sample ID: NAT-1
Lab Sample ID: 680-91019-18
Date Collected: 06/04/13 09:25
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	279777	06/10/13 15:50	AJMC	TAL SAV
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV
Total/NA	Analysis	6020A		1	280358	06/12/13 21:25	BR	TAL SAV

Client Sample ID: NAT-3
Lab Sample ID: 680-91019-19
Date Collected: 06/04/13 11:25
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	280759	06/17/13 11:06	AJMC	TAL SAV
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV
Total/NA	Analysis	6020A		1	280358	06/12/13 21:32	BR	TAL SAV

Client Sample ID: NAT-2
Lab Sample ID: 680-91019-20
Date Collected: 06/04/13 12:45
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	280541	06/13/13 17:42	JNC	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Client Sample ID: NAT-2

Lab Sample ID: 680-91019-20

Date Collected: 06/04/13 12:45
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV
Total/NA	Analysis	6020A		1	280358	06/12/13 21:39	BR	TAL SAV

Client Sample ID: LF-5

Lab Sample ID: 680-91019-21

Date Collected: 06/04/13 14:30
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	279777	06/10/13 16:20	AJMC	TAL SAV
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV
Total/NA	Analysis	6020A		1	280358	06/12/13 21:46	BR	TAL SAV

Client Sample ID: LF-3

Lab Sample ID: 680-91019-22

Date Collected: 06/04/13 15:15
Matrix: Water
Date Received: 06/05/13 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	280541	06/13/13 18:06	JNC	TAL SAV
Total/NA	Prep	3010A			279878	06/11/13 09:18	MK	TAL SAV
Total/NA	Analysis	6020A		1	280358	06/12/13 21:52	BR	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

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
A2LA	DoD ELAP		399.01	07-31-13
A2LA	ISO/IEC 17025		399.01	02-28-15
Arkansas DEQ	State Program	6	88-0692	02-01-14 *
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-13
Iowa	State Program	7	353	07-01-13 *
Kentucky	State Program	4	90084	12-31-13
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13 *
New Jersey	NELAP	2	GA769	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13 *
Puerto Rico	State Program	2	GA00006	01-01-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	09-30-13
Wisconsin	State Program	5	999819810	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91019-1
SDG: HAQ039

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number

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:

PAGE 1 OF 1

PROJECT REFERENCE: Ashland-Aqualon	PROJECT NO.: 1201858	PROJECT LOCATION (STATE): VA
CLIENT (LAB) PROJECT MANAGER: Lydia	P.O. NUMBER:	CONTRACT NO.:
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE: 866-222-7786	CLIENT FAX:
CLIENT NAME: GES	CLIENT E-MAIL:	
CLIENT ADDRESS: 23 S. 13th St Richmond VA 23219		
COMPANY CONTRACTING THIS WORK (if applicable): Ashland, Inc		

STANDARD REPORT DELIVERY ◯ DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯ DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

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

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	VOC HCL	SVOC None	Metals Nitric Acid	Methanol / Ethanol None							REMARKS
6/3/13	12:35	MW-4	C	A				X		X	X							
↓	12:55	Field Blank #1						X	X	X	X							Please See
	14:15	MW-4U						X		X								Attached
—	15:50	MW-5 (MS2/MSD2)								X								Sheet for
6/4/13	9:15	MW-5U									X							specific
	9:30	Equipment Blank #1						X	X	X	X							analytes
	11:10	MW-9								X								
	13:05	WWL-3U								X								
	14:30	WWL-3L						X		X								
↓ [illegible]	16:10	MW-2						X	X	X	X							
6/4/13		Trip Blank (Preserved + Unpreserved																
		Temp Blank																

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	6/4/13	17:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	06/05/10	1001	YES ◯ NO ◯		680-91019	68002633 3.6/3.8/4.2°C

TAL 8240 680 (1008)

Serial Number

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: Ashland - Aqualon	PROJECT NO.	PROJECT LOCATION (STATE)	PAGE 1 OF 1
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.	STANDARD REPORT DELIVERY ✓ DATE DUE
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE: 866-226-7786	CLIENT FAX	EXPEDITED REPORT DELIVERY (SURCHARGE) DATE DUE
CLIENT NAME: GES	CLIENT E-MAIL: ewright@gesonline.com		
CLIENT ADDRESS: 23 S. 13th St Richmond, VA			NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 3
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 / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	VOCs (8260B)	SVOCs (8270C)	Metals (6020)	[illegible]							REMARKS
6-3-13	1200	MW-8U	G	X				X		X	—							See Attached
	1235	MW-8L-R						X	X	X	—							Sample Matrix
	[illegible]	MW-8U						X	—	X	—							
	1430	MW-6						—	—	X	—							
	1545	MW-3						—	X	—	—							
6-4-13	925	NAT-1						X	—	X	—							
	1125	~~NAT-4~~ NAT 3						X		X	—							
	1245	NAT-2						—	—	X	X							
	1430	LF-3						X	—	X	—							
	[illegible]	LF-2						—	—	X	X							

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	6-4-13	1600						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	06/05/13	1001	YES ○ NO ○		680-91019	

TAL8240-680 (1008)

Ragnaldsen, Amy

From: Katherine Hall [KHall@gesonline.com]
Sent: Thursday, June 06, 2013 3:59 PM
To: Gulizia, Lidya; Nicholas Braun
Cc: Erin Wright; Ragnaldsen, Amy
Subject: RE: HERCULES AQUALON/HOPEWELL Receipt 6/6 - Duplicate MW-8U

Lidya,

MW-8U was collected at 12:00 (should be run for VOCs and metals)
MW-8D was collected at 13:15 (should be run for metals only)

You are correct in your assumption below. Thank you for revising on our behalf.

Kate

From: Gulizia, Lidya [mailto:Lidya.Gulizia@testamericainc.com]
Sent: Thursday, June 06, 2013 3:16 PM
To: Katherine Hall; Nicholas Braun
Cc: Erin Wright; Ragnaldsen, Amy
Subject: HERCULES AQUALON/HOPEWELL Receipt 6/6 - Duplicate MW-8U

Kate and Nick,

In the today's sample receipt for Hercules Hopewell, there are two listings for sample MW-8U on the second page of the COC (although they are each labeled Page 1 of 1).

MW-8U – collected 6/3/13 1200 for VOC and metals
MW-8U – collected 6/3/13 1315 ; containers for metals only received.

The container lists the sample at time 1315 as -8D. Please confirm if this is correct (and not intended as a field duplicate of 8U) and we will revise the COC on your behalf and retain the 8D ID as received.

LIDYA GULIZIA
Project Manager II

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5102 LaRoche Avenue
Savannah, GA 31404
Tel 912.354-7858 | Fax 912.352.0165
www.testamericainc.com

Confidentiality Notice: This transmission (including any attachments) may contain confidential information belonging to Groundwater & Environmental Services, Inc. and is intended only for the use of the party or entity to which it is addressed. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, retention or the taking of action in reliance on the contents of this transmission is strictly prohibited. If you have received this transmission in error, please immediately notify the sender and erase all information and attachments. Thank You.

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-91019-1
SDG Number: HAQ039

Login Number: 91019
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	3.6, 3.8, 4.2 C
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
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: 680-91117-1
TestAmerica Sample Delivery Group: HAQ040
Client Project/Site: Hercules Aqualon CA - GW June 2013

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
7/16/2013 11:51:28 PM

Kathryn Smith, Project Manager II
kathy.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
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
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.
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.
A	The tentatively identified compound is a suspected aldol-condensation product.

GC VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-91117-1	VFSP-MW-1	Water	06/05/13 12:15	06/07/13 09:50
680-91117-2	LF-1	Water	06/05/13 13:35	06/07/13 09:50
680-91117-3	LF-2	Water	06/05/13 14:45	06/07/13 09:50
680-91117-4	NAT-4	Water	06/05/13 09:35	06/07/13 09:50
680-91117-5	FB-2 (Field Blank 2)	Water	06/05/13 13:40	06/07/13 09:50
680-91117-6	MW-10	Water	06/06/13 10:50	06/07/13 09:50
680-91117-7	SDB-MW-1	Water	06/06/13 12:15	06/07/13 09:50
680-91117-8	SDB-MW-3	Water	06/06/13 12:50	06/07/13 09:50
680-91117-9	RAB-MW-1R	Water	06/06/13 15:50	06/07/13 09:50
680-91117-10	FD1 (RAB-MW-1R)	Water	06/06/13 15:55	06/07/13 09:50
680-91117-11	Equip Blank 2	Water	06/06/13 16:00	06/07/13 09:50
680-91117-12	Trip Blank (lot # 040913)	Water	06/06/13 00:00	06/07/13 09:50
680-91117-13	MW-7U	Water	06/05/13 10:25	06/07/13 09:50
680-91117-14	MW-7L	Water	06/05/13 12:45	06/07/13 09:50
680-91117-15	MW-1	Water	06/05/13 13:15	06/07/13 09:50
680-91117-16	RAB-MW-4	Water	06/05/13 16:35	06/07/13 09:50
680-91117-17	WWL-1	Water	06/06/13 10:05	06/07/13 09:50
680-91117-18	WWL-2	Water	06/06/13 10:45	06/07/13 09:50
680-91117-19	Field Duplicate #2	Water	06/06/13 10:45	06/07/13 09:50
680-91117-20	RAB-MW3	Water	06/06/13 13:30	06/07/13 09:50
680-91117-21	RAB-MW2	Water	06/06/13 15:40	06/07/13 09:50
680-91117-22	Trip Blank (lot # 050613)	Water	06/06/13 00:00	06/07/13 09:50

Job ID: 680-91117-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon CA - GW June 2013

Report Number: 680-91117-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/07/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 3.0º C, 3.0º C, 3.4º C and 3.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples VFSP-MW-1 (680-91117-1), LF-1 (680-91117-2), LF-2 (680-91117-3), NAT-4 (680-91117-4), MW-10 (680-91117-6), SDB-MW-1 (680-91117-7), SDB-MW-3 (680-91117-8), RAB-MW-1R (680-91117-9), FD1 (RAB-MW-1R) (680-91117-10), Trip Blank (lot # 040913) (680-91117-12), WWL-1 (680-91117-17), RAB-MW2 (680-91117-21) and Trip Blank (lot # 050613) (680-91117-22) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/13/2013 and 06/14/2013.

Samples NAT-4 (680-91117-4)[10X], RAB-MW-1R (680-91117-9)[1000X], FD1 (RAB-MW-1R) (680-91117-10)[100X], FD1 (RAB-MW-1R) (680-91117-10)[1000X] and WWL-1 (680-91117-17)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the volatiles analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples MW-10 (680-91117-6), RAB-MW-1R (680-91117-9), FD1 (RAB-MW-1R) (680-91117-10), MW-7U (680-91117-13) and MW-1 (680-91117-15) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 06/10/2013 and 06/11/2013 and analyzed on 06/18/2013, 06/23/2013 and 06/29/2013.

Phenol-d5 (Surr) failed the surrogate recovery criteria low for MW-1 (680-91117-15). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl, 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria low for MW-10MS (680-91117-6MS). Refer to the QC report for details.

2-Methylphenol and 3,3'-Dichlorobenzidine failed the recovery criteria low for the MS of sample 680-91019-17 in batch 680-282757.

Several analytes failed the recovery criteria low for the MSD of sample 680-91019-17 in batch 680-282757. Several analytes exceeded the RPD limit.

Job ID: 680-91117-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

1,4-Dioxane, Bis(2-chloroethyl)ether and Naphthalene failed the recovery criteria low for the MS/MSD of sample MW-10MS (680-91117-6) in batch 680-281094.

No other difficulties were encountered during the SVOAs analysis.

All other quality control parameters were within the acceptance limits.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples LF-2 (680-91117-3), RAB-MW-1R (680-91117-9), FD1 (RAB-MW-1R) (680-91117-10) and MW-7L (680-91117-14) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 06/12/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Sample RAB-MW2 (680-91117-21) was analyzed for metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 06/12/2013 and analyzed on 06/13/2013.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples VFSP-MW-1 (680-91117-1), LF-1 (680-91117-2), LF-2 (680-91117-3), NAT-4 (680-91117-4), FB-2 (Field Blank 2) (680-91117-5), MW-10 (680-91117-6), SDB-MW-1 (680-91117-7), SDB-MW-3 (680-91117-8), RAB-MW-1R (680-91117-9), FD1 (RAB-MW-1R) (680-91117-10), Equip Blank 2 (680-91117-11), MW-7U (680-91117-13), MW-7L (680-91117-14), MW-1 (680-91117-15), RAB-MW-4 (680-91117-16), WWL-1 (680-91117-17), WWL-2 (680-91117-18), Field Duplicate #2 (680-91117-19), RAB-MW3 (680-91117-20) and RAB-MW2 (680-91117-21) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 06/12/2013 and analyzed on 06/14/2013.

Manganese failed the recovery criteria high for the MS of sample MW-10MS (680-91117-6) in batch 680-280701.

Samples MW-7U (680-91117-13)[10X], WWL-2 (680-91117-18)[10X] and Field Duplicate #2 (680-91117-19)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: VFSP-MW-1 — Lab Sample ID: 680-91117-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	17		5.0	2.6	ug/L	1		8260B	Total/NA
Barium	200		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	2.5		0.50	0.12	ug/L	1		6020A	Total/NA
Iron	4300		100	44	ug/L	1		6020A	Total/NA
Manganese	780		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	2.5	J	5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: LF-1 — Lab Sample ID: 680-91117-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.6		1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	1.2		1.0	0.13	ug/L	1		8260B	Total/NA
Aluminum	91	J	100	50	ug/L	1		6020A	Total/NA

Client Sample ID: LF-2 — Lab Sample ID: 680-91117-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.6		1.0	0.25	ug/L	1		8260B	Total/NA
Aluminum	81	J	100	50	ug/L	1		6020A	Total/NA
Cadmium	0.29	J	0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-4 — Lab Sample ID: 680-91117-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	70		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	7000		100	44	ug/L	1		6020A	Total/NA
Arsenic	2.7		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: FB-2 (Field Blank 2) — Lab Sample ID: 680-91117-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	63	J	100	44	ug/L	1		6020A	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 680-91117-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.78	J	1.0	0.14	ug/L	1		8260B	Total/NA
1,4-Dioxane	27		2.0	0.31	ug/L	1		8270D LL	Total/NA
Aluminum	80	J	100	50	ug/L	1		6020A	Total/NA
Cadmium	3.8		0.50	0.13	ug/L	1		6020A	Total/NA
Nickel	58		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: SDB-MW-1 — Lab Sample ID: 680-91117-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	6.0		5.0	2.6	ug/L	1		8260B	Total/NA
Aluminum	570		100	50	ug/L	1		6020A	Total/NA
Chromium	3.4	J	5.0	2.5	ug/L	1		6020A	Total/NA
Iron	190000		100	44	ug/L	1		6020A	Total/NA
Lead	0.96	J	1.5	0.50	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SDB-MW-1 (Continued) — Lab Sample ID: 680-91117-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1900		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	2.9	J	5.0	2.0	ug/L	1		6020A	Total/NA
Arsenic	7.0		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: SDB-MW-3 — Lab Sample ID: 680-91117-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.66		0.50	0.13	ug/L	1		6020A	Total/NA
Nickel	35		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW-1R — Lab Sample ID: 680-91117-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	110		25	5.0	ug/L	1		8260B	Total/NA
t-Butanol	23000	E	5.0	2.6	ug/L	1		8260B	Total/NA
t-Butanol - DL	38000	D	5000	2600	ug/L	1000		8260B	Total/NA
1,4-Dioxane	2.4		2.0	0.31	ug/L	1		8270D LL	Total/NA
Arsenic	5.5		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	130		5.0	1.4	ug/L	1		6020A	Total/NA
Calcium	120000		500	170	ug/L	1		6020A	Total/NA
Cobalt	150		0.50	0.12	ug/L	1		6020A	Total/NA
Iron	130000		100	44	ug/L	1		6020A	Total/NA
Magnesium	86000		250	100	ug/L	1		6020A	Total/NA
Manganese	9100		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	28		5.0	2.0	ug/L	1		6020A	Total/NA
Potassium	1600		1000	330	ug/L	1		6020A	Total/NA
Sodium	260000		500	170	ug/L	1		6020A	Total/NA
Zinc	10	J	20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: FD1 (RAB-MW-1R) — Lab Sample ID: 680-91117-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	35000	E	500	260	ug/L	100		8260B	Total/NA
t-Butanol - DL	37000	D	5000	2600	ug/L	1000		8260B	Total/NA
1,4-Dioxane	1.4	J	2.3	0.35	ug/L	1		8270D LL	Total/NA
Arsenic	6.5		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	110		5.0	1.4	ug/L	1		6020A	Total/NA
Calcium	130000		500	170	ug/L	1		6020A	Total/NA
Cobalt	170		0.50	0.12	ug/L	1		6020A	Total/NA
Iron	140000		100	44	ug/L	1		6020A	Total/NA
Magnesium	94000		250	100	ug/L	1		6020A	Total/NA
Manganese	9700		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	30		5.0	2.0	ug/L	1		6020A	Total/NA
Potassium	1700		1000	330	ug/L	1		6020A	Total/NA
Sodium	280000		500	170	ug/L	1		6020A	Total/NA
Zinc	10	J	20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: Equip Blank 2 — Lab Sample ID: 680-91117-11

This Detection Summary does not include radiochemical test results.

Client Sample ID: Equip Blank 2 (Continued) — Lab Sample ID: 680-91117-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	10		5.0	1.4	ug/L	1		6020A	Total/NA
Cadmium	1.3		0.50	0.13	ug/L	1		6020A	Total/NA
Calcium	24000		500	170	ug/L	1		6020A	Total/NA
Copper	4.5	J	5.0	1.1	ug/L	1		6020A	Total/NA
Iron	44	J	100	44	ug/L	1		6020A	Total/NA
Magnesium	8800		250	100	ug/L	1		6020A	Total/NA
Manganese	2.0	J	5.0	2.0	ug/L	1		6020A	Total/NA
Potassium	3000		1000	330	ug/L	1		6020A	Total/NA
Sodium	14000		500	170	ug/L	1		6020A	Total/NA
Zinc	36		20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank (lot # 040913) — Lab Sample ID: 680-91117-12

No Detections.

Client Sample ID: MW-7U — Lab Sample ID: 680-91117-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.15	J	0.19	0.095	ug/L	1		8270D LL	Total/NA
Cadmium	6.6		0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	390		0.50	0.12	ug/L	1		6020A	Total/NA
Lead	1.7		1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	42000		50	20	ug/L	10		6020A	Total/NA
Mercury	1.0		0.80	0.40	ug/L	1		6020A	Total/NA
Nickel	130		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: MW-7L — Lab Sample ID: 680-91117-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	120		100	50	ug/L	1		6020A	Total/NA
Iron	2600		100	44	ug/L	1		6020A	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 680-91117-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.5		1.9	0.29	ug/L	1		8270D LL	Total/NA
Chromium	13		5.0	2.5	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW-4 — Lab Sample ID: 680-91117-16

No Detections.

Client Sample ID: WWL-1 — Lab Sample ID: 680-91117-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	370		25	13	ug/L	5		8260B	Total/NA
Aluminum	68	J	100	50	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-2 — Lab Sample ID: 680-91117-18

This Detection Summary does not include radiochemical test results.

Client Sample ID: WWL-2 (Continued) — Lab Sample ID: 680-91117-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	82	J	100	50	ug/L	1		6020A	Total/NA
Barium	2500		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	110		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	25000		50	20	ug/L	10		6020A	Total/NA
Nickel	31		5.0	2.0	ug/L	1		6020A	Total/NA
Arsenic	6.5		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: Field Duplicate #2 — Lab Sample ID: 680-91117-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	74	J	100	50	ug/L	1		6020A	Total/NA
Barium	2400		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	100		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	26000		10	4.0	ug/L	2		6020A	Total/NA
Nickel	31		5.0	2.0	ug/L	1		6020A	Total/NA
Arsenic	6.6		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW3 — Lab Sample ID: 680-91117-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	190		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	110000		100	44	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW2 — Lab Sample ID: 680-91117-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl ether	7.2	J	10	1.0	ug/L	1		8260B	Total/NA
Cadmium	0.14	J	0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	94		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	12000		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	64		5.0	2.0	ug/L	1		6020A	Total/NA
Cadmium	0.11	J	0.50	0.095	ug/L	1		6020A	Dissolved
Cobalt	92		0.50	0.15	ug/L	1		6020A	Dissolved
Manganese	12000		5.0	1.0	ug/L	1		6020A	Dissolved
Nickel	63		5.0	2.0	ug/L	1		6020A	Dissolved

Client Sample ID: Trip Blank (lot # 050613) — Lab Sample ID: 680-91117-22

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: VFSP-MW-1
Date Collected: 06/05/13 12:15
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	17		5.0	2.6	ug/L			06/13/13 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*06/13/13 16:20*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*06/13/13 16:20*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/13 16:20*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	200		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 04:24	1
Cobalt	2.5		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 04:24	1
Iron	4300		100	44	ug/L		06/12/13 14:35	06/14/13 04:24	1
Manganese	780		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:24	1
Nickel	2.5	J	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:24	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: LF-1
Date Collected: 06/05/13 13:35
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	2.6		1.0	0.25	ug/L			06/13/13 14:25	1
Trichloroethene	1.2		1.0	0.13	ug/L			06/13/13 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*06/13/13 14:25*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*06/13/13 14:25*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/13/13 14:25*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	91	J	100	50	ug/L		06/12/13 14:35	06/14/13 04:30	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 04:30	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: LF-2
Date Collected: 06/05/13 14:45
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.6		1.0	0.25	ug/L			06/13/13 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/13/13 14:47*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*06/13/13 14:47*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*06/13/13 14:47*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			06/12/13 20:47	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	81	J	100	50	ug/L		06/12/13 14:35	06/14/13 04:37	1
Cadmium	0.29	J	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 04:37	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: NAT-4
Date Collected: 06/05/13 09:35
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	100	U	100	10	ug/L			06/13/13 17:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*06/13/13 17:11*	*10*
Dibromofluoromethane	*96*		*70 - 130*		*06/13/13 17:11*	*10*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/13/13 17:11*	*10*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/12/13 14:35	06/14/13 04:44	1
Barium	**70**		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 04:44	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 04:44	1
Iron	**7000**		100	44	ug/L		06/12/13 14:35	06/14/13 04:44	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 04:44	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 04:44	1
Arsenic	**2.7**		2.5	1.3	ug/L		06/12/13 14:35	06/14/13 04:44	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: FB-2 (Field Blank 2)
Date Collected: 06/05/13 13:40
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-5
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/12/13 14:35	06/14/13 04:50	1
Barium	5.0	U	5.0	1.4	ug/L		06/12/13 14:35	06/14/13 04:50	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 04:50	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 04:50	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/12/13 14:35	06/14/13 04:50	1
Iron	**63**	**J**	100	44	ug/L		06/12/13 14:35	06/14/13 04:50	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 04:50	1
Manganese	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:50	1
Mercury	0.80	U	0.80	0.40	ug/L		06/12/13 14:35	06/14/13 04:50	1
Nickel	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:50	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 04:50	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/12/13 14:35	06/14/13 04:50	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: MW-10
Date Collected: 06/06/13 10:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.78	J	1.0	0.14	ug/L			06/13/13 17:32	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/13/13 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*06/13/13 17:32*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*06/13/13 17:32*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/13/13 17:32*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	27		2.0	0.31	ug/L		06/11/13 15:38	06/18/13 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*79*		*30 - 130*	*06/11/13 15:38*	*06/18/13 22:39*	*1*
2-Fluorobiphenyl	*73*		*34 - 130*	*06/11/13 15:38*	*06/18/13 22:39*	*1*
2-Fluorophenol (Surr)	*69*		*25 - 130*	*06/11/13 15:38*	*06/18/13 22:39*	*1*
Terphenyl-d14 (Surr)	*86*		*36 - 130*	*06/11/13 15:38*	*06/18/13 22:39*	*1*
Phenol-d5 (Surr)	*56*		*27 - 130*	*06/11/13 15:38*	*06/18/13 22:39*	*1*
Nitrobenzene-d5 (Surr)	*74*		*32 - 130*	*06/11/13 15:38*	*06/18/13 22:39*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	80	J	100	50	ug/L		06/12/13 14:35	06/14/13 04:57	1
Cadmium	3.8		0.50	0.13	ug/L		06/12/13 14:35	06/14/13 04:57	1
Nickel	58		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:57	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: SDB-MW-1
Date Collected: 06/06/13 12:15
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	6.0		5.0	2.6	ug/L			06/13/13 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*06/13/13 18:38*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*06/13/13 18:38*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/13/13 18:38*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	570		100	50	ug/L		06/12/13 14:35	06/14/13 05:43	1
Chromium	3.4	J	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 05:43	1
Iron	190000		100	44	ug/L		06/12/13 14:35	06/14/13 05:43	1
Lead	0.96	J	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 05:43	1
Manganese	1900		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 05:43	1
Nickel	2.9	J	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 05:43	1
Arsenic	7.0		2.5	1.3	ug/L		06/12/13 14:35	06/14/13 05:43	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: SDB-MW-3
Date Collected: 06/06/13 12:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	10	U	10	1.0	ug/L			06/13/13 19:00	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/13/13 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/13/13 19:00*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*06/13/13 19:00*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*06/13/13 19:00*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.66**		0.50	0.13	ug/L		06/12/13 14:35	06/14/13 05:50	1
Nickel	**35**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 05:50	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: RAB-MW-1R
Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**110**		25	5.0	ug/L			06/13/13 12:36	1
Acetonitrile	40	U	40	10	ug/L			06/13/13 12:36	1
Acrolein	20	U	20	7.4	ug/L			06/13/13 12:36	1
Acrylonitrile	20	U	20	7.2	ug/L			06/13/13 12:36	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			06/13/13 12:36	1
Benzene	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
Bromoform	1.0	U	1.0	0.50	ug/L			06/13/13 12:36	1
Bromomethane	5.0	U	5.0	2.0	ug/L			06/13/13 12:36	1
2-Butanone	10	U	10	1.0	ug/L			06/13/13 12:36	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			06/13/13 12:36	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			06/13/13 12:36	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
Chloroethane	5.0	U	5.0	2.0	ug/L			06/13/13 12:36	1
Chloroform	1.0	U	1.0	0.14	ug/L			06/13/13 12:36	1
Chloromethane	1.0	U	1.0	0.33	ug/L			06/13/13 12:36	1
Chloroprene	1.0	U	1.0	0.30	ug/L			06/13/13 12:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 12:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			06/13/13 12:36	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			06/13/13 12:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			06/13/13 12:36	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			06/13/13 12:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/13/13 12:36	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			06/13/13 12:36	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			06/13/13 12:36	1
Diethyl ether	10	U	10	1.0	ug/L			06/13/13 12:36	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			06/13/13 12:36	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
2-Hexanone	10	U	10	1.0	ug/L			06/13/13 12:36	1
Iodomethane	5.0	U	5.0	1.0	ug/L			06/13/13 12:36	1
Isobutyl alcohol	40	U	40	11	ug/L			06/13/13 12:36	1
Methacrylonitrile	20	U	20	3.3	ug/L			06/13/13 12:36	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			06/13/13 12:36	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			06/13/13 12:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			06/13/13 12:36	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			06/13/13 12:36	1
n-Heptane	1.0	U	1.0	0.42	ug/L			06/13/13 12:36	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			06/13/13 12:36	1
Propionitrile	20	U	20	4.6	ug/L			06/13/13 12:36	1
Styrene	1.0	U	1.0	0.11	ug/L			06/13/13 12:36	1
t-Butanol	**23000**	**E**	5.0	2.6	ug/L			06/13/13 12:36	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			06/13/13 12:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			06/13/13 12:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 12:36	1
Toluene	1.0	U	1.0	0.33	ug/L			06/13/13 12:36	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			06/13/13 12:36	1

Client Sample ID: RAB-MW-1R
Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			06/13/13 12:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			06/13/13 12:36	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			06/13/13 12:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			06/13/13 12:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			06/13/13 12:36	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			06/13/13 12:36	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:36	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			06/13/13 12:36	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			06/13/13 12:36	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			06/13/13 12:36	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			06/13/13 12:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.4*	*T J*	*ug/L*		*1.43*			*06/13/13 12:36*	*1*
Isopropyl ether	*1.2*	*J*	*ug/L*		*3.07*	*108-20-3*		*06/13/13 12:36*	*1*
Unknown	*6.2*	*T J*	*ug/L*		*3.78*			*06/13/13 12:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*06/13/13 12:36*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*06/13/13 12:36*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/13/13 12:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25000	U	25000	5000	ug/L			06/13/13 15:59	1000
Acetonitrile	40000	U	40000	10000	ug/L			06/13/13 15:59	1000
Acrolein	20000	U	20000	7400	ug/L			06/13/13 15:59	1000
Acrylonitrile	20000	U	20000	7200	ug/L			06/13/13 15:59	1000
Allyl chloride	1000	U	1000	200	ug/L			06/13/13 15:59	1000
Benzene	1000	U	1000	250	ug/L			06/13/13 15:59	1000
Bromodichloromethane	1000	U	1000	250	ug/L			06/13/13 15:59	1000
Bromoform	1000	U	1000	500	ug/L			06/13/13 15:59	1000
Bromomethane	5000	U	5000	2000	ug/L			06/13/13 15:59	1000
2-Butanone	10000	U	10000	1000	ug/L			06/13/13 15:59	1000
Carbon disulfide	2000	U	2000	600	ug/L			06/13/13 15:59	1000
Carbon tetrachloride	1000	U	1000	500	ug/L			06/13/13 15:59	1000
Chlorobenzene	1000	U	1000	250	ug/L			06/13/13 15:59	1000
Chloroethane	5000	U	5000	2000	ug/L			06/13/13 15:59	1000
Chloroform	1000	U	1000	140	ug/L			06/13/13 15:59	1000
Chloromethane	1000	U	1000	330	ug/L			06/13/13 15:59	1000
Chloroprene	1000	U	1000	300	ug/L			06/13/13 15:59	1000
cis-1,2-Dichloroethene	1000	U	1000	150	ug/L			06/13/13 15:59	1000
cis-1,3-Dichloropropene	1000	U	1000	110	ug/L			06/13/13 15:59	1000
Dibromochloromethane	1000	U	1000	100	ug/L			06/13/13 15:59	1000
1,2-Dibromo-3-Chloropropane	1000	U	1000	440	ug/L			06/13/13 15:59	1000
1,2-Dibromoethane	1000	U	1000	250	ug/L			06/13/13 15:59	1000
Dibromomethane	1000	U	1000	200	ug/L			06/13/13 15:59	1000
Dichlorodifluoromethane	1000	U	1000	250	ug/L			06/13/13 15:59	1000
1,1-Dichloroethane	1000	U	1000	250	ug/L			06/13/13 15:59	1000
1,2-Dichloroethane	1000	U	1000	100	ug/L			06/13/13 15:59	1000

Client Sample ID: RAB-MW-1R

Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1000	U	1000	110	ug/L			06/13/13 15:59	1000
1,2-Dichloropropane	1000	U	1000	130	ug/L			06/13/13 15:59	1000
Diethyl ether	10000	U	10000	1000	ug/L			06/13/13 15:59	1000
Ethylbenzene	1000	U	1000	110	ug/L			06/13/13 15:59	1000
Ethyl methacrylate	1000	U	1000	250	ug/L			06/13/13 15:59	1000
2-Hexanone	10000	U	10000	1000	ug/L			06/13/13 15:59	1000
Iodomethane	5000	U	5000	1000	ug/L			06/13/13 15:59	1000
Isobutyl alcohol	40000	U	40000	11000	ug/L			06/13/13 15:59	1000
Methacrylonitrile	20000	U	20000	3300	ug/L			06/13/13 15:59	1000
Methylene Chloride	5000	U	5000	1000	ug/L			06/13/13 15:59	1000
Methyl methacrylate	1000	U	1000	480	ug/L			06/13/13 15:59	1000
4-Methyl-2-pentanone (MIBK)	10000	U	10000	1000	ug/L			06/13/13 15:59	1000
Methyl tert-butyl ether	10000	U	10000	200	ug/L			06/13/13 15:59	1000
n-Heptane	1000	U	1000	420	ug/L			06/13/13 15:59	1000
Pentachloroethane	5000	U	5000	1200	ug/L			06/13/13 15:59	1000
Propionitrile	20000	U	20000	4600	ug/L			06/13/13 15:59	1000
Styrene	1000	U	1000	110	ug/L			06/13/13 15:59	1000
t-Butanol	**38000**	**D**	5000	2600	ug/L			06/13/13 15:59	1000
1,1,1,2-Tetrachloroethane	1000	U	1000	330	ug/L			06/13/13 15:59	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	180	ug/L			06/13/13 15:59	1000
Tetrachloroethene	1000	U	1000	150	ug/L			06/13/13 15:59	1000
Toluene	1000	U	1000	330	ug/L			06/13/13 15:59	1000
trans-1,4-Dichloro-2-butene	2000	U	2000	500	ug/L			06/13/13 15:59	1000
trans-1,2-Dichloroethene	1000	U	1000	200	ug/L			06/13/13 15:59	1000
trans-1,3-Dichloropropene	1000	U	1000	210	ug/L			06/13/13 15:59	1000
1,2,3-Trichlorobenzene	1000	U	1000	350	ug/L			06/13/13 15:59	1000
1,1,1-Trichloroethane	1000	U	1000	500	ug/L			06/13/13 15:59	1000
1,1,2-Trichloroethane	1000	U	1000	130	ug/L			06/13/13 15:59	1000
Trichloroethylene	1000	U	1000	130	ug/L			06/13/13 15:59	1000
Trichlorofluoromethane	1000	U	1000	250	ug/L			06/13/13 15:59	1000
1,2,3-Trichloropropane	1000	U	1000	410	ug/L			06/13/13 15:59	1000
Vinyl acetate	2000	U	2000	280	ug/L			06/13/13 15:59	1000
Vinyl chloride	1000	U	1000	180	ug/L			06/13/13 15:59	1000
Xylenes, Total	2000	U	2000	200	ug/L			06/13/13 15:59	1000

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/13 15:59*	*1000*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*06/13/13 15:59*	*1000*
Dibromofluoromethane	*102*		*70 - 130*		*06/13/13 15:59*	*1000*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/13 15:59*	*1000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Acetophenone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		06/10/13 15:22	06/29/13 18:35	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: RAB-MW-1R
Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		06/10/13 15:22	06/29/13 18:35	1
Aniline	2.0	U	2.0	0.97	ug/L		06/10/13 15:22	06/29/13 18:35	1
Anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		06/10/13 15:22	06/29/13 18:35	1
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.64	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Chrysene	0.20	U	0.20	0.045	ug/L		06/10/13 15:22	06/29/13 18:35	1
Diallate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Diethyl phthalate	1.0	U	1.0	0.11	ug/L		06/10/13 15:22	06/29/13 18:35	1
Dimethoate	2.0	U	2.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/29/13 18:35	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		06/10/13 15:22	06/29/13 18:35	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		06/10/13 15:22	06/29/13 18:35	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1
Di-n-octyl phthalate	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,4-Dioxane	**2.4**		2.0	0.31	ug/L		06/10/13 15:22	06/29/13 18:35	1
Disulfoton	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Famphur	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/29/13 18:35	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: RAB-MW-1R
Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
Hexachlorophene	500	U	500	25	ug/L		06/10/13 15:22	06/29/13 18:35	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Isophorone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Isosafrole	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Methapyrilene	200	U	200	1.3	ug/L		06/10/13 15:22	06/29/13 18:35	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		06/10/13 15:22	06/29/13 18:35	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		06/10/13 15:22	06/29/13 18:35	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/29/13 18:35	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/29/13 18:35	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		06/10/13 15:22	06/29/13 18:35	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		06/10/13 15:22	06/29/13 18:35	1
Phenacetin	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Phenol	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/29/13 18:35	1

Client Sample ID: RAB-MW-1R

Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Phorate	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-Picoline	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/29/13 18:35	1
p-Phenylene diamine	200	U	200	16	ug/L		06/10/13 15:22	06/29/13 18:35	1
Pronamide	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
Pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Pyridine	5.0	U	5.0	0.73	ug/L		06/10/13 15:22	06/29/13 18:35	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/29/13 18:35	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
Thionazin	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/29/13 18:35	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/29/13 18:35	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/29/13 18:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.9*	*T J*	*ug/L*		*4.98*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*7.3*	*T J*	*ug/L*		*5.26*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*81*	*T J*	*ug/L*		*5.62*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown Organic Acid	*8.7*	*T J*	*ug/L*		*7.16*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*17*	*T J*	*ug/L*		*8.94*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*19*	*T J*	*ug/L*		*8.96*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*12*	*T J*	*ug/L*		*8.98*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*13*	*T J*	*ug/L*		*9.05*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*7.6*	*T J*	*ug/L*		*9.07*		*06/10/13 15:22*	*06/29/13 18:35*	*1*
Unknown	*27*	*T J*	*ug/L*		*9.83*		*06/10/13 15:22*	*06/29/13 18:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*34 - 130*	*06/10/13 15:22*	*06/29/13 18:35*	*1*
2-Fluorophenol	*45*		*25 - 130*	*06/10/13 15:22*	*06/29/13 18:35*	*1*
Nitrobenzene-d5	*55*		*32 - 130*	*06/10/13 15:22*	*06/29/13 18:35*	*1*
Phenol-d5	*44*		*27 - 130*	*06/10/13 15:22*	*06/29/13 18:35*	*1*
Terphenyl-d14	*51*		*36 - 130*	*06/10/13 15:22*	*06/29/13 18:35*	*1*
2,4,6-Tribromophenol	*55*		*30 - 130*	*06/10/13 15:22*	*06/29/13 18:35*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/12/13 22:46	1
Methanol	5.0	U	5.0	1.0	mg/L			06/12/13 22:46	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/12/13 14:35	06/14/13 05:57	1
Antimony	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 05:57	1
Arsenic	**5.5**		2.5	1.3	ug/L		06/12/13 14:35	06/14/13 05:57	1
Barium	**130**		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 05:57	1
Beryllium	0.50	U	0.50	0.15	ug/L		06/12/13 14:35	06/14/13 05:57	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: RAB-MW-1R
Date Collected: 06/06/13 15:50
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-9
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 05:57	1
Calcium	**120000**		500	170	ug/L		06/12/13 14:35	06/14/13 05:57	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 05:57	1
Cobalt	**150**		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 05:57	1
Copper	5.0	U	5.0	1.1	ug/L		06/12/13 14:35	06/14/13 05:57	1
Iron	**130000**		100	44	ug/L		06/12/13 14:35	06/14/13 05:57	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 05:57	1
Magnesium	**86000**		250	100	ug/L		06/12/13 14:35	06/14/13 05:57	1
Manganese	**9100**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 05:57	1
Mercury	0.80	U	0.80	0.40	ug/L		06/12/13 14:35	06/14/13 05:57	1
Nickel	**28**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 05:57	1
Potassium	**1600**		1000	330	ug/L		06/12/13 14:35	06/14/13 05:57	1
Selenium	2.5	U	2.5	1.1	ug/L		06/12/13 14:35	06/14/13 05:57	1
Silver	1.0	U	1.0	0.18	ug/L		06/12/13 14:35	06/14/13 05:57	1
Sodium	**260000**		500	170	ug/L		06/12/13 14:35	06/14/13 05:57	1
Thallium	1.0	U	1.0	0.25	ug/L		06/12/13 14:35	06/14/13 05:57	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 05:57	1
Zinc	**10**	**J**	20	8.4	ug/L		06/12/13 14:35	06/14/13 05:57	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: FD1 (RAB-MW-1R)
Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2500	U	2500	500	ug/L			06/13/13 14:03	100
Acetonitrile	4000	U	4000	1000	ug/L			06/13/13 14:03	100
Acrolein	2000	U	2000	740	ug/L			06/13/13 14:03	100
Acrylonitrile	2000	U	2000	720	ug/L			06/13/13 14:03	100
Allyl chloride	100	U	100	20	ug/L			06/13/13 14:03	100
Benzene	100	U	100	25	ug/L			06/13/13 14:03	100
Bromodichloromethane	100	U	100	25	ug/L			06/13/13 14:03	100
Bromoform	100	U	100	50	ug/L			06/13/13 14:03	100
Bromomethane	500	U	500	200	ug/L			06/13/13 14:03	100
2-Butanone	1000	U	1000	100	ug/L			06/13/13 14:03	100
Carbon disulfide	200	U	200	60	ug/L			06/13/13 14:03	100
Carbon tetrachloride	100	U	100	50	ug/L			06/13/13 14:03	100
Chlorobenzene	100	U	100	25	ug/L			06/13/13 14:03	100
Chloroethane	500	U	500	200	ug/L			06/13/13 14:03	100
Chloroform	100	U	100	14	ug/L			06/13/13 14:03	100
Chloromethane	100	U	100	33	ug/L			06/13/13 14:03	100
Chloroprene	100	U	100	30	ug/L			06/13/13 14:03	100
cis-1,2-Dichloroethene	100	U	100	15	ug/L			06/13/13 14:03	100
cis-1,3-Dichloropropene	100	U	100	11	ug/L			06/13/13 14:03	100
Dibromochloromethane	100	U	100	10	ug/L			06/13/13 14:03	100
1,2-Dibromo-3-Chloropropane	100	U	100	44	ug/L			06/13/13 14:03	100
1,2-Dibromoethane	100	U	100	25	ug/L			06/13/13 14:03	100
Dibromomethane	100	U	100	20	ug/L			06/13/13 14:03	100
Dichlorodifluoromethane	100	U	100	25	ug/L			06/13/13 14:03	100
1,1-Dichloroethane	100	U	100	25	ug/L			06/13/13 14:03	100
1,2-Dichloroethane	100	U	100	10	ug/L			06/13/13 14:03	100
1,1-Dichloroethene	100	U	100	11	ug/L			06/13/13 14:03	100
1,2-Dichloropropane	100	U	100	13	ug/L			06/13/13 14:03	100
Diethyl ether	1000	U	1000	100	ug/L			06/13/13 14:03	100
Ethylbenzene	100	U	100	11	ug/L			06/13/13 14:03	100
Ethyl methacrylate	100	U	100	25	ug/L			06/13/13 14:03	100
2-Hexanone	1000	U	1000	100	ug/L			06/13/13 14:03	100
Iodomethane	500	U	500	100	ug/L			06/13/13 14:03	100
Isobutyl alcohol	4000	U	4000	1100	ug/L			06/13/13 14:03	100
Methacrylonitrile	2000	U	2000	330	ug/L			06/13/13 14:03	100
Methylene Chloride	500	U	500	100	ug/L			06/13/13 14:03	100
Methyl methacrylate	100	U	100	48	ug/L			06/13/13 14:03	100
4-Methyl-2-pentanone (MIBK)	1000	U	1000	100	ug/L			06/13/13 14:03	100
Methyl tert-butyl ether	1000	U	1000	20	ug/L			06/13/13 14:03	100
n-Heptane	100	U	100	42	ug/L			06/13/13 14:03	100
Pentachloroethane	500	U	500	120	ug/L			06/13/13 14:03	100
Propionitrile	2000	U	2000	460	ug/L			06/13/13 14:03	100
Styrene	100	U	100	11	ug/L			06/13/13 14:03	100
t-Butanol	**35000**	**E**	500	260	ug/L			06/13/13 14:03	100
1,1,1,2-Tetrachloroethane	100	U	100	33	ug/L			06/13/13 14:03	100
1,1,2,2-Tetrachloroethane	100	U	100	18	ug/L			06/13/13 14:03	100
Tetrachloroethene	100	U	100	15	ug/L			06/13/13 14:03	100
Toluene	100	U	100	33	ug/L			06/13/13 14:03	100
trans-1,4-Dichloro-2-butene	200	U	200	50	ug/L			06/13/13 14:03	100

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: FD1 (RAB-MW-1R)
Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	100	U	100	20	ug/L			06/13/13 14:03	100
trans-1,3-Dichloropropene	100	U	100	21	ug/L			06/13/13 14:03	100
1,2,3-Trichlorobenzene	100	U	100	35	ug/L			06/13/13 14:03	100
1,1,1-Trichloroethane	100	U	100	50	ug/L			06/13/13 14:03	100
1,1,2-Trichloroethane	100	U	100	13	ug/L			06/13/13 14:03	100
Trichloroethylene	100	U	100	13	ug/L			06/13/13 14:03	100
Trichlorofluoromethane	100	U	100	25	ug/L			06/13/13 14:03	100
1,2,3-Trichloropropane	100	U	100	41	ug/L			06/13/13 14:03	100
Vinyl acetate	200	U	200	28	ug/L			06/13/13 14:03	100
Vinyl chloride	100	U	100	18	ug/L			06/13/13 14:03	100
Xylenes, Total	200	U	200	20	ug/L			06/13/13 14:03	100

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/13 14:03*	*100*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*06/13/13 14:03*	*100*
Dibromofluoromethane	*103*		*70 - 130*		*06/13/13 14:03*	*100*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/13/13 14:03*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25000	U	25000	5000	ug/L			06/13/13 15:31	1000
Acetonitrile	40000	U	40000	10000	ug/L			06/13/13 15:31	1000
Acrolein	20000	U	20000	7400	ug/L			06/13/13 15:31	1000
Acrylonitrile	20000	U	20000	7200	ug/L			06/13/13 15:31	1000
Allyl chloride	1000	U	1000	200	ug/L			06/13/13 15:31	1000
Benzene	1000	U	1000	250	ug/L			06/13/13 15:31	1000
Bromodichloromethane	1000	U	1000	250	ug/L			06/13/13 15:31	1000
Bromoform	1000	U	1000	500	ug/L			06/13/13 15:31	1000
Bromomethane	5000	U	5000	2000	ug/L			06/13/13 15:31	1000
2-Butanone	10000	U	10000	1000	ug/L			06/13/13 15:31	1000
Carbon disulfide	2000	U	2000	600	ug/L			06/13/13 15:31	1000
Carbon tetrachloride	1000	U	1000	500	ug/L			06/13/13 15:31	1000
Chlorobenzene	1000	U	1000	250	ug/L			06/13/13 15:31	1000
Chloroethane	5000	U	5000	2000	ug/L			06/13/13 15:31	1000
Chloroform	1000	U	1000	140	ug/L			06/13/13 15:31	1000
Chloromethane	1000	U	1000	330	ug/L			06/13/13 15:31	1000
Chloroprene	1000	U	1000	300	ug/L			06/13/13 15:31	1000
cis-1,2-Dichloroethene	1000	U	1000	150	ug/L			06/13/13 15:31	1000
cis-1,3-Dichloropropene	1000	U	1000	110	ug/L			06/13/13 15:31	1000
Dibromochloromethane	1000	U	1000	100	ug/L			06/13/13 15:31	1000
1,2-Dibromo-3-Chloropropane	1000	U	1000	440	ug/L			06/13/13 15:31	1000
1,2-Dibromoethane	1000	U	1000	250	ug/L			06/13/13 15:31	1000
Dibromomethane	1000	U	1000	200	ug/L			06/13/13 15:31	1000
Dichlorodifluoromethane	1000	U	1000	250	ug/L			06/13/13 15:31	1000
1,1-Dichloroethane	1000	U	1000	250	ug/L			06/13/13 15:31	1000
1,2-Dichloroethane	1000	U	1000	100	ug/L			06/13/13 15:31	1000
1,1-Dichloroethene	1000	U	1000	110	ug/L			06/13/13 15:31	1000
1,2-Dichloropropane	1000	U	1000	130	ug/L			06/13/13 15:31	1000

Client Sample ID: FD1 (RAB-MW-1R)

Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	10000	U	10000	1000	ug/L			06/13/13 15:31	1000
Ethylbenzene	1000	U	1000	110	ug/L			06/13/13 15:31	1000
Ethyl methacrylate	1000	U	1000	250	ug/L			06/13/13 15:31	1000
2-Hexanone	10000	U	10000	1000	ug/L			06/13/13 15:31	1000
Iodomethane	5000	U	5000	1000	ug/L			06/13/13 15:31	1000
Isobutyl alcohol	40000	U	40000	11000	ug/L			06/13/13 15:31	1000
Methacrylonitrile	20000	U	20000	3300	ug/L			06/13/13 15:31	1000
Methylene Chloride	5000	U	5000	1000	ug/L			06/13/13 15:31	1000
Methyl methacrylate	1000	U	1000	480	ug/L			06/13/13 15:31	1000
4-Methyl-2-pentanone (MIBK)	10000	U	10000	1000	ug/L			06/13/13 15:31	1000
Methyl tert-butyl ether	10000	U	10000	200	ug/L			06/13/13 15:31	1000
n-Heptane	1000	U	1000	420	ug/L			06/13/13 15:31	1000
Pentachloroethane	5000	U	5000	1200	ug/L			06/13/13 15:31	1000
Propionitrile	20000	U	20000	4600	ug/L			06/13/13 15:31	1000
Styrene	1000	U	1000	110	ug/L			06/13/13 15:31	1000
t-Butanol	**37000**	**D**	5000	2600	ug/L			06/13/13 15:31	1000
1,1,1,2-Tetrachloroethane	1000	U	1000	330	ug/L			06/13/13 15:31	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	180	ug/L			06/13/13 15:31	1000
Tetrachloroethene	1000	U	1000	150	ug/L			06/13/13 15:31	1000
Toluene	1000	U	1000	330	ug/L			06/13/13 15:31	1000
trans-1,4-Dichloro-2-butene	2000	U	2000	500	ug/L			06/13/13 15:31	1000
trans-1,2-Dichloroethene	1000	U	1000	200	ug/L			06/13/13 15:31	1000
trans-1,3-Dichloropropene	1000	U	1000	210	ug/L			06/13/13 15:31	1000
1,2,3-Trichlorobenzene	1000	U	1000	350	ug/L			06/13/13 15:31	1000
1,1,1-Trichloroethane	1000	U	1000	500	ug/L			06/13/13 15:31	1000
1,1,2-Trichloroethane	1000	U	1000	130	ug/L			06/13/13 15:31	1000
Trichloroethylene	1000	U	1000	130	ug/L			06/13/13 15:31	1000
Trichlorofluoromethane	1000	U	1000	250	ug/L			06/13/13 15:31	1000
1,2,3-Trichloropropane	1000	U	1000	410	ug/L			06/13/13 15:31	1000
Vinyl acetate	2000	U	2000	280	ug/L			06/13/13 15:31	1000
Vinyl chloride	1000	U	1000	180	ug/L			06/13/13 15:31	1000
Xylenes, Total	2000	U	2000	200	ug/L			06/13/13 15:31	1000

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/13 15:31*	*1000*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/13/13 15:31*	*1000*
Dibromofluoromethane	*98*		*70 - 130*		*06/13/13 15:31*	*1000*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/13 15:31*	*1000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Acenaphthylene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Acetophenone	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Acetylaminofluorene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
alpha,alpha-Dimethyl phenethylamine	11	U	11	3.9	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Aminobiphenyl	5.7	U	5.7	0.35	ug/L		06/10/13 15:22	06/29/13 18:59	1
Aniline	2.3	U	2.3	1.1	ug/L		06/10/13 15:22	06/29/13 18:59	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: FD1 (RAB-MW-1R)
Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Aramite, Total	1.7	U	1.7	0.13	ug/L		06/10/13 15:22	06/29/13 18:59	1
Benzo[a]anthracene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Benzo[a]pyrene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Benzo[b]fluoranthene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Benzo[g,h,i]perylene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Benzo[k]fluoranthene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Benzyl alcohol	1.1	U	1.1	0.16	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,1'-Biphenyl	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Bis(2-chloroethoxy)methane	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Bis(2-ethylhexyl) phthalate	2.3	U	2.3	0.73	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Bromophenyl phenyl ether	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
Butyl benzyl phthalate	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Chloroaniline	2.3	U	2.3	0.41	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Chloro-3-methylphenol	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Chloronaphthalene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Chlorophenol	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Chlorophenyl phenyl ether	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Chrysene	0.23	U	0.23	0.051	ug/L		06/10/13 15:22	06/29/13 18:59	1
Diallate	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Dibenz(a,h)anthracene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Dibenzofuran	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,2-Dichlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,3-Dichlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,4-Dichlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
3,3'-Dichlorobenzidine	23	U	23	2.3	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,4-Dichlorophenol	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,6-Dichlorophenol	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Diethyl phthalate	1.1	U	1.1	0.13	ug/L		06/10/13 15:22	06/29/13 18:59	1
Dimethoate	2.3	U	2.3	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
7,12-Dimethylbenz(a)anthracene	1.1	U	1.1	0.23	ug/L		06/10/13 15:22	06/29/13 18:59	1
3,3'-Dimethylbenzidine	23	U	23	5.7	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,4-Dimethylphenol	2.3	U	2.3	0.79	ug/L		06/10/13 15:22	06/29/13 18:59	1
Dimethyl phthalate	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Di-n-butyl phthalate	1.1	U	1.1	0.44	ug/L		06/10/13 15:22	06/29/13 18:59	1
4,6-Dinitro-2-methylphenol	5.7	U	5.7	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,4-Dinitrophenol	11	U	11	1.3	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,4-Dinitrotoluene	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,6-Dinitrotoluene	1.1	U	1.1	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
Di-n-octyl phthalate	1.1	U	1.1	0.19	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,4-Dioxane	**1.4**	**J**	2.3	0.35	ug/L		06/10/13 15:22	06/29/13 18:59	1
Disulfoton	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Ethyl methanesulfonate	2.3	U	2.3	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Ethyl Parathion	2.3	U	2.3	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Famphur	1.1	U	1.1	0.18	ug/L		06/10/13 15:22	06/29/13 18:59	1
Fluoranthene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Fluorene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Hexachlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: FD1 (RAB-MW-1R)
Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Hexachlorocyclopentadiene	2.3	U	2.3	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
Hexachloroethane	1.1	U	1.1	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
Hexachlorophene	570	U	570	28	ug/L		06/10/13 15:22	06/29/13 18:59	1
Hexachloropropene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Indeno[1,2,3-cd]pyrene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Isophorone	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Isosafrole	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
m-Dinitrobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Methapyrilene	230	U	230	1.5	ug/L		06/10/13 15:22	06/29/13 18:59	1
3-Methylcholanthrene	1.1	U	1.1	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
Methyl methanesulfonate	2.3	U	2.3	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Methylnaphthalene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Methyl parathion	1.1	U	1.1	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Methylphenol	2.3	U	2.3	0.84	ug/L		06/10/13 15:22	06/29/13 18:59	1
3 & 4 Methylphenol	2.3	U	2.3	0.75	ug/L		06/10/13 15:22	06/29/13 18:59	1
1-Naphthalenamine	5.7	U	5.7	1.5	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Naphthalenamine	5.7	U	5.7	1.5	ug/L		06/10/13 15:22	06/29/13 18:59	1
Naphthalene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,4-Naphthoquinone	1.1	U	1.1	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Nitroaniline	1.1	U	1.1	0.18	ug/L		06/10/13 15:22	06/29/13 18:59	1
3-Nitroaniline	5.7	U	5.7	0.18	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Nitroaniline	5.7	U	5.7	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
Nitrobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
5-Nitro-o-toluidine	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-Nitrophenol	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Nitrophenol	5.7	U	5.7	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
4-Nitroquinoline-1-oxide	2.3	U	2.3	1.3	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosodiethylamine	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosodimethylamine	1.1	U	1.1	0.28	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosodi-n-butylamine	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosodi-n-propylamine	1.1	U	1.1	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosodiphenylamine	1.1	U	1.1	0.42	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosomethylethylamine	2.3	U	2.3	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosomorpholine	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosopiperidine	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
N-Nitrosopyrrolidine	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
o,o',o''-Triethylphosphorothioate	1.1	U	1.1	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
o-Toluidine	1.1	U	1.1	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,2'-oxybis[1-chloropropane]	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
p-Dimethylamino azobenzene	5.7	U	5.7	0.17	ug/L		06/10/13 15:22	06/29/13 18:59	1
Pentachlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Pentachloronitrobenzene	1.1	U	1.1	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1
Pentachlorophenol	5.7	U	5.7	0.46	ug/L		06/10/13 15:22	06/29/13 18:59	1
Phenacetin	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Phenanthrene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Phenol	1.1	U	1.1	0.15	ug/L		06/10/13 15:22	06/29/13 18:59	1
Phenyl ether	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Phorate	1.1	U	1.1	0.23	ug/L		06/10/13 15:22	06/29/13 18:59	1

Client Sample ID: FD1 (RAB-MW-1R)
Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Picoline	2.3	U	2.3	0.17	ug/L		06/10/13 15:22	06/29/13 18:59	1
p-Phenylene diamine	230	U	230	18	ug/L		06/10/13 15:22	06/29/13 18:59	1
Pronamide	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
Pyrene	0.23	U	0.23	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Pyridine	5.7	U	5.7	0.83	ug/L		06/10/13 15:22	06/29/13 18:59	1
Safrole, Total	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2-sec-Butyl-4,6-dinitrophenol	2.3	U	2.3	0.17	ug/L		06/10/13 15:22	06/29/13 18:59	1
Sulfotepp	1.1	U	1.1	0.16	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,2,4,5-Tetrachlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,3,4,6-Tetrachlorophenol	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
Thionazin	1.1	U	1.1	0.23	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,2,4-Trichlorobenzene	1.1	U	1.1	0.11	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,4,5-Trichlorophenol	1.1	U	1.1	0.14	ug/L		06/10/13 15:22	06/29/13 18:59	1
2,4,6-Trichlorophenol	1.1	U	1.1	0.19	ug/L		06/10/13 15:22	06/29/13 18:59	1
1,3,5-Trinitrobenzene	1.1	U	1.1	0.57	ug/L		06/10/13 15:22	06/29/13 18:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*5.5*	*T J*	*ug/L*		*5.06*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown	*20*	*T J*	*ug/L*		*5.55*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown Organic Acid	*4.6*	*T J*	*ug/L*		*7.15*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Diethyltoluamide	*6.3*	*T J N*	*ug/L*		*8.91*	*134-62-3*	*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown	*9.1*	*T J*	*ug/L*		*8.93*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown	*9.7*	*T J*	*ug/L*		*8.95*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown	*5.5*	*T J*	*ug/L*		*8.97*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown	*8.1*	*T J*	*ug/L*		*9.06*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Unknown	*4.4*	*T J*	*ug/L*		*9.83*		*06/10/13 15:22*	*06/29/13 18:59*	*1*
Oleic Acid	*15*	*T J N*	*ug/L*		*11.73*	*112-80-1*	*06/10/13 15:22*	*06/29/13 18:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*34 - 130*	*06/10/13 15:22*	*06/29/13 18:59*	*1*
2-Fluorophenol	*44*		*25 - 130*	*06/10/13 15:22*	*06/29/13 18:59*	*1*
Nitrobenzene-d5	*58*		*32 - 130*	*06/10/13 15:22*	*06/29/13 18:59*	*1*
Phenol-d5	*48*		*27 - 130*	*06/10/13 15:22*	*06/29/13 18:59*	*1*
Terphenyl-d14	*56*		*36 - 130*	*06/10/13 15:22*	*06/29/13 18:59*	*1*
2,4,6-Tribromophenol	*57*		*30 - 130*	*06/10/13 15:22*	*06/29/13 18:59*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/12/13 21:11	1
Methanol	5.0	U	5.0	1.0	mg/L			06/12/13 21:11	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/12/13 14:35	06/14/13 06:04	1
Antimony	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:04	1
Arsenic	**6.5**		2.5	1.3	ug/L		06/12/13 14:35	06/14/13 06:04	1
Barium	**110**		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 06:04	1
Beryllium	0.50	U	0.50	0.15	ug/L		06/12/13 14:35	06/14/13 06:04	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 06:04	1
Calcium	**130000**		500	170	ug/L		06/12/13 14:35	06/14/13 06:04	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: FD1 (RAB-MW-1R)
Date Collected: 06/06/13 15:55
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-10
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 06:04	1
Cobalt	**170**		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 06:04	1
Copper	5.0	U	5.0	1.1	ug/L		06/12/13 14:35	06/14/13 06:04	1
Iron	**140000**		100	44	ug/L		06/12/13 14:35	06/14/13 06:04	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 06:04	1
Magnesium	**94000**		250	100	ug/L		06/12/13 14:35	06/14/13 06:04	1
Manganese	**9700**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:04	1
Mercury	0.80	U	0.80	0.40	ug/L		06/12/13 14:35	06/14/13 06:04	1
Nickel	**30**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:04	1
Potassium	**1700**		1000	330	ug/L		06/12/13 14:35	06/14/13 06:04	1
Selenium	2.5	U	2.5	1.1	ug/L		06/12/13 14:35	06/14/13 06:04	1
Silver	1.0	U	1.0	0.18	ug/L		06/12/13 14:35	06/14/13 06:04	1
Sodium	**280000**		500	170	ug/L		06/12/13 14:35	06/14/13 06:04	1
Thallium	1.0	U	1.0	0.25	ug/L		06/12/13 14:35	06/14/13 06:04	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 06:04	1
Zinc	**10**	**J**	20	8.4	ug/L		06/12/13 14:35	06/14/13 06:04	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: Equip Blank 2
Date Collected: 06/06/13 16:00
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-11
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/12/13 14:35	06/14/13 06:10	1
Antimony	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:10	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/12/13 14:35	06/14/13 06:10	1
Barium	**10**		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 06:10	1
Beryllium	0.50	U	0.50	0.15	ug/L		06/12/13 14:35	06/14/13 06:10	1
Cadmium	**1.3**		0.50	0.13	ug/L		06/12/13 14:35	06/14/13 06:10	1
Calcium	**24000**		500	170	ug/L		06/12/13 14:35	06/14/13 06:10	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 06:10	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/12/13 14:35	06/14/13 06:10	1
Copper	**4.5**	**J**	5.0	1.1	ug/L		06/12/13 14:35	06/14/13 06:10	1
Iron	**44**	**J**	100	44	ug/L		06/12/13 14:35	06/14/13 06:10	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 06:10	1
Magnesium	**8800**		250	100	ug/L		06/12/13 14:35	06/14/13 06:10	1
Manganese	**2.0**	**J**	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:10	1
Mercury	0.80	U	0.80	0.40	ug/L		06/12/13 14:35	06/14/13 06:10	1
Nickel	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:10	1
Potassium	**3000**		1000	330	ug/L		06/12/13 14:35	06/14/13 06:10	1
Selenium	2.5	U	2.5	1.1	ug/L		06/12/13 14:35	06/14/13 06:10	1
Silver	1.0	U	1.0	0.18	ug/L		06/12/13 14:35	06/14/13 06:10	1
Sodium	**14000**		500	170	ug/L		06/12/13 14:35	06/14/13 06:10	1
Thallium	1.0	U	1.0	0.25	ug/L		06/12/13 14:35	06/14/13 06:10	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 06:10	1
Zinc	**36**		20	8.4	ug/L		06/12/13 14:35	06/14/13 06:10	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: Trip Blank (lot # 040913)
Date Collected: 06/06/13 00:00
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			06/13/13 12:13	1
Acetonitrile	40	U	40	10	ug/L			06/13/13 12:13	1
Acrolein	20	U	20	7.4	ug/L			06/13/13 12:13	1
Acrylonitrile	20	U	20	7.2	ug/L			06/13/13 12:13	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			06/13/13 12:13	1
Benzene	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
Bromoform	1.0	U	1.0	0.50	ug/L			06/13/13 12:13	1
Bromomethane	5.0	U	5.0	2.0	ug/L			06/13/13 12:13	1
2-Butanone	10	U	10	1.0	ug/L			06/13/13 12:13	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			06/13/13 12:13	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			06/13/13 12:13	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
Chloroethane	5.0	U	5.0	2.0	ug/L			06/13/13 12:13	1
Chloroform	1.0	U	1.0	0.14	ug/L			06/13/13 12:13	1
Chloromethane	1.0	U	1.0	0.33	ug/L			06/13/13 12:13	1
Chloroprene	1.0	U	1.0	0.30	ug/L			06/13/13 12:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 12:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			06/13/13 12:13	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			06/13/13 12:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			06/13/13 12:13	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			06/13/13 12:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/13/13 12:13	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			06/13/13 12:13	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			06/13/13 12:13	1
Diethyl ether	10	U	10	1.0	ug/L			06/13/13 12:13	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			06/13/13 12:13	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
2-Hexanone	10	U	10	1.0	ug/L			06/13/13 12:13	1
Iodomethane	5.0	U	5.0	1.0	ug/L			06/13/13 12:13	1
Isobutyl alcohol	40	U	40	11	ug/L			06/13/13 12:13	1
Methacrylonitrile	20	U	20	3.3	ug/L			06/13/13 12:13	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			06/13/13 12:13	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			06/13/13 12:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			06/13/13 12:13	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			06/13/13 12:13	1
n-Heptane	1.0	U	1.0	0.42	ug/L			06/13/13 12:13	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			06/13/13 12:13	1
Propionitrile	20	U	20	4.6	ug/L			06/13/13 12:13	1
Styrene	1.0	U	1.0	0.11	ug/L			06/13/13 12:13	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/13/13 12:13	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			06/13/13 12:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			06/13/13 12:13	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 12:13	1
Toluene	1.0	U	1.0	0.33	ug/L			06/13/13 12:13	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			06/13/13 12:13	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: Trip Blank (lot # 040913)
Date Collected: 06/06/13 00:00
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			06/13/13 12:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			06/13/13 12:13	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			06/13/13 12:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			06/13/13 12:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			06/13/13 12:13	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			06/13/13 12:13	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			06/13/13 12:13	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			06/13/13 12:13	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			06/13/13 12:13	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			06/13/13 12:13	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			06/13/13 12:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Septum Bleed	*33*	*T J*	*ug/L*		*1.55*			*06/13/13 12:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/13/13 12:13*	*1*
Dibromofluoromethane	*105*		*70 - 130*		*06/13/13 12:13*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/13 12:13*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: MW-7U
Date Collected: 06/05/13 10:25
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.15	J	0.19	0.095	ug/L		06/11/13 15:38	06/23/13 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*79*		*30 - 130*	*06/11/13 15:38*	*06/23/13 13:51*	*1*
2-Fluorobiphenyl	*64*		*34 - 130*	*06/11/13 15:38*	*06/23/13 13:51*	*1*
2-Fluorophenol (Surr)	*59*		*25 - 130*	*06/11/13 15:38*	*06/23/13 13:51*	*1*
Terphenyl-d14 (Surr)	*84*		*36 - 130*	*06/11/13 15:38*	*06/23/13 13:51*	*1*
Phenol-d5 (Surr)	*46*		*27 - 130*	*06/11/13 15:38*	*06/23/13 13:51*	*1*
Nitrobenzene-d5 (Surr)	*70*		*32 - 130*	*06/11/13 15:38*	*06/23/13 13:51*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	6.6		0.50	0.13	ug/L		06/12/13 14:35	06/14/13 06:17	1
Cobalt	390		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 06:17	1
Lead	1.7		1.5	0.50	ug/L		06/12/13 14:35	06/14/13 06:17	1
Manganese	42000		50	20	ug/L		06/12/13 14:35	06/14/13 13:26	10
Mercury	1.0		0.80	0.40	ug/L		06/12/13 14:35	06/14/13 06:17	1
Nickel	130		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 06:17	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 06:17	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: MW-7L
Date Collected: 06/05/13 12:45
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-14
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			06/12/13 21:35	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**120**		100	50	ug/L		06/12/13 14:35	06/14/13 06:24	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 06:24	1
Iron	**2600**		100	44	ug/L		06/12/13 14:35	06/14/13 06:24	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 06:24	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: MW-1
Date Collected: 06/05/13 13:15
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-15
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	9.5		1.9	0.29	ug/L		06/11/13 15:38	06/23/13 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*65*		*30 - 130*	*06/11/13 15:38*	*06/23/13 14:16*	*1*
2-Fluorobiphenyl	*49*		*34 - 130*	*06/11/13 15:38*	*06/23/13 14:16*	*1*
2-Fluorophenol (Surr)	*44*		*25 - 130*	*06/11/13 15:38*	*06/23/13 14:16*	*1*
Terphenyl-d14 (Surr)	*65*		*36 - 130*	*06/11/13 15:38*	*06/23/13 14:16*	*1*
Phenol-d5 (Surr)	*16*	*X*	*27 - 130*	*06/11/13 15:38*	*06/23/13 14:16*	*1*
Nitrobenzene-d5 (Surr)	*55*		*32 - 130*	*06/11/13 15:38*	*06/23/13 14:16*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	13		5.0	2.5	ug/L		06/12/13 14:35	06/14/13 06:30	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: RAB-MW-4
Date Collected: 06/05/13 16:35
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-16
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 06:50	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: WWL-1
Date Collected: 06/06/13 10:05
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	370		25	13	ug/L			06/13/13 15:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/13/13 15:09*	*5*
Dibromofluoromethane	*99*		*70 - 130*		*06/13/13 15:09*	*5*
Toluene-d8 (Surr)	*96*		*70 - 130*		*06/13/13 15:09*	*5*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	68	J	100	50	ug/L		06/12/13 14:35	06/14/13 06:57	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 06:57	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: WWL-2
Date Collected: 06/06/13 10:45
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-18
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**82**	**J**	100	50	ug/L		06/12/13 14:35	06/14/13 07:04	1
Barium	**2500**		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 07:04	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 07:04	1
Cobalt	**110**		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 07:04	1
Manganese	**25000**		50	20	ug/L		06/12/13 14:35	06/14/13 13:20	10
Nickel	**31**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 07:04	1
Arsenic	**6.5**		2.5	1.3	ug/L		06/12/13 14:35	06/14/13 07:04	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: Field Duplicate #2
Date Collected: 06/06/13 10:45
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-19
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**74**	**J**	100	50	ug/L		06/12/13 14:35	06/14/13 07:11	1
Barium	**2400**		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 07:11	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 07:11	1
Cobalt	**100**		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 07:11	1
Manganese	**26000**		10	4.0	ug/L		06/12/13 14:35	06/14/13 13:06	2
Nickel	**31**		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 07:11	1
Arsenic	**6.6**		2.5	1.3	ug/L		06/12/13 14:35	06/14/13 07:11	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: RAB-MW3
Date Collected: 06/06/13 13:30
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-20
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	190		5.0	1.4	ug/L		06/12/13 14:35	06/14/13 07:17	1
Iron	110000		100	44	ug/L		06/12/13 14:35	06/14/13 07:17	1

Client Sample ID: RAB-MW2

Date Collected: 06/06/13 15:40
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-21

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	7.2	J	10	1.0	ug/L			06/14/13 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/14/13 17:58*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*06/14/13 17:58*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*06/14/13 17:58*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.14	J	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 07:24	1
Cobalt	94		0.50	0.12	ug/L		06/12/13 14:35	06/14/13 07:24	1
Manganese	12000		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 07:24	1
Nickel	64		5.0	2.0	ug/L		06/12/13 14:35	06/14/13 07:24	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.11	J	0.50	0.095	ug/L		06/12/13 13:49	06/13/13 23:02	1
Cobalt	92		0.50	0.15	ug/L		06/12/13 13:49	06/13/13 23:02	1
Manganese	12000		5.0	1.0	ug/L		06/12/13 13:49	06/13/13 23:02	1
Nickel	63		5.0	2.0	ug/L		06/12/13 13:49	06/13/13 23:02	1

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: Trip Blank (lot # 050613)
Date Collected: 06/06/13 00:00
Date Received: 06/07/13 09:50

Lab Sample ID: 680-91117-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/13/13 11:52	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/13/13 11:52	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/13/13 11:52	1
Diethyl ether	10	U	10	1.0	ug/L			06/13/13 11:52	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/13/13 11:52	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 11:52	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/13/13 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*06/13/13 11:52*	*1*
Dibromofluoromethane	*106*		*70 - 130*		*06/13/13 11:52*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/13/13 11:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-91117-1	VFSP-MW-1	94	103	100
680-91117-2	LF-1	95	104	101
680-91117-3	LF-2	96	104	96
680-91117-4	NAT-4	97	96	102
680-91117-6	MW-10	94	103	98
680-91117-6 MS	MW-10	99	108	104
680-91117-6 MSD	MW-10	101	108	98
680-91117-7	SDB-MW-1	94	103	101
680-91117-8	SDB-MW-3	96	102	97
680-91117-9	RAB-MW-1R	95	104	101
680-91117-9 - DL	RAB-MW-1R	92	102	100
680-91117-10	FD1 (RAB-MW-1R)	93	103	101
680-91117-10 - DL	FD1 (RAB-MW-1R)	96	98	100
680-91117-12	Trip Blank (lot # 040913)	96	105	100
680-91117-17	WWL-1	96	99	96
680-91117-21	RAB-MW2	96	102	96
680-91117-22	Trip Blank (lot # 050613)	95	106	99
LCS 680-280345/4	Lab Control Sample	95	100	102
LCS 680-280483/4	Lab Control Sample	96	100	101
LCSD 680-280345/5	Lab Control Sample Dup	98	107	102
LCSD 680-280483/7	Lab Control Sample Dup	96	100	103
MB 680-280345/12	Method Blank	94	106	102
MB 680-280483/5	Method Blank	96	104	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(34-130)	(25-130)	(32-130)	(27-130)	(36-130)	(30-130)
680-91117-6	MW-10	73	69	74	56	86	79
680-91117-6 MS	MW-10	5 X	9 X	7 X	4 X	40	18 X
680-91117-6 MSD	MW-10	59	63	66	59	74	73
680-91117-9	RAB-MW-1R	49	45	55	44	51	55
680-91117-10	FD1 (RAB-MW-1R)	52	44	58	48	56	57
680-91117-13	MW-7U	64	59	70	46	84	79
680-91117-15	MW-1	49	44	55	16 X	65	65
LCS 680-279737/7-A	Lab Control Sample	53	49	51	49	61	66
LCS 680-279877/4-A	Lab Control Sample	74	75	81	71	84	80
LCS 680-279879/6-A	Lab Control Sample	72	65	77	60	82	84
MB 680-279737/6-A	Method Blank	52	46	50	46	64	51
MB 680-279877/3-A	Method Blank	59	57	67	54	94	54
MB 680-279879/5-A	Method Blank	72	61	75	66	88	75

Surrogate Legend

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-280345/12
Matrix: Water
Analysis Batch: 280345

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			06/13/13 11:30	1
Acetonitrile	40	U	40	10	ug/L			06/13/13 11:30	1
Acrolein	20	U	20	7.4	ug/L			06/13/13 11:30	1
Acrylonitrile	20	U	20	7.2	ug/L			06/13/13 11:30	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			06/13/13 11:30	1
Benzene	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
Bromoform	1.0	U	1.0	0.50	ug/L			06/13/13 11:30	1
Bromomethane	5.0	U	5.0	2.0	ug/L			06/13/13 11:30	1
2-Butanone	10	U	10	1.0	ug/L			06/13/13 11:30	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			06/13/13 11:30	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			06/13/13 11:30	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
Chloroethane	5.0	U	5.0	2.0	ug/L			06/13/13 11:30	1
Chloroform	1.0	U	1.0	0.14	ug/L			06/13/13 11:30	1
Chloromethane	1.0	U	1.0	0.33	ug/L			06/13/13 11:30	1
Chloroprene	1.0	U	1.0	0.30	ug/L			06/13/13 11:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 11:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			06/13/13 11:30	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			06/13/13 11:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			06/13/13 11:30	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			06/13/13 11:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/13/13 11:30	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			06/13/13 11:30	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			06/13/13 11:30	1
Diethyl ether	10	U	10	1.0	ug/L			06/13/13 11:30	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			06/13/13 11:30	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
2-Hexanone	10	U	10	1.0	ug/L			06/13/13 11:30	1
Iodomethane	5.0	U	5.0	1.0	ug/L			06/13/13 11:30	1
Isobutyl alcohol	40	U	40	11	ug/L			06/13/13 11:30	1
Methacrylonitrile	20	U	20	3.3	ug/L			06/13/13 11:30	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			06/13/13 11:30	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			06/13/13 11:30	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			06/13/13 11:30	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			06/13/13 11:30	1
n-Heptane	1.0	U	1.0	0.42	ug/L			06/13/13 11:30	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			06/13/13 11:30	1
Propionitrile	20	U	20	4.6	ug/L			06/13/13 11:30	1
Styrene	1.0	U	1.0	0.11	ug/L			06/13/13 11:30	1
t-Butanol	5.0	U	5.0	2.6	ug/L			06/13/13 11:30	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			06/13/13 11:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			06/13/13 11:30	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/13/13 11:30	1
Toluene	1.0	U	1.0	0.33	ug/L			06/13/13 11:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-280345/12
Matrix: Water
Analysis Batch: 280345

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			06/13/13 11:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			06/13/13 11:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			06/13/13 11:30	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			06/13/13 11:30	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			06/13/13 11:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			06/13/13 11:30	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/13/13 11:30	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			06/13/13 11:30	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			06/13/13 11:30	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			06/13/13 11:30	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			06/13/13 11:30	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			06/13/13 11:30	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			06/13/13 11:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*06/13/13 11:30*	*1*
Dibromofluoromethane	*106*		*70 - 130*		*06/13/13 11:30*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/13/13 11:30*	*1*

Lab Sample ID: LCS 680-280345/4
Matrix: Water
Analysis Batch: 280345

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	96.8		ug/L		97	39 - 162
Benzene	50.0	49.2		ug/L		98	74 - 123
Bromodichloromethane	50.0	51.9		ug/L		104	72 - 129
Bromoform	50.0	46.9		ug/L		94	60 - 134
Bromomethane	50.0	34.4		ug/L		69	10 - 171
2-Butanone	100	105		ug/L		105	55 - 142
Carbon disulfide	50.0	48.0		ug/L		96	63 - 142
Carbon tetrachloride	50.0	51.7		ug/L		103	70 - 131
Chlorobenzene	50.0	49.8		ug/L		100	79 - 120
Chloroethane	50.0	46.6		ug/L		93	47 - 148
Chloroform	50.0	47.9		ug/L		96	76 - 128
Chloromethane	50.0	49.6		ug/L		99	47 - 151
cis-1,2-Dichloroethene	50.0	47.0		ug/L		94	78 - 127
cis-1,3-Dichloropropene	50.0	52.3		ug/L		105	73 - 128
Dibromochloromethane	50.0	40.6		ug/L		81	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	41.1		ug/L		82	57 - 126
1,2-Dibromoethane	50.0	50.9		ug/L		102	75 - 127
Dibromomethane	50.0	49.3		ug/L		99	75 - 122
Dichlorodifluoromethane	50.0	44.2		ug/L		88	41 - 165
1,1-Dichloroethane	50.0	48.6		ug/L		97	69 - 132
1,2-Dichloroethane	50.0	50.3		ug/L		101	75 - 120
1,1-Dichloroethene	50.0	46.1		ug/L		92	73 - 134
1,2-Dichloropropane	50.0	49.9		ug/L		100	71 - 126
Diethyl ether	50.0	52.8		ug/L		106	40 - 160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-280345/4
Matrix: Water
Analysis Batch: 280345

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	50.0	49.8		ug/L		100	78 - 125
2-Hexanone	100	97.9		ug/L		98	52 - 149
Methylene Chloride	50.0	46.2		ug/L		92	79 - 124
4-Methyl-2-pentanone (MIBK)	100	102		ug/L		102	51 - 143
Methyl tert-butyl ether	100	99.6		ug/L		100	76 - 126
Styrene	50.0	48.7		ug/L		97	75 - 129
t-Butanol	50.0	45.3		ug/L		91	49 - 148
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/L		102	68 - 132
1,1,2,2-Tetrachloroethane	50.0	48.2		ug/L		96	71 - 127
Tetrachloroethene	50.0	47.9		ug/L		96	77 - 128
Toluene	50.0	50.2		ug/L		100	77 - 125
trans-1,2-Dichloroethene	50.0	47.2		ug/L		94	78 - 130
trans-1,3-Dichloropropene	50.0	52.6		ug/L		105	72 - 127
1,2,3-Trichlorobenzene	50.0	45.6		ug/L		91	63 - 136
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	76 - 126
1,1,2-Trichloroethane	50.0	50.2		ug/L		100	69 - 127
Trichloroethene	50.0	49.5		ug/L		99	80 - 120
Trichloroethylene	50.0	49.5		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	47.3		ug/L		95	66 - 144
1,2,3-Trichloropropane	50.0	46.6		ug/L		93	74 - 126
Vinyl acetate	100	112		ug/L		112	10 - 200
Vinyl chloride	50.0	48.0		ug/L		96	58 - 141
Xylenes, Total	150	146		ug/L		98	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-280345/5
Matrix: Water
Analysis Batch: 280345

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
Acetone	100	98.2		ug/L		98	39 - 162	1	50
Benzene	50.0	50.5		ug/L		101	74 - 123	3	30
Bromodichloromethane	50.0	52.3		ug/L		105	72 - 129	1	30
Bromoform	50.0	48.8		ug/L		98	60 - 134	4	30
Bromomethane	50.0	35.6		ug/L		71	10 - 171	3	50
2-Butanone	100	111		ug/L		111	55 - 142	5	30
Carbon disulfide	50.0	50.2		ug/L		100	63 - 142	5	30
Carbon tetrachloride	50.0	54.1		ug/L		108	70 - 131	5	30
Chlorobenzene	50.0	51.0		ug/L		102	79 - 120	2	30
Chloroethane	50.0	44.7		ug/L		89	47 - 148	4	40
Chloroform	50.0	48.9		ug/L		98	76 - 128	2	30
Chloromethane	50.0	45.2		ug/L		90	47 - 151	9	30
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	78 - 127	3	30
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	73 - 128	12	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-280345/5
Matrix: Water
Analysis Batch: 280345

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
Dibromochloromethane			50.0	41.6		ug/L		83	63 - 134	2	50
1,2-Dibromo-3-Chloropropane			50.0	43.6		ug/L		87	57 - 126	6	50
1,2-Dibromoethane			50.0	52.8		ug/L		106	75 - 127	4	30
Dibromomethane			50.0	52.3		ug/L		105	75 - 122	6	30
Dichlorodifluoromethane			50.0	41.5		ug/L		83	41 - 165	6	50
1,1-Dichloroethane			50.0	46.6		ug/L		93	69 - 132	4	30
1,2-Dichloroethane			50.0	50.0		ug/L		100	75 - 120	0	30
1,1-Dichloroethene			50.0	47.0		ug/L		94	73 - 134	2	30
1,2-Dichloropropane			50.0	45.0		ug/L		90	71 - 126	10	30
Diethyl ether			50.0	52.7		ug/L		105	40 - 160	0	50
Ethylbenzene			50.0	49.9		ug/L		100	78 - 125	0	30
2-Hexanone			100	104		ug/L		104	52 - 149	6	30
Methylene Chloride			50.0	49.5		ug/L		99	79 - 124	7	30
4-Methyl-2-pentanone (MIBK)			100	109		ug/L		109	51 - 143	6	30
Methyl tert-butyl ether			100	102		ug/L		102	76 - 126	2	30
Styrene			50.0	49.1		ug/L		98	75 - 129	1	30
t-Butanol			50.0	46.5		ug/L		93	49 - 148	3	50
1,1,1,2-Tetrachloroethane			50.0	50.7		ug/L		101	68 - 132	0	30
1,1,2,2-Tetrachloroethane			50.0	49.8		ug/L		100	71 - 127	3	30
Tetrachloroethene			50.0	49.4		ug/L		99	77 - 128	3	30
Toluene			50.0	51.5		ug/L		103	77 - 125	2	30
trans-1,2-Dichloroethene			50.0	49.3		ug/L		99	78 - 130	4	30
trans-1,3-Dichloropropene			50.0	47.6		ug/L		95	72 - 127	10	50
1,2,3-Trichlorobenzene			50.0	47.3		ug/L		95	63 - 136	3	30
1,1,1-Trichloroethane			50.0	49.2		ug/L		98	76 - 126	1	30
1,1,2-Trichloroethane			50.0	54.0		ug/L		108	69 - 127	7	30
Trichloroethene			50.0	47.6		ug/L		95	80 - 120	4	30
Trichloroethylene			50.0	47.6		ug/L		95	80 - 120	4	30
Trichlorofluoromethane			50.0	46.4		ug/L		93	66 - 144	2	30
1,2,3-Trichloropropane			50.0	42.4		ug/L		85	74 - 126	9	30
Vinyl acetate			100	131		ug/L		131	10 - 200	16	30
Vinyl chloride			50.0	45.0		ug/L		90	58 - 141	6	30
Xylenes, Total			150	147		ug/L		98	80 - 124	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane	*107*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 680-280483/5
Matrix: Water
Analysis Batch: 280483

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			06/14/13 11:03	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/14/13 11:03	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			06/14/13 11:03	1
Diethyl ether	10	U	10	1.0	ug/L			06/14/13 11:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-280483/5
Matrix: Water
Analysis Batch: 280483

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U	5.0	2.6	ug/L			06/14/13 11:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/14/13 11:03	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			06/14/13 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*06/14/13 11:03*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*06/14/13 11:03*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/14/13 11:03*	*1*

Lab Sample ID: LCS 680-280483/4
Matrix: Water
Analysis Batch: 280483

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	48.3		ug/L		97	76 - 128
1,1-Dichloroethane	50.0	48.7		ug/L		97	69 - 132
1,2-Dichloroethane	50.0	48.2		ug/L		96	75 - 120
Diethyl ether	50.0	53.8		ug/L		108	40 - 160
t-Butanol	50.0	46.4		ug/L		93	49 - 148
Tetrachloroethene	50.0	47.9		ug/L		96	77 - 128
Trichloroethene	50.0	48.0		ug/L		96	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 680-280483/7
Matrix: Water
Analysis Batch: 280483

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
Chloroform	50.0	48.0		ug/L		96	76 - 128	1	30
1,1-Dichloroethane	50.0	48.3		ug/L		97	69 - 132	1	30
1,2-Dichloroethane	50.0	50.0		ug/L		100	75 - 120	4	30
Diethyl ether	50.0	54.6		ug/L		109	40 - 160	2	50
t-Butanol	50.0	47.1		ug/L		94	49 - 148	1	50
Tetrachloroethene	50.0	47.8		ug/L		96	77 - 128	0	30
Trichloroethene	50.0	49.4		ug/L		99	80 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-91117-6 MS
Matrix: Water
Analysis Batch: 280483

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.78	J	50.0	50.5		ug/L		99	76 - 128
1,1-Dichloroethane	0.98		50.0	49.3		ug/L		97	69 - 132
1,2-Dichloroethane	1.0	U	50.0	49.0		ug/L		98	75 - 120
Diethyl ether	14		50.0	75.6		ug/L		124	40 - 160
t-Butanol	5.0		50.0	52.9		ug/L		106	49 - 148
Tetrachloroethene	8.4		50.0	59.1		ug/L		101	77 - 128
Trichloroethene	1.1		50.0	49.2		ug/L		96	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane	*108*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 680-91117-6 MSD
Matrix: Water
Analysis Batch: 280483

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	0.78	J	50.0	51.2		ug/L		101	76 - 128	1	30
1,1-Dichloroethane	0.98		50.0	50.3		ug/L		99	69 - 132	2	30
1,2-Dichloroethane	1.0	U	50.0	47.7		ug/L		95	75 - 120	3	30
Diethyl ether	14		50.0	54.6		ug/L		82	40 - 160	32	50
t-Butanol	5.0		50.0	51.8		ug/L		104	49 - 148	2	50
Tetrachloroethene	8.4		50.0	59.1		ug/L		101	77 - 128	0	30
Trichloroethene	1.1		50.0	48.5		ug/L		95	80 - 120	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*108*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Acetophenone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		06/10/13 15:22	06/28/13 13:03	1
Aniline	2.0	U	2.0	0.97	ug/L		06/10/13 15:22	06/28/13 13:03	1
Anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		06/10/13 15:22	06/28/13 13:03	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.64	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Chrysene	0.20	U	0.20	0.045	ug/L		06/10/13 15:22	06/28/13 13:03	1
Diallate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Diethyl phthalate	1.0	U	1.0	0.11	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dimethoate	2.0	U	2.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/28/13 13:03	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		06/10/13 15:22	06/28/13 13:03	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		06/10/13 15:22	06/28/13 13:03	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
Di-n-octyl phthalate	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		06/10/13 15:22	06/28/13 13:03	1
Disulfoton	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Famphur	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/28/13 13:03	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Fluorene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachlorophene	500	U	500	25	ug/L		06/10/13 15:22	06/28/13 13:03	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Isophorone	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Isosafrole	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Methapyrilene	200	U	200	1.3	ug/L		06/10/13 15:22	06/28/13 13:03	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		06/10/13 15:22	06/28/13 13:03	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		06/10/13 15:22	06/28/13 13:03	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		06/10/13 15:22	06/28/13 13:03	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		06/10/13 15:22	06/28/13 13:03	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenacetin	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenol	1.0	U	1.0	0.13	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phenyl ether	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Phorate	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/28/13 13:03	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279737/6-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Picoline	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:03	1
p-Phenylene diamine	200	U	200	16	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pronamide	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pyrene	0.20	U	0.20	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Pyridine	5.0	U	5.0	0.73	ug/L		06/10/13 15:22	06/28/13 13:03	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		06/10/13 15:22	06/28/13 13:03	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
Thionazin	1.0	U	1.0	0.20	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		06/10/13 15:22	06/28/13 13:03	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		06/10/13 15:22	06/28/13 13:03	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		06/10/13 15:22	06/28/13 13:03	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown Aldol Condensate	*10.6*	*T A J*	*ug/L*		*3.98*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.584*	*T J*	*ug/L*		*4.02*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.302*	*T J*	*ug/L*		*4.48*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*1.62*	*T J*	*ug/L*		*4.92*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*3.02*	*T J*	*ug/L*		*4.98*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.267*	*T J*	*ug/L*		*5.67*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.350*	*T J*	*ug/L*		*6.10*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.640*	*T J*	*ug/L*		*8.27*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Unknown	*0.253*	*T J*	*ug/L*		*10.74*		*06/10/13 15:22*	*06/28/13 13:03*	*1*
Oleic Acid	*0.368*	*T J N*	*ug/L*		*11.78*	*112-80-1*	*06/10/13 15:22*	*06/28/13 13:03*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*34 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*
2-Fluorophenol	*46*		*25 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*
Nitrobenzene-d5	*50*		*32 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*
Phenol-d5	*46*		*27 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*
Terphenyl-d14	*64*		*36 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*
2,4,6-Tribromophenol	*51*		*30 - 130*	*06/10/13 15:22*	*06/28/13 13:03*	*1*

Lab Sample ID: LCS 680-279737/7-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	6.40		ug/L		64	42 - 130
Acenaphthylene	10.0	7.08		ug/L		71	45 - 130
Acetophenone	10.0	6.20		ug/L		62	45 - 130
Aniline	10.0	6.03		ug/L		60	10 - 130
Anthracene	10.0	6.98		ug/L		70	58 - 130
Benzo[a]anthracene	10.0	7.35		ug/L		73	42 - 143

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-279737/7-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	10.0	7.23		ug/L		72	45 - 151
Benzo[b]fluoranthene	10.0	7.72		ug/L		77	41 - 140
Benzo[g,h,i]perylene	10.0	6.30		ug/L		63	27 - 134
Benzo[k]fluoranthene	10.0	7.27		ug/L		73	45 - 140
Benzyl alcohol	10.0	6.56		ug/L		66	34 - 130
1,1'-Biphenyl	10.0	6.05		ug/L		60	50 - 130
Bis(2-chloroethoxy)methane	10.0	6.34		ug/L		63	47 - 130
Bis(2-chloroethyl)ether	10.0	5.74		ug/L		57	36 - 130
Bis(2-ethylhexyl) phthalate	10.0	7.23		ug/L		72	10 - 158
4-Bromophenyl phenyl ether	10.0	7.12		ug/L		71	44 - 130
Butyl benzyl phthalate	10.0	6.95		ug/L		69	60 - 130
4-Chloroaniline	10.0	6.53		ug/L		65	17 - 130
4-Chloro-3-methylphenol	10.0	6.98		ug/L		70	54 - 130
2-Chloronaphthalene	10.0	5.95		ug/L		59	48 - 130
2-Chlorophenol	10.0	6.50		ug/L		65	45 - 130
4-Chlorophenyl phenyl ether	10.0	6.52		ug/L		65	52 - 130
Chrysene	10.0	7.25		ug/L		73	40 - 142
Dibenz(a,h)anthracene	10.0	6.22		ug/L		62	38 - 130
Dibenzofuran	10.0	6.85		ug/L		68	56 - 130
1,2-Dichlorobenzene	10.0	5.08		ug/L		51	36 - 130
1,3-Dichlorobenzene	10.0	4.79		ug/L		48	31 - 130
1,4-Dichlorobenzene	10.0	4.89		ug/L		49	34 - 130
3,3'-Dichlorobenzidine	10.0	6.09	J	ug/L		61	10 - 158
2,4-Dichlorophenol	10.0	7.05		ug/L		70	58 - 130
Diethyl phthalate	10.0	6.83		ug/L		68	60 - 130
2,4-Dimethylphenol	10.0	5.58		ug/L		56	41 - 130
Dimethyl phthalate	10.0	6.64		ug/L		66	58 - 130
Di-n-butyl phthalate	10.0	7.97		ug/L		80	59 - 130
4,6-Dinitro-2-methylphenol	10.0	5.98		ug/L		60	10 - 182
2,4-Dinitrophenol	10.0	4.72	J	ug/L		47	10 - 200
2,4-Dinitrotoluene	10.0	7.09		ug/L		71	57 - 130
2,6-Dinitrotoluene	10.0	7.07		ug/L		71	53 - 130
Di-n-octyl phthalate	10.0	7.30		ug/L		73	19 - 130
1,4-Dioxane	10.0	5.51		ug/L		55	10 - 130
Fluoranthene	10.0	7.58		ug/L		76	46 - 136
Fluorene	10.0	7.00		ug/L		70	48 - 130
Hexachlorobenzene	10.0	7.25		ug/L		72	49 - 130
Hexachlorobutadiene	10.0	5.61		ug/L		56	36 - 130
Hexachlorocyclopentadiene	10.0	2.25		ug/L		22	16 - 130
Hexachloroethane	10.0	4.71		ug/L		47	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	5.91		ug/L		59	12 - 130
Isophorone	10.0	6.70		ug/L		67	45 - 130
2-Methylnaphthalene	10.0	6.13		ug/L		61	51 - 130
2-Methylphenol	10.0	6.38		ug/L		64	49 - 130
3 & 4 Methylphenol	10.0	6.42		ug/L		64	55 - 130
Naphthalene	10.0	5.90		ug/L		59	35 - 130
2-Nitroaniline	10.0	6.13		ug/L		61	48 - 130
3-Nitroaniline	10.0	6.63		ug/L		66	18 - 147

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-279737/7-A
Matrix: Water
Analysis Batch: 282521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	10.0	7.89		ug/L		79	31 - 147
Nitrobenzene	10.0	6.17		ug/L		62	45 - 130
2-Nitrophenol	10.0	6.86		ug/L		69	49 - 130
4-Nitrophenol	10.0	6.12		ug/L		61	36 - 132
N-Nitrosodimethylamine	10.0	5.37		ug/L		54	29 - 130
N-Nitrosodi-n-propylamine	10.0	6.32		ug/L		63	42 - 130
N-Nitrosodiphenylamine	10.0	6.13		ug/L		61	38 - 130
2,2'-oxybis[1-chloropropane]	10.0	5.25		ug/L		52	39 - 130
Pentachlorophenol	10.0	7.27		ug/L		73	12 - 156
Phenanthrene	10.0	6.99		ug/L		70	45 - 134
Phenol	10.0	6.25		ug/L		62	44 - 130
Pyrene	10.0	7.39		ug/L		74	47 - 143
Pyridine	10.0	5.04		ug/L		50	10 - 130
1,2,4-Trichlorobenzene	10.0	5.31		ug/L		53	39 - 130
2,4,5-Trichlorophenol	10.0	6.67		ug/L		67	61 - 130
2,4,6-Trichlorophenol	10.0	6.94		ug/L		69	61 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*53*		*34 - 130*
2-Fluorophenol	*49*		*25 - 130*
Nitrobenzene-d5	*51*		*32 - 130*
Phenol-d5	*49*		*27 - 130*
Terphenyl-d14	*61*		*36 - 130*
2,4,6-Tribromophenol	*66*		*30 - 130*

Lab Sample ID: MB 680-279877/3-A
Matrix: Water
Analysis Batch: 281094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/11/13 15:38	06/18/13 20:12	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		06/11/13 15:38	06/18/13 20:12	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/11/13 15:38	06/18/13 20:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*34 - 130*	*06/11/13 15:38*	*06/18/13 20:12*	*1*
2-Fluorophenol (Surr)	*57*		*25 - 130*	*06/11/13 15:38*	*06/18/13 20:12*	*1*
Nitrobenzene-d5 (Surr)	*67*		*32 - 130*	*06/11/13 15:38*	*06/18/13 20:12*	*1*
Phenol-d5 (Surr)	*54*		*27 - 130*	*06/11/13 15:38*	*06/18/13 20:12*	*1*
Terphenyl-d14 (Surr)	*94*		*36 - 130*	*06/11/13 15:38*	*06/18/13 20:12*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*30 - 130*	*06/11/13 15:38*	*06/18/13 20:12*	*1*

Lab Sample ID: LCS 680-279877/4-A
Matrix: Water
Analysis Batch: 281094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	10.0	9.38		ug/L		94	36 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-279877/4-A
Matrix: Water
Analysis Batch: 281094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279877

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.06		ug/L		91	10 - 130		
Naphthalene			10.0	7.69		ug/L		77	35 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*34 - 130*
2-Fluorophenol (Surr)	*75*		*25 - 130*
Nitrobenzene-d5 (Surr)	*81*		*32 - 130*
Phenol-d5 (Surr)	*71*		*27 - 130*
Terphenyl-d14 (Surr)	*84*		*36 - 130*
2,4,6-Tribromophenol (Surr)	*80*		*30 - 130*

Lab Sample ID: 680-91117-6 MS
Matrix: Water
Analysis Batch: 281094

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 279877

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	27		9.99	12.3	F	ug/L		-148	10 - 130		
Bis(2-chloroethyl)ether	0.99		9.99	0.861	J F	ug/L		9	36 - 130		
Naphthalene	0.20		9.99	0.589	F	ug/L		6	35 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*18*	*X*	*30 - 130*
2-Fluorobiphenyl	*5*	*X*	*34 - 130*
2-Fluorophenol (Surr)	*9*	*X*	*25 - 130*
Terphenyl-d14 (Surr)	*40*		*36 - 130*
Phenol-d5 (Surr)	*4*	*X*	*27 - 130*
Nitrobenzene-d5 (Surr)	*7*	*X*	*32 - 130*

Lab Sample ID: 680-91117-6 MSD
Matrix: Water
Analysis Batch: 281094

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 279877

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	27		8.99	30.5	F	ug/L		38	10 - 130	85	50
Bis(2-chloroethyl)ether	0.99		8.99	6.57	F	ug/L		73	36 - 130	154	50
Naphthalene	0.20		8.99	5.16	F	ug/L		57	35 - 130	159	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*73*		*30 - 130*
2-Fluorobiphenyl	*59*		*34 - 130*
2-Fluorophenol (Surr)	*63*		*25 - 130*
Terphenyl-d14 (Surr)	*74*		*36 - 130*
Phenol-d5 (Surr)	*59*		*27 - 130*
Nitrobenzene-d5 (Surr)	*66*		*32 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-279879/5-A
Matrix: Water
Analysis Batch: 281653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		06/11/13 15:38	06/23/13 13:01	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		06/11/13 15:38	06/23/13 13:01	1
Naphthalene	0.20	U	0.20	0.10	ug/L		06/11/13 15:38	06/23/13 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 130*	*06/11/13 15:38*	*06/23/13 13:01*	*1*
2-Fluorophenol (Surr)	*61*		*25 - 130*	*06/11/13 15:38*	*06/23/13 13:01*	*1*
Nitrobenzene-d5 (Surr)	*75*		*32 - 130*	*06/11/13 15:38*	*06/23/13 13:01*	*1*
Phenol-d5 (Surr)	*66*		*27 - 130*	*06/11/13 15:38*	*06/23/13 13:01*	*1*
Terphenyl-d14 (Surr)	*88*		*36 - 130*	*06/11/13 15:38*	*06/23/13 13:01*	*1*
2,4,6-Tribromophenol (Surr)	*75*		*30 - 130*	*06/11/13 15:38*	*06/23/13 13:01*	*1*

Lab Sample ID: LCS 680-279879/6-A
Matrix: Water
Analysis Batch: 281653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	10.0	7.98		ug/L		80	36 - 130
1,4-Dioxane	10.0	6.54		ug/L		65	10 - 130
Naphthalene	10.0	6.30		ug/L		63	35 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*34 - 130*
2-Fluorophenol (Surr)	*65*		*25 - 130*
Nitrobenzene-d5 (Surr)	*77*		*32 - 130*
Phenol-d5 (Surr)	*60*		*27 - 130*
Terphenyl-d14 (Surr)	*82*		*36 - 130*
2,4,6-Tribromophenol (Surr)	*84*		*30 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-280283/3
Matrix: Water
Analysis Batch: 280283

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			06/12/13 13:37	1
Methanol	5.0	U	5.0	1.0	mg/L			06/12/13 13:37	1

Lab Sample ID: LCS 680-280283/4
Matrix: Water
Analysis Batch: 280283

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethanol	20.0	18.4		mg/L		92	38 - 156
Methanol	20.0	18.8		mg/L		94	43 - 143

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: LCSD 680-280283/19
Matrix: Water
Analysis Batch: 280283

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
Ethanol			20.0	18.3		mg/L		92	38 - 156	0	50
Methanol			20.0	19.2		mg/L		96	43 - 143	2	50

Lab Sample ID: 680-91117-9 MS
Matrix: Water
Analysis Batch: 280283

Client Sample ID: RAB-MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	5.0	U	20.0	16.2		mg/L		81	43 - 143

Lab Sample ID: 680-91117-9 MSD
Matrix: Water
Analysis Batch: 280283

Client Sample ID: RAB-MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methanol	5.0	U	20.0	16.4		mg/L		82	43 - 143	1	50

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-280165/1-A
Matrix: Water
Analysis Batch: 280701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280165

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		06/12/13 14:35	06/14/13 04:10	1
Antimony	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:10	1
Barium	5.0	U	5.0	1.4	ug/L		06/12/13 14:35	06/14/13 04:10	1
Beryllium	0.50	U	0.50	0.15	ug/L		06/12/13 14:35	06/14/13 04:10	1
Cadmium	0.50	U	0.50	0.13	ug/L		06/12/13 14:35	06/14/13 04:10	1
Calcium	500	U	500	170	ug/L		06/12/13 14:35	06/14/13 04:10	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 14:35	06/14/13 04:10	1
Cobalt	0.50	U	0.50	0.12	ug/L		06/12/13 14:35	06/14/13 04:10	1
Copper	5.0	U	5.0	1.1	ug/L		06/12/13 14:35	06/14/13 04:10	1
Iron	100	U	100	44	ug/L		06/12/13 14:35	06/14/13 04:10	1
Lead	1.5	U	1.5	0.50	ug/L		06/12/13 14:35	06/14/13 04:10	1
Magnesium	250	U	250	100	ug/L		06/12/13 14:35	06/14/13 04:10	1
Manganese	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:10	1
Mercury	0.80	U	0.80	0.40	ug/L		06/12/13 14:35	06/14/13 04:10	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/12/13 14:35	06/14/13 04:10	1
Nickel	5.0	U	5.0	2.0	ug/L		06/12/13 14:35	06/14/13 04:10	1
Potassium	1000	U	1000	330	ug/L		06/12/13 14:35	06/14/13 04:10	1
Selenium	2.5	U	2.5	1.1	ug/L		06/12/13 14:35	06/14/13 04:10	1
Silver	1.0	U	1.0	0.18	ug/L		06/12/13 14:35	06/14/13 04:10	1
Sodium	500	U	500	170	ug/L		06/12/13 14:35	06/14/13 04:10	1
Thallium	1.0	U	1.0	0.25	ug/L		06/12/13 14:35	06/14/13 04:10	1
Vanadium	10	U	10	3.2	ug/L		06/12/13 14:35	06/14/13 04:10	1
Zinc	20	U	20	8.4	ug/L		06/12/13 14:35	06/14/13 04:10	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-280165/2-A
Matrix: Water
Analysis Batch: 280701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5110		ug/L		102	75 - 125
Antimony	50.0	54.6		ug/L		109	75 - 125
Barium	100	105		ug/L		105	75 - 125
Beryllium	50.0	49.6		ug/L		99	75 - 125
Cadmium	50.0	50.8		ug/L		102	75 - 125
Calcium	5000	5190		ug/L		104	75 - 125
Chromium	100	99.5		ug/L		99	75 - 125
Cobalt	50.0	47.9		ug/L		96	75 - 125
Copper	100	101		ug/L		101	75 - 125
Iron	5000	5110		ug/L		102	75 - 125
Lead	50.0	49.3		ug/L		99	75 - 125
Magnesium	5000	5050		ug/L		101	75 - 125
Manganese	500	504		ug/L		101	75 - 125
Mercury	5.00	5.72		ug/L		114	75 - 125
Arsenic	100	108		ug/L		108	75 - 125
Nickel	100	100		ug/L		100	75 - 125
Potassium	5000	4960		ug/L		99	75 - 125
Selenium	100	103		ug/L		103	75 - 125
Silver	50.0	49.4		ug/L		99	75 - 125
Sodium	5000	5070		ug/L		101	75 - 125
Thallium	40.0	40.4		ug/L		101	75 - 125
Vanadium	100	98.4		ug/L		98	75 - 125
Zinc	100	106		ug/L		106	75 - 125

Lab Sample ID: 680-91117-6 MS
Matrix: Water
Analysis Batch: 280701

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 280165

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	80	J	5000	5350		ug/L		105	75 - 125
Barium	15		100	122		ug/L		107	75 - 125
Cadmium	3.8		50.0	54.5		ug/L		101	75 - 125
Chromium	5.0		100	97.9		ug/L		98	75 - 125
Cobalt	67		50.0	117		ug/L		100	75 - 125
Iron	100		5000	5080		ug/L		99	75 - 125
Lead	1.5		50.0	48.1		ug/L		96	75 - 125
Manganese	3600		500	4290	4	ug/L		131	75 - 125
Mercury	0.80		5.00	5.88		ug/L		118	75 - 125
Nickel	58		100	156		ug/L		98	75 - 125
Vanadium	10		100	99.0		ug/L		99	75 - 125
Arsenic	2.5		100	105		ug/L		105	75 - 125

Lab Sample ID: 680-91117-6 MSD
Matrix: Water
Analysis Batch: 280701

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 280165

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	80	J	5000	5590		ug/L		110	75 - 125	4	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-91117-6 MSD
Matrix: Water
Analysis Batch: 280701

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 280165

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	15		100	122		ug/L		107	75 - 125	0	20
Cadmium	3.8		50.0	53.6		ug/L		99	75 - 125	2	20
Chromium	5.0		100	102		ug/L		102	75 - 125	4	20
Cobalt	67		50.0	114		ug/L		94	75 - 125	2	20
Iron	100		5000	5550		ug/L		109	75 - 125	9	20
Lead	1.5		50.0	48.4		ug/L		97	75 - 125	1	20
Manganese	3600		500	4170	4	ug/L		106	75 - 125	3	20
Mercury	0.80		5.00	6.01		ug/L		120	75 - 125	2	20
Nickel	58		100	160		ug/L		101	75 - 125	2	20
Vanadium	10		100	102		ug/L		102	75 - 125	3	20
Arsenic	2.5		100	108		ug/L		108	75 - 125	3	20

Lab Sample ID: MB 680-280149/1-A
Matrix: Water
Analysis Batch: 280511

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 280149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	23	ug/L		06/12/13 13:49	06/13/13 20:56	1
Antimony	5.0	U	5.0	2.3	ug/L		06/12/13 13:49	06/13/13 20:56	1
Barium	5.0	U	5.0	1.3	ug/L		06/12/13 13:49	06/13/13 20:56	1
Beryllium	0.50	U	0.50	0.25	ug/L		06/12/13 13:49	06/13/13 20:56	1
Cadmium	0.50	U	0.50	0.095	ug/L		06/12/13 13:49	06/13/13 20:56	1
Chromium	5.0	U	5.0	2.5	ug/L		06/12/13 13:49	06/13/13 20:56	1
Cobalt	0.50	U	0.50	0.15	ug/L		06/12/13 13:49	06/13/13 20:56	1
Copper	5.0	U	5.0	1.1	ug/L		06/12/13 13:49	06/13/13 20:56	1
Iron	100	U	100	33	ug/L		06/12/13 13:49	06/13/13 20:56	1
Lead	1.5	U	1.5	0.20	ug/L		06/12/13 13:49	06/13/13 20:56	1
Manganese	5.0	U	5.0	1.0	ug/L		06/12/13 13:49	06/13/13 20:56	1
Mercury	0.80	U	0.80	0.40	ug/L		06/12/13 13:49	06/13/13 20:56	1
Arsenic	2.5	U	2.5	1.3	ug/L		06/12/13 13:49	06/13/13 20:56	1
Nickel	5.0	U	5.0	2.0	ug/L		06/12/13 13:49	06/13/13 20:56	1
Selenium	2.5	U	2.5	1.0	ug/L		06/12/13 13:49	06/13/13 20:56	1
Vanadium	10	U	10	3.8	ug/L		06/12/13 13:49	06/13/13 20:56	1

Lab Sample ID: LCS 680-280149/2-A
Matrix: Water
Analysis Batch: 280511

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 280149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4970		ug/L		99	75 - 125
Antimony	50.0	53.8		ug/L		108	75 - 125
Barium	100	102		ug/L		102	75 - 125
Beryllium	50.0	49.6		ug/L		99	75 - 125
Cadmium	50.0	51.6		ug/L		103	75 - 125
Chromium	100	99.4		ug/L		99	75 - 125
Cobalt	50.0	48.5		ug/L		97	75 - 125
Copper	100	101		ug/L		101	75 - 125
Iron	5000	4750		ug/L		95	75 - 125
Lead	50.0	47.1		ug/L		94	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-280149/2-A
Matrix: Water
Analysis Batch: 280511

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 280149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	500	508		ug/L		102	75 - 125
Mercury	5.00	5.64		ug/L		113	75 - 125
Arsenic	100	107		ug/L		107	75 - 125
Nickel	100	103		ug/L		103	75 - 125
Selenium	100	99.5		ug/L		100	75 - 125
Vanadium	100	99.2		ug/L		99	75 - 125

GC/MS VOA

Analysis Batch: 280345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-1	VFSP-MW-1	Total/NA	Water	8260B	
680-91117-2	LF-1	Total/NA	Water	8260B	
680-91117-3	LF-2	Total/NA	Water	8260B	
680-91117-4	NAT-4	Total/NA	Water	8260B	
680-91117-6	MW-10	Total/NA	Water	8260B	
680-91117-7	SDB-MW-1	Total/NA	Water	8260B	
680-91117-8	SDB-MW-3	Total/NA	Water	8260B	
680-91117-9	RAB-MW-1R	Total/NA	Water	8260B	
680-91117-9 - DL	RAB-MW-1R	Total/NA	Water	8260B	
680-91117-10	FD1 (RAB-MW-1R)	Total/NA	Water	8260B	
680-91117-10 - DL	FD1 (RAB-MW-1R)	Total/NA	Water	8260B	
680-91117-12	Trip Blank (lot # 040913)	Total/NA	Water	8260B	
680-91117-17	WWL-1	Total/NA	Water	8260B	
680-91117-22	Trip Blank (lot # 050613)	Total/NA	Water	8260B	
LCS 680-280345/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-280345/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-280345/12	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 280483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-6 MS	MW-10	Total/NA	Water	8260B	
680-91117-6 MSD	MW-10	Total/NA	Water	8260B	
680-91117-21	RAB-MW2	Total/NA	Water	8260B	
LCS 680-280483/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-280483/7	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-280483/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 279737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-9	RAB-MW-1R	Total/NA	Water	3520C	
680-91117-10	FD1 (RAB-MW-1R)	Total/NA	Water	3520C	
LCS 680-279737/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-279737/6-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 279877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-6	MW-10	Total/NA	Water	3520C	
680-91117-6 MS	MW-10	Total/NA	Water	3520C	
680-91117-6 MSD	MW-10	Total/NA	Water	3520C	
LCS 680-279877/4-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-279877/3-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 279879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-13	MW-7U	Total/NA	Water	3520C	
680-91117-15	MW-1	Total/NA	Water	3520C	
LCS 680-279879/6-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-279879/5-A	Method Blank	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Analysis Batch: 281094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-6	MW-10	Total/NA	Water	8270D LL	279877
680-91117-6 MS	MW-10	Total/NA	Water	8270D LL	279877
680-91117-6 MSD	MW-10	Total/NA	Water	8270D LL	279877
LCS 680-279877/4-A	Lab Control Sample	Total/NA	Water	8270D LL	279877
MB 680-279877/3-A	Method Blank	Total/NA	Water	8270D LL	279877

Analysis Batch: 281653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-13	MW-7U	Total/NA	Water	8270D LL	279879
680-91117-15	MW-1	Total/NA	Water	8270D LL	279879
LCS 680-279879/6-A	Lab Control Sample	Total/NA	Water	8270D LL	279879
MB 680-279879/5-A	Method Blank	Total/NA	Water	8270D LL	279879

Analysis Batch: 282521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-279737/7-A	Lab Control Sample	Total/NA	Water	8270D LL	279737
MB 680-279737/6-A	Method Blank	Total/NA	Water	8270D LL	279737

Analysis Batch: 282757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-9	RAB-MW-1R	Total/NA	Water	8270D LL	279737
680-91117-10	FD1 (RAB-MW-1R)	Total/NA	Water	8270D LL	279737

GC VOA

Analysis Batch: 280283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-3	LF-2	Total/NA	Water	8015C	
680-91117-9	RAB-MW-1R	Total/NA	Water	8015C	
680-91117-9 MS	RAB-MW-1R	Total/NA	Water	8015C	
680-91117-9 MSD	RAB-MW-1R	Total/NA	Water	8015C	
680-91117-10	FD1 (RAB-MW-1R)	Total/NA	Water	8015C	
680-91117-14	MW-7L	Total/NA	Water	8015C	
LCS 680-280283/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-280283/19	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-280283/3	Method Blank	Total/NA	Water	8015C	

Metals

Prep Batch: 280149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-21	RAB-MW2	Dissolved	Water	3005A	
LCS 680-280149/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-280149/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 280165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-1	VFSP-MW-1	Total/NA	Water	3010A	
680-91117-2	LF-1	Total/NA	Water	3010A	
680-91117-3	LF-2	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 280165 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-4	NAT-4	Total/NA	Water	3010A	
680-91117-5	FB-2 (Field Blank 2)	Total/NA	Water	3010A	
680-91117-6	MW-10	Total/NA	Water	3010A	
680-91117-6 MS	MW-10	Total/NA	Water	3010A	
680-91117-6 MSD	MW-10	Total/NA	Water	3010A	
680-91117-7	SDB-MW-1	Total/NA	Water	3010A	
680-91117-8	SDB-MW-3	Total/NA	Water	3010A	
680-91117-9	RAB-MW-1R	Total/NA	Water	3010A	
680-91117-10	FD1 (RAB-MW-1R)	Total/NA	Water	3010A	
680-91117-11	Equip Blank 2	Total/NA	Water	3010A	
680-91117-13	MW-7U	Total/NA	Water	3010A	
680-91117-14	MW-7L	Total/NA	Water	3010A	
680-91117-15	MW-1	Total/NA	Water	3010A	
680-91117-16	RAB-MW-4	Total/NA	Water	3010A	
680-91117-17	WWL-1	Total/NA	Water	3010A	
680-91117-18	WWL-2	Total/NA	Water	3010A	
680-91117-19	Field Duplicate #2	Total/NA	Water	3010A	
680-91117-20	RAB-MW3	Total/NA	Water	3010A	
680-91117-21	RAB-MW2	Total/NA	Water	3010A	
LCS 680-280165/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-280165/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 280511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-21	RAB-MW2	Dissolved	Water	6020A	280149
LCS 680-280149/2-A	Lab Control Sample	Total Recoverable	Water	6020A	280149
MB 680-280149/1-A	Method Blank	Total Recoverable	Water	6020A	280149

Analysis Batch: 280701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-1	VFSP-MW-1	Total/NA	Water	6020A	280165
680-91117-2	LF-1	Total/NA	Water	6020A	280165
680-91117-3	LF-2	Total/NA	Water	6020A	280165
680-91117-4	NAT-4	Total/NA	Water	6020A	280165
680-91117-5	FB-2 (Field Blank 2)	Total/NA	Water	6020A	280165
680-91117-6	MW-10	Total/NA	Water	6020A	280165
680-91117-6 MS	MW-10	Total/NA	Water	6020A	280165
680-91117-6 MSD	MW-10	Total/NA	Water	6020A	280165
680-91117-7	SDB-MW-1	Total/NA	Water	6020A	280165
680-91117-8	SDB-MW-3	Total/NA	Water	6020A	280165
680-91117-9	RAB-MW-1R	Total/NA	Water	6020A	280165
680-91117-10	FD1 (RAB-MW-1R)	Total/NA	Water	6020A	280165
680-91117-11	Equip Blank 2	Total/NA	Water	6020A	280165
680-91117-13	MW-7U	Total/NA	Water	6020A	280165
680-91117-13	MW-7U	Total/NA	Water	6020A	280165
680-91117-14	MW-7L	Total/NA	Water	6020A	280165
680-91117-15	MW-1	Total/NA	Water	6020A	280165
680-91117-16	RAB-MW-4	Total/NA	Water	6020A	280165
680-91117-17	WWL-1	Total/NA	Water	6020A	280165
680-91117-18	WWL-2	Total/NA	Water	6020A	280165
680-91117-18	WWL-2	Total/NA	Water	6020A	280165

Metals (Continued)

Analysis Batch: 280701 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-91117-19	Field Duplicate #2	Total/NA	Water	6020A	280165
680-91117-19	Field Duplicate #2	Total/NA	Water	6020A	280165
680-91117-20	RAB-MW3	Total/NA	Water	6020A	280165
680-91117-21	RAB-MW2	Total/NA	Water	6020A	280165
LCS 680-280165/2-A	Lab Control Sample	Total/NA	Water	6020A	280165
MB 680-280165/1-A	Method Blank	Total/NA	Water	6020A	280165

Client Sample ID: VFSP-MW-1

Lab Sample ID: 680-91117-1

Date Collected: 06/05/13 12:15
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 16:20	AJMC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 04:24	BWR	TAL SAV

Client Sample ID: LF-1

Lab Sample ID: 680-91117-2

Date Collected: 06/05/13 13:35
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 14:25	AJMC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 04:30	BWR	TAL SAV

Client Sample ID: LF-2

Lab Sample ID: 680-91117-3

Date Collected: 06/05/13 14:45
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 14:47	AJMC	TAL SAV
Total/NA	Analysis	8015C		1	280283	06/12/13 20:47	JNC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 04:37	BWR	TAL SAV

Client Sample ID: NAT-4

Lab Sample ID: 680-91117-4

Date Collected: 06/05/13 09:35
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	280345	06/13/13 17:11	AJMC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 04:44	BWR	TAL SAV

Client Sample ID: FB-2 (Field Blank 2)

Lab Sample ID: 680-91117-5

Date Collected: 06/05/13 13:40
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 04:50	BWR	TAL SAV

Client Sample ID: MW-10

Lab Sample ID: 680-91117-6

Date Collected: 06/06/13 10:50

Matrix: Water

Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 17:32	AJMC	TAL SAV
Total/NA	Prep	3520C			279877	06/11/13 15:38	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	281094	06/18/13 22:39	NED	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 04:57	BWR	TAL SAV

Client Sample ID: SDB-MW-1

Lab Sample ID: 680-91117-7

Date Collected: 06/06/13 12:15

Matrix: Water

Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 18:38	AJMC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 05:43	BWR	TAL SAV

Client Sample ID: SDB-MW-3

Lab Sample ID: 680-91117-8

Date Collected: 06/06/13 12:50

Matrix: Water

Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 19:00	AJMC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 05:50	BWR	TAL SAV

Client Sample ID: RAB-MW-1R

Lab Sample ID: 680-91117-9

Date Collected: 06/06/13 15:50

Matrix: Water

Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 12:36	AJMC	TAL SAV
Total/NA	Analysis	8260B	DL	1000	280345	06/13/13 15:59	AJMC	TAL SAV
Total/NA	Prep	3520C			279737	06/10/13 15:22	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	282757	06/29/13 18:35	NED	TAL SAV
Total/NA	Analysis	8015C		1	280283	06/12/13 22:46	JNC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 05:57	BWR	TAL SAV

Client Sample ID: FD1 (RAB-MW-1R)

Lab Sample ID: 680-91117-10

Date Collected: 06/06/13 15:55
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	280345	06/13/13 14:03	AJMC	TAL SAV
Total/NA	Analysis	8260B	DL	1000	280345	06/13/13 15:31	AJMC	TAL SAV
Total/NA	Prep	3520C			279737	06/10/13 15:22	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	282757	06/29/13 18:59	NED	TAL SAV
Total/NA	Analysis	8015C		1	280283	06/12/13 21:11	JNC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 06:04	BWR	TAL SAV

Client Sample ID: Equip Blank 2

Lab Sample ID: 680-91117-11

Date Collected: 06/06/13 16:00
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 06:10	BWR	TAL SAV

Client Sample ID: Trip Blank (lot # 040913)

Lab Sample ID: 680-91117-12

Date Collected: 06/06/13 00:00
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 12:13	AJMC	TAL SAV

Client Sample ID: MW-7U

Lab Sample ID: 680-91117-13

Date Collected: 06/05/13 10:25
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			279879	06/11/13 15:38	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	281653	06/23/13 13:51	NED	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		10	280701	06/14/13 13:26	BWR	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 06:17	BWR	TAL SAV

Client Sample ID: MW-7L

Lab Sample ID: 680-91117-14

Date Collected: 06/05/13 12:45
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	280283	06/12/13 21:35	JNC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV

Client Sample ID: MW-7L

Lab Sample ID: 680-91117-14

Date Collected: 06/05/13 12:45
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		1	280701	06/14/13 06:24	BWR	TAL SAV

Client Sample ID: MW-1

Lab Sample ID: 680-91117-15

Date Collected: 06/05/13 13:15
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			279879	06/11/13 15:38	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	281653	06/23/13 14:16	NED	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 06:30	BWR	TAL SAV

Client Sample ID: RAB-MW-4

Lab Sample ID: 680-91117-16

Date Collected: 06/05/13 16:35
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 06:50	BWR	TAL SAV

Client Sample ID: WWL-1

Lab Sample ID: 680-91117-17

Date Collected: 06/06/13 10:05
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	280345	06/13/13 15:09	AJMC	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 06:57	BWR	TAL SAV

Client Sample ID: WWL-2

Lab Sample ID: 680-91117-18

Date Collected: 06/06/13 10:45
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		10	280701	06/14/13 13:20	BWR	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 07:04	BWR	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Client Sample ID: Field Duplicate #2

Lab Sample ID: 680-91117-19

Date Collected: 06/06/13 10:45
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		2	280701	06/14/13 13:06	BWR	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 07:11	BWR	TAL SAV

Client Sample ID: RAB-MW3

Lab Sample ID: 680-91117-20

Date Collected: 06/06/13 13:30
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 07:17	BWR	TAL SAV

Client Sample ID: RAB-MW2

Lab Sample ID: 680-91117-21

Date Collected: 06/06/13 15:40
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280483	06/14/13 17:58	AJMC	TAL SAV
Dissolved	Prep	3005A			280149	06/12/13 13:49	MK	TAL SAV
Dissolved	Analysis	6020A		1	280511	06/13/13 23:02	BWR	TAL SAV
Total/NA	Prep	3010A			280165	06/12/13 14:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	280701	06/14/13 07:24	BWR	TAL SAV

Client Sample ID: Trip Blank (lot # 050613)

Lab Sample ID: 680-91117-22

Date Collected: 06/06/13 00:00
Matrix: Water
Date Received: 06/07/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	280345	06/13/13 11:52	AJMC	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

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
A2LA	DoD ELAP		399.01	07-31-13
A2LA	ISO/IEC 17025		399.01	02-28-15
Arkansas DEQ	State Program	6	88-0692	02-01-14 *
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-13
Iowa	State Program	7	353	07-01-13 *
Kentucky	State Program	4	90084	12-31-13
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13 *
New Jersey	NELAP	2	GA769	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Puerto Rico	State Program	2	GA00006	01-01-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	09-30-13
Wisconsin	State Program	5	999819810	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon CA - GW June 2013

TestAmerica Job ID: 680-91117-1
SDG: HAQ040

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 66354

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:

PAGE 1 OF 2

PROJECT REFERENCE: Ashland - Aqualon	PROJECT NO.	PROJECT LOCATION (STATE): VA	STANDARD REPORT DELIVERY: ✓
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.	DATE DUE
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE: 866-222-7786	CLIENT FAX	EXPEDITED REPORT DELIVERY (SURCHARGE): ○
CLIENT NAME: GES	CLIENT E-MAIL: ewright@gesonline.com		DATE DUE
CLIENT ADDRESS: 23 S. 13th St Richmond, VA			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:
COMPANY CONTRACTING THIS WORK (if applicable): Ashland Inc			

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

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

PRESERVATIVE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	VOC	SVOC	metals	methanol/ETHanol	REMARKS
6-5-13	1215	VFSP-MW-1	G	A				X	–	X	–	* See Attached
	1335	LF-1						X	–	X	–	Sample Matrix
	1445	LF-2						X	–	X	X	for analysis
	935	NAT-4						X	–	X	–	
6-5-13	1340	FB-2 - (Field Blank 2)						–	–	X	–	
6-6-13	1050	MW-10 (MS/MSD) - 1055						X	X	X	X	MS/MSD includes VOC, SVOC, metals
	1215	SDB-MW-1						X	–	X	–	
	1250	& SDB-MW-3						X	–	X		
	1550	RAB-MW-1R (MS/MSD) 8015C only						X	X	X	X	MS/MSD - only 8015C - meth/ETH
	1555	FD1 (RAB-MW-1R)						X	X	X	X	
	1600	Equip Blank 2						–	–	X	–	
–	–	Trip Blank						X	–	–	–	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	6-6-13	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	06/07/13	0950	YES ○ NO ○		680-91117	3.6/3.0/3.0/3.4°C

TAL8240-680 (1008)

Serial Number 57361

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)
Aqualon		
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Lydia		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Erin Wright		
CLIENT NAME	CLIENT E-MAIL	
GES		
CLIENT ADDRESS		
23. S. 13th St Richmond VA 23219		
COMPANY CONTRACTING THIS WORK (if applicable)		
Ashland Inc.		

PAGE 2 OF 2

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

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

REQUIRED ANALYSIS: VOC; SVOC; Metals; Methanol/Ethanol

PRESERVATIVE

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: VOC	SVOC	Metals	Methanol/Ethanol	REMARKS
6/5/13	10:25	MW-7U	G	A					X	X		Please see attached sheet for further/detailed analyses
↓	12:45	MW-7L								X	X	
↓	13:15	MW-1							X	X		
—	16:35	RAB-MW-4								X		
6/6/13	10:05	MWL-1						X		X		
↓	10:45	MWL-2								X		
↓	10:45	Field Duplicate #2								X		
↓	13:30	RAB-MW3								X		
6/6/13	15:40	RAB-MW2						X		X		** Metals has filtered and non-filtered samples
—	—	Trip Blank										

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	6/6/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	06/07/13	0950	YES ◯ NO ◯		680-91117	

TAL-8240-680 (1008)

7/16/2013

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-91117-1
SDG Number: HAQ040

Login Number: 91117
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	3.0, 3.0, 3.4, 3.6 C
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	time on labels for 8015 MS/MSD (-9) is 1555
Samples are received within Holding Time.	True	did not receive 8015 vials for -6
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	-7 -- received 1 40 ml broken
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	

ATTACHMENT B

NOVEMBER/DECEMBER 2013 SITE-WIDE GROUNDWATER SAMPLING EVENT LABORATORY ANALYTICAL DATA (ON CD)

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: 680-96731-1
Client Project/Site: Hercules Aqualon Corrective Action

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
12/17/2013 7:25:24 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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
U	Indicates the analyte was analyzed for but not detected.

GC VOA

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

HPLC/IC

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.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-96731-1	LF-1	Water	12/03/13 10:45	12/04/13 09:32
680-96731-2	LF-2	Water	12/03/13 11:45	12/04/13 09:32
680-96731-3	LF-3	Water	12/03/13 13:00	12/04/13 09:32
680-96731-4	VFSP-MW1	Water	12/03/13 14:10	12/04/13 09:32
680-96731-5	SDB-MW3	Water	12/03/13 09:45	12/04/13 09:32
680-96731-6	WWL-3U	Water	12/03/13 15:25	12/04/13 09:32
680-96731-7	WWL-3L	Water	12/03/13 10:05	12/04/13 09:32
680-96731-8	MW-5U	Water	12/03/13 12:15	12/04/13 09:32
680-96731-9	MW-5	Water	12/03/13 14:41	12/04/13 09:32
680-96731-10	Trip Blank	Water	12/03/13 00:00	12/04/13 09:32

Job ID: 680-96731-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-96731-1

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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/04/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.6º C and 2.4º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples LF-1 (680-96731-1), LF-2 (680-96731-2), SDB-MW3 (680-96731-5) and Trip Blank (680-96731-10) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/11/2013.

No difficulties were encountered during the volatiles analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Sample MW-5U (680-96731-8) was analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 12/05/2013 and analyzed on 12/13/2013.

No difficulties were encountered during the SVOAs analysis.

All quality control parameters were within the acceptance limits.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples LF-1 (680-96731-1), LF-2 (680-96731-2), LF-3 (680-96731-3), WWL-3U (680-96731-6) and MW-5U (680-96731-8) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 12/06/2013 and 12/09/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 12/05/2013 and 12/09/2013 and analyzed on 12/06/2013, 12/09/2013 and 12/10/2013.

Job ID: 680-96731-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples LF-1 (680-96731-1), LF-2 (680-96731-2), LF-3 (680-96731-3), VFSP-MW1 (680-96731-4), SDB-MW3 (680-96731-5), WWL-3U (680-96731-6), WWL-3L (680-96731-7) and MW-5 (680-96731-9) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 12/05/2013 and analyzed on 12/06/2013.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

ALKALINITY

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 12/09/2013.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

AMMONIA

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/04/2013.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

ORTHOPHOSPHATE

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 12/04/2013.

No difficulties were encountered during the orthophosphate analysis.

All quality control parameters were within the acceptance limits.

SULFIDE

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 12/06/2013.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

SULFIDE

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 12/06/2013.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

9056 ANIONS

Job ID: 680-96731-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 12/12/2013.

Samples MW-5U (680-96731-8)[25X], MW-5U (680-96731-8)[50X], MW-5 (680-96731-9)[10X] and MW-5 (680-96731-9)[25X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the 9056 Anions analysis.

All quality control parameters were within the acceptance limits.

ANIONS BY IC (NITRATE/NITRITE)

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 12/04/2013.

Samples MW-5U (680-96731-8)[4X] and MW-5 (680-96731-9)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Anions by IC (Nitrate/Nitrite) analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED ORGANIC CARBON

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/14/2013.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

UNIONIZED AMMONIA

Samples MW-5U (680-96731-8) and MW-5 (680-96731-9) were analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 12/12/2013.

No difficulties were encountered during the unionized ammonia analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: LF-1 — Lab Sample ID: 680-96731-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.6		1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	1.1		1.0	0.13	ug/L	1		8260B	Total/NA
Methanol	1.0	J	5.0	1.0	mg/L	1		8015C	Total/NA
Aluminum	340		100	50	ug/L	1		6020A	Total/NA

Client Sample ID: LF-2 — Lab Sample ID: 680-96731-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.4		1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	0.53	J	1.0	0.13	ug/L	1		8260B	Total/NA
Aluminum	120		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.85		0.50	0.13	ug/L	1		6020A	Total/NA
Lead	0.63	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: LF-3 — Lab Sample ID: 680-96731-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	1.8	J	5.0	1.0	mg/L	1		8015C	Total/NA
Aluminum	260		100	50	ug/L	1		6020A	Total/NA
Barium	140		5.0	1.4	ug/L	1		6020A	Total/NA
Chromium	2.8	J	5.0	2.5	ug/L	1		6020A	Total/NA
Cobalt	5.3		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	3100		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	9.2		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: VFSP-MW1 — Lab Sample ID: 680-96731-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	200		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	2.7		0.50	0.12	ug/L	1		6020A	Total/NA
Iron	4600		100	44	ug/L	1		6020A	Total/NA
Manganese	880		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	2.0	J	5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: SDB-MW3 — Lab Sample ID: 680-96731-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.54		0.50	0.13	ug/L	1		6020A	Total/NA
Nickel	37		5.0	2.0	ug/L	1		6020A	Total/NA
Selenium	8.6		2.5	1.1	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-3U — Lab Sample ID: 680-96731-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	1.3	J	5.0	1.0	mg/L	1		8015C	Total/NA
Aluminum	590		100	50	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-3L — Lab Sample ID: 680-96731-7

This Detection Summary does not include radiochemical test results.

Client Sample ID: WWL-3L (Continued) — Lab Sample ID: 680-96731-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	220		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.14	J	0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: MW-5U — Lab Sample ID: 680-96731-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2400		25	13	mg/L	50		9056A	Total/NA
Sulfate	380		13	6.3	mg/L	25		9056A	Total/NA
Calcium, Dissolved	170000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	14000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	43000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	2700		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	5800		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	1900000		5000	2500	ug/L	10		6020	Dissolved
Ammonia, Dissolved	0.72		0.050	0.026	mg/L	1		350.1	Total/NA
Orthophosphate, Dissolved	0.097		0.050	0.016	mg/L	1		365.1	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	930		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	930		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.92		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	7.0		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	21		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	27		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-5 — Lab Sample ID: 680-96731-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1100		13	6.3	mg/L	25		9056A	Total/NA
Nitrate as N	0.26	J	0.50	0.25	mg/L	10		9056A	Total/NA
Sulfate	61		5.0	2.5	mg/L	10		9056A	Total/NA
Aluminum	250		100	50	ug/L	1		6020A	Total/NA
Barium	1200		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	80000		100	44	ug/L	1		6020A	Total/NA
Calcium, Dissolved	200000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	74000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	40000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	3600		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	5900		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	640000		10000	5000	ug/L	20		6020	Dissolved
Ammonia, Dissolved	1.1		0.050	0.026	mg/L	1		350.1	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	250		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	1.4		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	6.7		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	19		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	16		1.0	1.0	mg/L	1		9060	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: Trip Blank **Lab Sample ID: 680-96731-10**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: LF-1
Date Collected: 12/03/13 10:45
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	2.6		1.0	0.25	ug/L			12/11/13 14:17	1
Trichloroethene	1.1		1.0	0.13	ug/L			12/11/13 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*12/11/13 14:17*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	1.0	J	5.0	1.0	mg/L			12/06/13 17:38	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	340		100	50	ug/L		12/05/13 10:35	12/06/13 20:57	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/05/13 10:35	12/06/13 20:57	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: LF-2

Date Collected: 12/03/13 11:45
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.4		1.0	0.25	ug/L			12/11/13 14:45	1
Trichloroethene	0.53	J	1.0	0.13	ug/L			12/11/13 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*12/11/13 14:45*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 18:03	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	120		100	50	ug/L		12/05/13 10:35	12/06/13 21:19	1
Cadmium	0.85		0.50	0.13	ug/L		12/05/13 10:35	12/06/13 21:19	1
Lead	0.63	J	1.5	0.50	ug/L		12/05/13 10:35	12/06/13 21:19	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: LF-3
Date Collected: 12/03/13 13:00
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-3
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	1.8	J	5.0	1.0	mg/L			12/06/13 18:27	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	260		100	50	ug/L		12/05/13 10:35	12/06/13 21:27	1
Barium	140		5.0	1.4	ug/L		12/05/13 10:35	12/06/13 21:27	1
Chromium	2.8	J	5.0	2.5	ug/L		12/05/13 10:35	12/06/13 21:27	1
Cobalt	5.3		0.50	0.12	ug/L		12/05/13 10:35	12/06/13 21:27	1
Manganese	3100		5.0	2.0	ug/L		12/05/13 10:35	12/06/13 21:27	1
Nickel	9.2		5.0	2.0	ug/L		12/05/13 10:35	12/06/13 21:27	1
Vanadium	10	U	10	3.2	ug/L		12/05/13 10:35	12/06/13 21:27	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: VFSP-MW1
Date Collected: 12/03/13 14:10
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-4
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	200		5.0	1.4	ug/L		12/05/13 10:35	12/06/13 21:34	1
Cobalt	2.7		0.50	0.12	ug/L		12/05/13 10:35	12/06/13 21:34	1
Iron	4600		100	44	ug/L		12/05/13 10:35	12/06/13 21:34	1
Manganese	880		5.0	2.0	ug/L		12/05/13 10:35	12/06/13 21:34	1
Nickel	2.0	J	5.0	2.0	ug/L		12/05/13 10:35	12/06/13 21:34	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: SDB-MW3
Date Collected: 12/03/13 09:45
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	10	U	10	1.0	ug/L			12/11/13 15:13	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/11/13 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*12/11/13 15:13*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.54**		0.50	0.13	ug/L		12/05/13 10:35	12/06/13 22:10	1
Nickel	**37**		5.0	2.0	ug/L		12/05/13 10:35	12/06/13 22:10	1
Selenium	**8.6**		2.5	1.1	ug/L		12/05/13 10:35	12/06/13 22:10	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: WWL-3U
Date Collected: 12/03/13 15:25
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-6
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	**1.3**	**J**	5.0	1.0	mg/L			12/06/13 18:51	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**590**		100	50	ug/L		12/05/13 18:42	12/06/13 23:38	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/05/13 18:42	12/06/13 23:38	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: WWL-3L
Date Collected: 12/03/13 10:05
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-7
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	220		100	50	ug/L		12/05/13 10:35	12/06/13 22:17	1
Cadmium	0.14	J	0.50	0.13	ug/L		12/05/13 10:35	12/06/13 22:17	1

Client Sample ID: MW-5U

Date Collected: 12/03/13 12:15
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-8

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.97	U	0.97	0.097	ug/L		12/05/13 15:11	12/13/13 06:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*30 - 130*	*12/05/13 15:11*	*12/13/13 06:37*	*1*
2-Fluorobiphenyl	*67*		*34 - 130*	*12/05/13 15:11*	*12/13/13 06:37*	*1*
2-Fluorophenol (Surr)	*74*		*25 - 130*	*12/05/13 15:11*	*12/13/13 06:37*	*1*
Terphenyl-d14 (Surr)	*65*		*36 - 130*	*12/05/13 15:11*	*12/13/13 06:37*	*1*
Phenol-d5 (Surr)	*33*		*27 - 130*	*12/05/13 15:11*	*12/13/13 06:37*	*1*
Nitrobenzene-d5 (Surr)	*63*		*32 - 130*	*12/05/13 15:11*	*12/13/13 06:37*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 14:24	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		25	13	mg/L			12/12/13 18:45	50
Nitrate as N	0.20	U	0.20	0.10	mg/L			12/04/13 18:54	4
Nitrite as N	0.20	U	0.20	0.10	mg/L			12/04/13 18:54	4
Sulfate	**380**		13	6.3	mg/L			12/12/13 18:33	25

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**170000**		250	130	ug/L		12/09/13 09:19	12/09/13 19:56	1
Iron, Dissolved	**14000**		100	33	ug/L		12/09/13 09:19	12/09/13 19:56	1
Magnesium, Dissolved	**43000**		250	43	ug/L		12/09/13 09:19	12/09/13 19:56	1
Manganese, Dissolved	**2700**		5.0	1.0	ug/L		12/09/13 09:19	12/09/13 19:56	1
Potassium, Dissolved	**5800**		500	170	ug/L		12/09/13 09:19	12/09/13 19:56	1
Sodium, Dissolved	**1900000**		5000	2500	ug/L		12/09/13 09:19	12/10/13 11:44	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Dissolved	**0.72**		0.050	0.026	mg/L			12/04/13 16:23	1
Orthophosphate, Dissolved	**0.097**		0.050	0.016	mg/L			12/04/13 14:06	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1
Alkalinity	**930**		5.0	5.0	mg/L			12/09/13 17:26	1
Bicarbonate Alkalinity as CaCO3	**930**		5.0	5.0	mg/L			12/09/13 17:26	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 17:26	1
Ammonium ion as NH4	**0.92**		0.030	0.030	mg/L			12/12/13 13:26	1
pH	**7.0**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**21**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**27**		1.0	1.0	mg/L			12/14/13 03:34	1

Client Sample ID: MW-5

Lab Sample ID: 680-96731-9

Date Collected: 12/03/13 14:41

Matrix: Water

Date Received: 12/04/13 09:32

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		13	6.3	mg/L			12/12/13 18:57	25
Nitrate as N	**0.26**	**J**	0.50	0.25	mg/L			12/04/13 19:40	10
Nitrite as N	0.50	U	0.50	0.25	mg/L			12/04/13 19:40	10
Sulfate	**61**		5.0	2.5	mg/L			12/12/13 16:06	10

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**250**		100	50	ug/L		12/05/13 10:35	12/06/13 22:25	1
Barium	**1200**		5.0	1.4	ug/L		12/05/13 10:35	12/06/13 22:25	1
Iron	**80000**		100	44	ug/L		12/05/13 10:35	12/06/13 22:25	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**200000**		250	130	ug/L		12/05/13 15:59	12/06/13 17:32	1
Iron, Dissolved	**74000**		100	33	ug/L		12/05/13 15:59	12/06/13 17:32	1
Magnesium, Dissolved	**40000**		250	43	ug/L		12/05/13 15:59	12/06/13 17:32	1
Manganese, Dissolved	**3600**		5.0	1.0	ug/L		12/05/13 15:59	12/06/13 17:32	1
Potassium, Dissolved	**5900**		500	170	ug/L		12/05/13 15:59	12/06/13 17:32	1
Sodium, Dissolved	**640000**		10000	5000	ug/L		12/05/13 15:59	12/10/13 11:58	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Dissolved	**1.1**		0.050	0.026	mg/L			12/04/13 16:23	1
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			12/04/13 14:06	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1
Alkalinity	**250**		5.0	5.0	mg/L			12/09/13 17:13	1
Bicarbonate Alkalinity as CaCO3	**250**		5.0	5.0	mg/L			12/09/13 17:13	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 17:13	1
Ammonium ion as NH4	**1.4**		0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.7**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**19**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**16**		1.0	1.0	mg/L			12/14/13 04:28	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: Trip Blank
Date Collected: 12/03/13 00:00
Date Received: 12/04/13 09:32

Lab Sample ID: 680-96731-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/11/13 13:48	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/11/13 13:48	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/11/13 13:48	1
Diethyl ether	10	U	10	1.0	ug/L			12/11/13 13:48	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/11/13 13:48	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/11/13 13:48	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/11/13 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*12/11/13 13:48*	*1*
Dibromofluoromethane	*122*		*70 - 130*		*12/11/13 13:48*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*12/11/13 13:48*	*1*

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB	DBFM	TOL						
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)						
680-96731-1	LF-1			95						
680-96731-2	LF-2			95						
680-96731-5	SDB-MW3			94						
680-96731-10	Trip Blank	97	122	94						
LCS 680-307011/4	Lab Control Sample	99	108	98						
LCSD 680-307011/5	Lab Control Sample Dup	100	110	100						
MB 680-307011/8	Method Blank	100	120	94						

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	TPH	PHL	NBZ		
Lab Sample ID	Client Sample ID	(30-130)	(34-130)	(25-130)	(36-130)	(27-130)	(32-130)		
680-96731-8	MW-5U	90	67	74	65	33	63		
LCS 680-306184/20-A	Lab Control Sample	75	65	67	72	67	69		
MB 680-306184/19-A	Method Blank	59	64	65	88	67	68		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-307011/8
Matrix: Water
Analysis Batch: 307011

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/11/13 12:52	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/11/13 12:52	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/11/13 12:52	1
Diethyl ether	10	U	10	1.0	ug/L			12/11/13 12:52	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/11/13 12:52	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/11/13 12:52	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/11/13 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*12/11/13 12:52*	*1*
Dibromofluoromethane	*120*		*70 - 130*		*12/11/13 12:52*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*12/11/13 12:52*	*1*

Lab Sample ID: LCS 680-307011/4
Matrix: Water
Analysis Batch: 307011

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	53.7		ug/L		107	76 - 128		
1,1-Dichloroethane			50.0	53.0		ug/L		106	69 - 132		
1,2-Dichloroethane			50.0	44.5		ug/L		89	75 - 120		
Diethyl ether			50.0	50.0		ug/L		100	40 - 160		
t-Butanol			50.0	30.8		ug/L		62	49 - 148		
Tetrachloroethene			50.0	51.8		ug/L		104	77 - 128		
Trichloroethene			50.0	48.6		ug/L		97	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane	*108*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 680-307011/5
Matrix: Water
Analysis Batch: 307011

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
Chloroform			50.0	56.2		ug/L		112	76 - 128	5	30
1,1-Dichloroethane			50.0	56.4		ug/L		113	69 - 132	6	30
1,2-Dichloroethane			50.0	43.9		ug/L		88	75 - 120	1	30
Diethyl ether			50.0	50.8		ug/L		102	40 - 160	1	50
t-Butanol			50.0	29.1		ug/L		58	49 - 148	6	50
Tetrachloroethene			50.0	54.5		ug/L		109	77 - 128	5	30
Trichloroethene			50.0	51.1		ug/L		102	80 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*110*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-307011/5
Matrix: Water
Analysis Batch: 307011

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-306184/19-A
Matrix: Water
Analysis Batch: 307383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 306184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		12/05/13 15:11	12/13/13 01:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	59		30 - 130	12/05/13 15:11	12/13/13 01:11	1
2-Fluorobiphenyl	64		34 - 130	12/05/13 15:11	12/13/13 01:11	1
2-Fluorophenol (Surr)	65		25 - 130	12/05/13 15:11	12/13/13 01:11	1
Terphenyl-d14 (Surr)	88		36 - 130	12/05/13 15:11	12/13/13 01:11	1
Phenol-d5 (Surr)	67		27 - 130	12/05/13 15:11	12/13/13 01:11	1
Nitrobenzene-d5 (Surr)	68		32 - 130	12/05/13 15:11	12/13/13 01:11	1

Lab Sample ID: LCS 680-306184/20-A
Matrix: Water
Analysis Batch: 307383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 306184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	10.0	5.84		ug/L		58	34 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	75		30 - 130
2-Fluorobiphenyl	65		34 - 130
2-Fluorophenol (Surr)	67		25 - 130
Terphenyl-d14 (Surr)	72		36 - 130
Phenol-d5 (Surr)	67		27 - 130
Nitrobenzene-d5 (Surr)	69		32 - 130

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-306407/8
Matrix: Water
Analysis Batch: 306407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 12:30	1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: LCS 680-306407/4
Matrix: Water
Analysis Batch: 306407

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	20.0	22.0		mg/L		110	43 - 143

Lab Sample ID: LCSD 680-306407/5
Matrix: Water
Analysis Batch: 306407

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
Methanol	20.0	22.2		mg/L		111	43 - 143	1	50

Lab Sample ID: MB 680-306699/6
Matrix: Water
Analysis Batch: 306699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 12:46	1

Lab Sample ID: LCS 680-306699/4
Matrix: Water
Analysis Batch: 306699

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	20.0	19.7		mg/L		99	43 - 143

Lab Sample ID: LCSD 680-306699/5
Matrix: Water
Analysis Batch: 306699

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
Methanol	20.0	19.8		mg/L		99	43 - 143	1	50

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-306122/22
Matrix: Water
Analysis Batch: 306122

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			12/04/13 17:52	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			12/04/13 17:52	1

Lab Sample ID: LCS 680-306122/23
Matrix: Water
Analysis Batch: 306122

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.01		mg/L		101	90 - 110
Nitrite as N	0.997	0.996		mg/L		100	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-306122/24
Matrix: Water
Analysis Batch: 306122

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
Nitrate as N	0.999	1.01		mg/L		101	90 - 110	0	30
Nitrite as N	0.997	0.998		mg/L		100	90 - 110	0	30

Lab Sample ID: 680-96731-8 MS
Matrix: Water
Analysis Batch: 306122

Client Sample ID: MW-5U
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.20	U	4.00	3.95		mg/L		99	80 - 120
Nitrite as N	0.20	U	3.99	3.86		mg/L		97	80 - 120

Lab Sample ID: 680-96731-8 MSD
Matrix: Water
Analysis Batch: 306122

Client Sample ID: MW-5U
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.20	U	4.00	3.89		mg/L		97	80 - 120	1	30
Nitrite as N	0.20	U	3.99	3.79		mg/L		95	80 - 120	2	30

Lab Sample ID: MB 680-307268/5
Matrix: Water
Analysis Batch: 307268

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			12/12/13 12:35	1
Sulfate	0.50	U	0.50	0.25	mg/L			12/12/13 12:35	1

Lab Sample ID: LCS 680-307268/6
Matrix: Water
Analysis Batch: 307268

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.0		mg/L		100	90 - 110
Sulfate	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LCSD 680-307268/7
Matrix: Water
Analysis Batch: 307268

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
Chloride	10.0	10.0		mg/L		100	90 - 110	0	30
Sulfate	10.0	10.4		mg/L		104	90 - 110	0	30

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 680-306329/1-A
Matrix: Water
Analysis Batch: 306733

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 306329

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	250	U	250	130	ug/L		12/05/13 15:59	12/06/13 16:41	1
Iron, Dissolved	100	U	100	33	ug/L		12/05/13 15:59	12/06/13 16:41	1
Magnesium, Dissolved	250	U	250	43	ug/L		12/05/13 15:59	12/06/13 16:41	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		12/05/13 15:59	12/06/13 16:41	1
Potassium, Dissolved	500	U	500	170	ug/L		12/05/13 15:59	12/06/13 16:41	1
Sodium, Dissolved	500	U	500	250	ug/L		12/05/13 15:59	12/06/13 16:41	1

Lab Sample ID: LCS 680-306329/2-A
Matrix: Water
Analysis Batch: 306733

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 306329

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	5000	5500		ug/L		110	75 - 125
Iron, Dissolved	5000	5420		ug/L		108	75 - 125
Magnesium, Dissolved	5000	5690		ug/L		114	75 - 125
Manganese, Dissolved	500	546		ug/L		109	75 - 125
Potassium, Dissolved	5000	5500		ug/L		110	75 - 125
Sodium, Dissolved	5000	5210		ug/L		104	75 - 125

Lab Sample ID: MB 680-306670/1-A
Matrix: Water
Analysis Batch: 306872

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 306670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	250	U	250	130	ug/L		12/09/13 09:19	12/09/13 19:08	1
Iron, Dissolved	100	U	100	33	ug/L		12/09/13 09:19	12/09/13 19:08	1
Magnesium, Dissolved	250	U	250	43	ug/L		12/09/13 09:19	12/09/13 19:08	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		12/09/13 09:19	12/09/13 19:08	1
Potassium, Dissolved	500	U	500	170	ug/L		12/09/13 09:19	12/09/13 19:08	1

Lab Sample ID: MB 680-306670/1-A
Matrix: Water
Analysis Batch: 307100

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 306670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	500	U	500	250	ug/L		12/09/13 09:19	12/10/13 10:57	1

Lab Sample ID: LCS 680-306670/2-A
Matrix: Water
Analysis Batch: 306872

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 306670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	5000	5850		ug/L		117	75 - 125
Iron, Dissolved	5000	5830		ug/L		117	75 - 125
Magnesium, Dissolved	5000	5850		ug/L		117	75 - 125
Manganese, Dissolved	500	537		ug/L		107	75 - 125
Potassium, Dissolved	5000	5610		ug/L		112	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-306670/2-A
Matrix: Water
Analysis Batch: 307100

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 306670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium, Dissolved	5000	5180		ug/L		104	75 - 125

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-306225/1-A
Matrix: Water
Analysis Batch: 306733

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 306225

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/05/13 10:35	12/06/13 19:52	1
Barium	5.0	U	5.0	1.4	ug/L		12/05/13 10:35	12/06/13 19:52	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/05/13 10:35	12/06/13 19:52	1
Chromium	5.0	U	5.0	2.5	ug/L		12/05/13 10:35	12/06/13 19:52	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/05/13 10:35	12/06/13 19:52	1
Iron	100	U	100	44	ug/L		12/05/13 10:35	12/06/13 19:52	1
Lead	1.5	U	1.5	0.50	ug/L		12/05/13 10:35	12/06/13 19:52	1
Manganese	5.0	U	5.0	2.0	ug/L		12/05/13 10:35	12/06/13 19:52	1
Nickel	5.0	U	5.0	2.0	ug/L		12/05/13 10:35	12/06/13 19:52	1
Selenium	2.5	U	2.5	1.1	ug/L		12/05/13 10:35	12/06/13 19:52	1
Vanadium	10	U	10	3.2	ug/L		12/05/13 10:35	12/06/13 19:52	1

Lab Sample ID: LCS 680-306225/2-A
Matrix: Water
Analysis Batch: 306733

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 306225

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5660		ug/L		113	75 - 125
Antimony	50.0	54.2		ug/L		108	75 - 125
Barium	100	106		ug/L		106	75 - 125
Beryllium	50.0	51.3		ug/L		103	75 - 125
Cadmium	50.0	51.9		ug/L		104	75 - 125
Chromium	100	105		ug/L		105	75 - 125
Cobalt	50.0	49.6		ug/L		99	75 - 125
Copper	100	106		ug/L		106	75 - 125
Iron	5000	5560		ug/L		111	75 - 125
Lead	50.0	52.0		ug/L		104	75 - 125
Manganese	500	536		ug/L		107	75 - 125
Mercury	5.00	5.20		ug/L		104	75 - 125
Nickel	100	105		ug/L		105	75 - 125
Selenium	100	108		ug/L		108	75 - 125
Vanadium	100	103		ug/L		103	75 - 125
Arsenic	100	104		ug/L		104	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96731-4 MS
Matrix: Water
Analysis Batch: 306733

Client Sample ID: VFSP-MW1 MS
Prep Type: Total/NA
Prep Batch: 306225

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	110		5000	5070		ug/L		99	75 - 125
Antimony	5.0		50.0	51.9		ug/L		104	75 - 125
Barium	200		100	284		ug/L		89	75 - 125
Beryllium	0.50		50.0	50.7		ug/L		101	75 - 125
Cadmium	0.50		50.0	48.9		ug/L		98	75 - 125
Chromium	5.0		100	103		ug/L		103	75 - 125
Cobalt	2.7		50.0	48.3		ug/L		91	75 - 125
Copper	5.0		100	103		ug/L		103	75 - 125
Iron	4600		5000	9320		ug/L		94	75 - 125
Lead	1.5		50.0	49.4		ug/L		99	75 - 125
Manganese	880		500	1320		ug/L		88	75 - 125
Mercury	0.80		5.00	4.93		ug/L		99	75 - 125
Nickel	2.0	J	100	103		ug/L		101	75 - 125
Selenium	2.5		100	99.2		ug/L		99	75 - 125
Vanadium	10		100	103		ug/L		103	75 - 125
Arsenic	2.5		100	105		ug/L		105	75 - 125

Lab Sample ID: 680-96731-4 MSD
Matrix: Water
Analysis Batch: 306733

Client Sample ID: VFSP-MW1 MSD
Prep Type: Total/NA
Prep Batch: 306225

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	110		5000	5210		ug/L		102	75 - 125	3	20
Antimony	5.0		50.0	52.8		ug/L		106	75 - 125	2	20
Barium	200		100	289		ug/L		94	75 - 125	2	20
Beryllium	0.50		50.0	51.4		ug/L		103	75 - 125	1	20
Cadmium	0.50		50.0	50.0		ug/L		100	75 - 125	2	20
Chromium	5.0		100	102		ug/L		102	75 - 125	1	20
Cobalt	2.7		50.0	48.6		ug/L		92	75 - 125	0	20
Copper	5.0		100	102		ug/L		102	75 - 125	1	20
Iron	4600		5000	9570		ug/L		99	75 - 125	3	20
Lead	1.5		50.0	49.9		ug/L		100	75 - 125	1	20
Manganese	880		500	1330		ug/L		91	75 - 125	1	20
Mercury	0.80		5.00	5.19		ug/L		104	75 - 125	5	20
Nickel	2.0	J	100	103		ug/L		101	75 - 125	0	20
Selenium	2.5		100	102		ug/L		102	75 - 125	3	20
Vanadium	10		100	101		ug/L		101	75 - 125	2	20
Arsenic	2.5		100	105		ug/L		105	75 - 125	1	20

Lab Sample ID: MB 680-306374/1-A
Matrix: Water
Analysis Batch: 306733

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 306374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/05/13 18:42	12/06/13 23:09	1
Barium	5.0	U	5.0	1.4	ug/L		12/05/13 18:42	12/06/13 23:09	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/05/13 18:42	12/06/13 23:09	1
Chromium	5.0	U	5.0	2.5	ug/L		12/05/13 18:42	12/06/13 23:09	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-306374/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306733 — **Prep Batch: 306374**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.50	U	0.50	0.12	ug/L		12/05/13 18:42	12/06/13 23:09	1
Iron	100	U	100	44	ug/L		12/05/13 18:42	12/06/13 23:09	1
Lead	1.5	U	1.5	0.50	ug/L		12/05/13 18:42	12/06/13 23:09	1
Manganese	5.0	U	5.0	2.0	ug/L		12/05/13 18:42	12/06/13 23:09	1
Nickel	5.0	U	5.0	2.0	ug/L		12/05/13 18:42	12/06/13 23:09	1
Selenium	2.5	U	2.5	1.1	ug/L		12/05/13 18:42	12/06/13 23:09	1
Vanadium	10	U	10	3.2	ug/L		12/05/13 18:42	12/06/13 23:09	1

Lab Sample ID: LCS 680-306374/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306733 — **Prep Batch: 306374**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5500		ug/L		110	75 - 125
Antimony	50.0	53.7		ug/L		107	75 - 125
Barium	100	104		ug/L		104	75 - 125
Beryllium	50.0	51.9		ug/L		104	75 - 125
Cadmium	50.0	51.4		ug/L		103	75 - 125
Chromium	100	108		ug/L		108	75 - 125
Cobalt	50.0	48.3		ug/L		97	75 - 125
Copper	100	108		ug/L		108	75 - 125
Iron	5000	5390		ug/L		108	75 - 125
Lead	50.0	51.3		ug/L		103	75 - 125
Manganese	500	525		ug/L		105	75 - 125
Mercury	5.00	5.07		ug/L		101	75 - 125
Nickel	100	108		ug/L		108	75 - 125
Selenium	100	103		ug/L		103	75 - 125
Vanadium	100	105		ug/L		105	75 - 125
Arsenic	100	106		ug/L		106	75 - 125

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-306163/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Dissolved	0.050	U	0.050	0.026	mg/L			12/04/13 16:13	1

Lab Sample ID: LCS 680-306163/1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia, Dissolved	1.00	1.00		mg/L		100	90 - 110

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-306117/13
Matrix: Water
Analysis Batch: 306117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			12/04/13 14:07	1

Lab Sample ID: LCS 680-306117/12
Matrix: Water
Analysis Batch: 306117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.19		mg/L		100	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-306473/1
Matrix: Water
Analysis Batch: 306473

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Lab Sample ID: LCS 680-306473/2
Matrix: Water
Analysis Batch: 306473

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.4		mg/L		104	75 - 125

Lab Sample ID: LCSD 680-306473/3
Matrix: Water
Analysis Batch: 306473

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
Sulfide	10.0	10.4		mg/L		104	75 - 125	0	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-307748/23
Matrix: Water
Analysis Batch: 307748

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			12/13/13 23:47	1

Lab Sample ID: LCS 680-307748/22
Matrix: Water
Analysis Batch: 307748

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	20.0	16.9		mg/L		85	80 - 120

Method: 9060 - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: 680-96731-9 DU
Matrix: Water
Analysis Batch: 307748

Client Sample ID: MW-5
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Dissolved Organic Carbon	16			15.1		mg/L				4	30

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-306823/3
Matrix: Water
Analysis Batch: 306823

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			12/09/13 15:13	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 15:13	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 15:13	1

Lab Sample ID: LCS 680-306823/4
Matrix: Water
Analysis Batch: 306823

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	207		mg/L		83	80 - 120		

Lab Sample ID: LCSD 680-306823/30
Matrix: Water
Analysis Batch: 306823

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
Alkalinity			250	210		mg/L		84	80 - 120	1	30

GC/MS VOA

Analysis Batch: 307011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-1	LF-1	Total/NA	Water	8260B	
680-96731-2	LF-2	Total/NA	Water	8260B	
680-96731-5	SDB-MW3	Total/NA	Water	8260B	
680-96731-10	Trip Blank	Total/NA	Water	8260B	
LCS 680-307011/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-307011/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-307011/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 306184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	3520C	
LCS 680-306184/20-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-306184/19-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 307383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	8270D LL	306184
LCS 680-306184/20-A	Lab Control Sample	Total/NA	Water	8270D LL	306184
MB 680-306184/19-A	Method Blank	Total/NA	Water	8270D LL	306184

GC VOA

Analysis Batch: 306407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-1	LF-1	Total/NA	Water	8015C	
680-96731-2	LF-2	Total/NA	Water	8015C	
680-96731-3	LF-3	Total/NA	Water	8015C	
680-96731-6	WWL-3U	Total/NA	Water	8015C	
LCS 680-306407/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306407/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306407/8	Method Blank	Total/NA	Water	8015C	

Analysis Batch: 306699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	8015C	
LCS 680-306699/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306699/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306699/6	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 306122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	9056A	
680-96731-8 MS	MW-5U	Total/NA	Water	9056A	
680-96731-8 MSD	MW-5U	Total/NA	Water	9056A	
680-96731-9	MW-5	Total/NA	Water	9056A	
LCS 680-306122/23	Lab Control Sample	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 306122 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 680-306122/24	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-306122/22	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 307268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	9056A	
680-96731-8	MW-5U	Total/NA	Water	9056A	
680-96731-9	MW-5	Total/NA	Water	9056A	
680-96731-9	MW-5	Total/NA	Water	9056A	
LCS 680-307268/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-307268/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-307268/5	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 306225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-1	LF-1	Total/NA	Water	3010A	
680-96731-2	LF-2	Total/NA	Water	3010A	
680-96731-3	LF-3	Total/NA	Water	3010A	
680-96731-4	VFSP-MW1	Total/NA	Water	3010A	
680-96731-4 MS	VFSP-MW1 MS	Total/NA	Water	3010A	
680-96731-4 MSD	VFSP-MW1 MSD	Total/NA	Water	3010A	
680-96731-5	SDB-MW3	Total/NA	Water	3010A	
680-96731-7	WWL-3L	Total/NA	Water	3010A	
680-96731-9	MW-5	Total/NA	Water	3010A	
LCS 680-306225/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-306225/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 306329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-9	MW-5	Dissolved	Water	3005A	
LCS 680-306329/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-306329/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 306374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-6	WWL-3U	Total/NA	Water	3010A	
LCS 680-306374/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-306374/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 306670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Dissolved	Water	3005A	
LCS 680-306670/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-306670/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 306733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-1	LF-1	Total/NA	Water	6020A	306225

Metals (Continued)

Analysis Batch: 306733 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-2	LF-2	Total/NA	Water	6020A	306225
680-96731-3	LF-3	Total/NA	Water	6020A	306225
680-96731-4	VFSP-MW1	Total/NA	Water	6020A	306225
680-96731-4 MS	VFSP-MW1 MS	Total/NA	Water	6020A	306225
680-96731-4 MSD	VFSP-MW1 MSD	Total/NA	Water	6020A	306225
680-96731-5	SDB-MW3	Total/NA	Water	6020A	306225
680-96731-6	WWL-3U	Total/NA	Water	6020A	306374
680-96731-7	WWL-3L	Total/NA	Water	6020A	306225
680-96731-9	MW-5	Dissolved	Water	6020	306329
680-96731-9	MW-5	Total/NA	Water	6020A	306225
LCS 680-306225/2-A	Lab Control Sample	Total/NA	Water	6020A	306225
LCS 680-306329/2-A	Lab Control Sample	Total Recoverable	Water	6020	306329
LCS 680-306374/2-A	Lab Control Sample	Total/NA	Water	6020A	306374
MB 680-306225/1-A	Method Blank	Total/NA	Water	6020A	306225
MB 680-306329/1-A	Method Blank	Total Recoverable	Water	6020	306329
MB 680-306374/1-A	Method Blank	Total/NA	Water	6020A	306374

Analysis Batch: 306872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Dissolved	Water	6020	306670
LCS 680-306670/2-A	Lab Control Sample	Total Recoverable	Water	6020	306670
MB 680-306670/1-A	Method Blank	Total Recoverable	Water	6020	306670

Analysis Batch: 307100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Dissolved	Water	6020	306670
680-96731-9	MW-5	Dissolved	Water	6020	306329
LCS 680-306670/2-A	Lab Control Sample	Total Recoverable	Water	6020	306670
MB 680-306670/1-A	Method Blank	Total Recoverable	Water	6020	306670

General Chemistry

Analysis Batch: 306117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	365.1	
680-96731-9	MW-5	Total/NA	Water	365.1	
LCS 680-306117/12	Lab Control Sample	Total/NA	Water	365.1	
MB 680-306117/13	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 306163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	350.1	
680-96731-9	MW-5	Total/NA	Water	350.1	
LCS 680-306163/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-306163/2	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 306473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Dissolved	Water	9034	
680-96731-8	MW-5U	Total/NA	Water	9034	

General Chemistry (Continued)

Analysis Batch: 306473 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-9	MW-5	Dissolved	Water	9034	
680-96731-9	MW-5	Total/NA	Water	9034	
LCS 680-306473/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-306473/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-306473/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 306823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	SM 2320B	
680-96731-9	MW-5	Total/NA	Water	SM 2320B	
LCS 680-306823/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-306823/30	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-306823/3	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 307265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Total/NA	Water	UnionizedNH3	
680-96731-9	MW-5	Total/NA	Water	UnionizedNH3	

Analysis Batch: 307748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96731-8	MW-5U	Dissolved	Water	9060	
680-96731-9	MW-5	Dissolved	Water	9060	
680-96731-9 DU	MW-5	Dissolved	Water	9060	
LCS 680-307748/22	Lab Control Sample	Dissolved	Water	9060	
MB 680-307748/23	Method Blank	Dissolved	Water	9060	

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: LF-1

Lab Sample ID: 680-96731-1

Date Collected: 12/03/13 10:45
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	307011	12/11/13 14:17	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 17:38	AJMC	TAL SAV
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 20:57	BWR	TAL SAV

Client Sample ID: LF-2

Lab Sample ID: 680-96731-2

Date Collected: 12/03/13 11:45
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	307011	12/11/13 14:45	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 18:03	AJMC	TAL SAV
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 21:19	BWR	TAL SAV

Client Sample ID: LF-3

Lab Sample ID: 680-96731-3

Date Collected: 12/03/13 13:00
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	306407	12/06/13 18:27	AJMC	TAL SAV
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 21:27	BWR	TAL SAV

Client Sample ID: VFSP-MW1

Lab Sample ID: 680-96731-4

Date Collected: 12/03/13 14:10
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 21:34	BWR	TAL SAV

Client Sample ID: SDB-MW3

Lab Sample ID: 680-96731-5

Date Collected: 12/03/13 09:45
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	307011	12/11/13 15:13	JD1	TAL SAV
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 22:10	BWR	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: WWL-3U

Lab Sample ID: 680-96731-6

Date Collected: 12/03/13 15:25
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	306407	12/06/13 18:51	AJMC	TAL SAV
Total/NA	Prep	3010A			306374	12/05/13 18:42	DAS	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 23:38	BWR	TAL SAV

Client Sample ID: WWL-3L

Lab Sample ID: 680-96731-7

Date Collected: 12/03/13 10:05
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 22:17	BWR	TAL SAV

Client Sample ID: MW-5U

Lab Sample ID: 680-96731-8

Date Collected: 12/03/13 12:15
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			306184	12/05/13 15:11	RNJ	TAL SAV
Total/NA	Analysis	8270D LL		1	307383	12/13/13 06:37	JPM	TAL SAV
Total/NA	Analysis	8015C		1	306699	12/09/13 14:24	AJMC	TAL SAV
Total/NA	Analysis	9056A		4	306122	12/04/13 18:54	PAT	TAL SAV
Total/NA	Analysis	9056A		25	307268	12/12/13 18:33	PAT	TAL SAV
Total/NA	Analysis	9056A		50	307268	12/12/13 18:45	PAT	TAL SAV
Dissolved	Prep	3005A			306670	12/09/13 09:19	BJB	TAL SAV
Dissolved	Analysis	6020		1	306872	12/09/13 19:56	BWR	TAL SAV
Dissolved	Analysis	6020		10	307100	12/10/13 11:44	BWR	TAL SAV
Total/NA	Analysis	365.1		1	306117	12/04/13 14:06	CRW	TAL SAV
Total/NA	Analysis	350.1		1	306163	12/04/13 16:23	JME	TAL SAV
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306823	12/09/13 17:26	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 03:34	JER	TAL SAV

Client Sample ID: MW-5

Lab Sample ID: 680-96731-9

Date Collected: 12/03/13 14:41
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		10	306122	12/04/13 19:40	PAT	TAL SAV
Total/NA	Analysis	9056A		10	307268	12/12/13 16:06	PAT	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Client Sample ID: MW-5

Lab Sample ID: 680-96731-9

Date Collected: 12/03/13 14:41
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		25	307268	12/12/13 18:57	PAT	TAL SAV
Dissolved	Prep	3005A			306329	12/05/13 15:59	DAS	TAL SAV
Dissolved	Analysis	6020		1	306733	12/06/13 17:32	BWR	TAL SAV
Total/NA	Prep	3010A			306225	12/05/13 10:35	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306733	12/06/13 22:25	BWR	TAL SAV
Dissolved	Prep	3005A			306329	12/05/13 15:59	DAS	TAL SAV
Dissolved	Analysis	6020		20	307100	12/10/13 11:58	BWR	TAL SAV
Total/NA	Analysis	365.1		1	306117	12/04/13 14:06	CRW	TAL SAV
Total/NA	Analysis	350.1		1	306163	12/04/13 16:23	JME	TAL SAV
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306823	12/09/13 17:13	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 04:28	JER	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-96731-10

Date Collected: 12/03/13 00:00
Matrix: Water
Date Received: 12/04/13 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	307011	12/11/13 13:48	JD1	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-14
Arkansas DEQ	State Program	6	88-0692	02-01-14
California	NELAP	9	3217CA	07-31-14
Colorado	State Program	8	N/A	12-31-13 *
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13 *
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	06-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-14
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13 *
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13 *
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13 *
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14 *
South Carolina	State Program	4	98001	06-30-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13 *
West Virginia DEP	State Program	3	94	06-30-14
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96731-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020	Metals (ICP/MS)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 81917

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Corrective Action Analyses

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: Ashland - Aqualon
PROJECT NO.:
PROJECT LOCATION (STATE): VA
TAL (LAB) PROJECT MANAGER: Kathy Smith
P.O. NUMBER:
CONTRACT NO.:
CLIENT (SITE) PM: Erin Wright
CLIENT PHONE:
CLIENT FAX:
CLIENT NAME: GES
CLIENT E-MAIL:
CLIENT ADDRESS: Richmond, VA
COMPANY CONTRACTING THIS WORK (if applicable):

PAGE 1 OF 2

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

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

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

PRESERVATIVE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	VOCs 8260B	SVOC 8270C	Metals 6020	Ethanol/Methanol 8015B							REMARKS
12/3/13	10:45	LF-1	G	X				X		X	X							
	11:45	LF-2						X		X	X							See Attached
	13:00	LF-3								X	X							table for
	14:10	VFSP-MW1 (MS/MSD)								X								metal analyses
	9:45	SDB-MW3						X		X								
	15:25	WWL-3U								X	X							
	10:05	WWL-3L								X								
	12:15	MW-5U							X	X								
	14:41	MW-5								X								
—	—	Trip Blank																

680-96731 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	12/3/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	12/04/13	09:32	YES ○ NO ○			0.6, 2.4 680-96731

TAL8240-680 (1008)

12/17/2013

Serial Number 81919

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Geochemical Analaspes

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 - Aqualon		VA
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Kathy Smith		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Erin Wright		
CLIENT NAME	CLIENT E-MAIL	
GES		
CLIENT ADDRESS		
Richmond, VA		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 2

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) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ..)	Dissolved Iron /Manganese 6020	Diss. Major Cations 6020	Diss. ortho-phosphate 365.1	Dissolved Ammonia 350.1	Total Sulfide 9034	Diss. Sulfide 9034	Alkalinity 2320B	Major Anions 9056A	Diss. Organic Carbon 9060	REMARKS
								PRESERVATIVE									
								NUMBER OF CONTAINERS SUBMITTED									
12/3/13	12:15	MW-5U (▲ see note)	X	X				X	X	X	X	X	X	X	X	X	▲ Filtered Sample for MW-5U collected @ 12:28
12/3/13	14:41	MW-5 (see notes)	X	X				X	X	X	X	X	X	X	X	X	Dissolved Samples were field filtered
																	▲ Filtered sample collected @ 14:48 for MW-5

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	12/3/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	12/04/13	09:32	YES ○ NO ○			0.6, 2.4 680-96731

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-96731-1

Login Number: 96731

List Source: TestAmerica Savannah

List Number: 1

Creator: Contreras, Cesar A

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.	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	

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: 680-96566-1
Client Project/Site: Hercules Aqualon Corrective Action

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
12/12/2013 11:06:16 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

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.
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
H	Sample was prepped or analyzed beyond the specified holding time
X	Surrogate is outside control limits

GC VOA

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

Metals

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.
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-96566-1	NAT-3	Water	11/25/13 13:35	11/26/13 10:09
680-96566-2	NAT-2	Water	11/25/13 14:30	11/26/13 10:09
680-96566-3	NAT-1	Water	11/25/13 15:25	11/26/13 10:09
680-96566-4	RAB-MW2	Water	11/25/13 12:00	11/26/13 10:09
680-96566-5	RAB-MW4	Water	11/25/13 12:55	11/26/13 10:09
680-96566-6	RAB-MW3	Water	11/25/13 14:05	11/26/13 10:09
680-96566-7	Field Blank 1	Water	11/25/13 00:00	11/26/13 10:09
680-96566-8	Trip Blank	Water	11/25/13 00:00	11/26/13 10:09

Job ID: 680-96566-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-96566-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples NAT-3 (680-96566-1), NAT-1 (680-96566-3), RAB-MW2 (680-96566-4), Field Blank 1 (680-96566-7) and Trip Blank (680-96566-8) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/02/2013, 12/05/2013 and 12/06/2013.

cis-1,3-Dichloropropene and trans-1,3-Dichloropropene failed the recovery criteria high for LCS/LCSD 680-305616/4. 1,2-Dichloroethane failed the recovery criteria high for LCS 680-306176/5.

Samples NAT-3 (680-96566-1)[2000X] and RAB-MW2 (680-96566-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Sample Field Blank 1 (680-96566-7) was analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 11/27/2013 and 12/03/2013 and analyzed on 12/02/2013 and 12/06/2013.

2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl, 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr), Phenol-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for MB 680-305281/6-A. Terphenyl-d14 (Surr) failed the surrogate recovery criteria high for MB 680-305856/6-A. Therefore, the batch was re extracted outsided analytical holding time with acceptable results. Both sets of data have been reported.

No other difficulties were encountered during the SVOAs analysis.

All other quality control parameters were within the acceptance limits.

Job ID: 680-96566-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples NAT-2 (680-96566-2), RAB-MW2 (680-96566-4) and Field Blank 1 (680-96566-7) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 12/06/2013 and 12/09/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples NAT-3 (680-96566-1), NAT-2 (680-96566-2), NAT-1 (680-96566-3), RAB-MW2 (680-96566-4), RAB-MW4 (680-96566-5), RAB-MW3 (680-96566-6) and Field Blank 1 (680-96566-7) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 11/27/2013 and analyzed on 11/27/2013, 11/28/2013 and 12/02/2013.

Sample RAB-MW2 (680-96566-4)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: NAT-3 — Lab Sample ID: 680-96566-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	72000		10000	5200	ug/L	2000		8260B	Total/NA
Cadmium	0.18	J	0.50	0.13	ug/L	1		6020A	Total/NA
Chromium	9.7		5.0	2.5	ug/L	1		6020A	Total/NA
Lead	0.53	J	1.5	0.50	ug/L	1		6020A	Total/NA
Nickel	22		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-2 — Lab Sample ID: 680-96566-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	2.1	J	5.0	1.0	mg/L	1		8015C	Total/NA
Lead	1.9		1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-1 — Lab Sample ID: 680-96566-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	35		1.0	0.13	ug/L	1		8260B	Total/NA
Cadmium	0.37	J	0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	18		0.50	0.12	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW2 — Lab Sample ID: 680-96566-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl ether	7.1	J	50	5.0	ug/L	5		8260B	Total/NA
Cadmium	0.18	J	0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	110		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	16000		20	8.0	ug/L	4		6020A	Total/NA
Nickel	74		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW4 — Lab Sample ID: 680-96566-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	1.5		0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: RAB-MW3 — Lab Sample ID: 680-96566-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	230		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	200000		100	44	ug/L	1		6020A	Total/NA

Client Sample ID: Field Blank 1 — Lab Sample ID: 680-96566-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	6.0		5.0	1.4	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-96566-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.0	J	10	1.0	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: NAT-3
Date Collected: 11/25/13 13:35
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	72000		10000	5200	ug/L			12/06/13 15:03	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/06/13 15:03*	*2000*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.18	J	0.50	0.13	ug/L		11/27/13 10:26	11/27/13 23:28	1
Chromium	9.7		5.0	2.5	ug/L		11/27/13 10:26	11/27/13 23:28	1
Lead	0.53	J	1.5	0.50	ug/L		11/27/13 10:26	11/27/13 23:28	1
Nickel	22		5.0	2.0	ug/L		11/27/13 10:26	11/27/13 23:28	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: NAT-2
Date Collected: 11/25/13 14:30
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-2
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	2.1	J	5.0	1.0	mg/L			12/06/13 14:24	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.9		1.5	0.50	ug/L		11/27/13 10:26	11/28/13 00:05	1

Client Sample ID: NAT-1
Date Collected: 11/25/13 15:25
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	35		1.0	0.13	ug/L			12/05/13 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/05/13 19:21*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.37	J	0.50	0.13	ug/L		11/27/13 10:26	11/28/13 00:12	1
Cobalt	18		0.50	0.12	ug/L		11/27/13 10:26	11/28/13 00:12	1
Lead	1.5	U	1.5	0.50	ug/L		11/27/13 10:26	11/28/13 00:12	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: RAB-MW2
Date Collected: 11/25/13 12:00
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	7.1	J	50	5.0	ug/L			12/06/13 15:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*12/06/13 15:25*	*5*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 14:49	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.18	J	0.50	0.13	ug/L		11/27/13 10:26	11/28/13 00:19	1
Cobalt	110		0.50	0.12	ug/L		11/27/13 10:26	11/28/13 00:19	1
Manganese	16000		20	8.0	ug/L		11/27/13 10:26	12/02/13 21:30	4
Nickel	74		5.0	2.0	ug/L		11/27/13 10:26	11/28/13 00:19	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: RAB-MW4
Date Collected: 11/25/13 12:55
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-5
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.5		0.50	0.13	ug/L		11/27/13 10:26	11/28/13 00:42	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: RAB-MW3
Date Collected: 11/25/13 14:05
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-6
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	230		5.0	1.4	ug/L		11/27/13 10:26	11/28/13 00:49	1
Iron	200000		100	44	ug/L		11/27/13 10:26	11/28/13 00:49	1

Client Sample ID: Field Blank 1
Date Collected: 11/25/13 00:00
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/02/13 14:23	1
Acetonitrile	40	U	40	10	ug/L			12/02/13 14:23	1
Acrolein	20	U	20	7.4	ug/L			12/02/13 14:23	1
Acrylonitrile	20	U	20	7.2	ug/L			12/02/13 14:23	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/02/13 14:23	1
Benzene	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/02/13 14:23	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/02/13 14:23	1
2-Butanone	10	U	10	1.0	ug/L			12/02/13 14:23	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/02/13 14:23	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/02/13 14:23	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/02/13 14:23	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 14:23	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/02/13 14:23	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/02/13 14:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 14:23	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.11	ug/L			12/02/13 14:23	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/02/13 14:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/02/13 14:23	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/02/13 14:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/02/13 14:23	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/02/13 14:23	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/02/13 14:23	1
Diethyl ether	10	U	10	1.0	ug/L			12/02/13 14:23	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/02/13 14:23	1
Ethylene oxide	200	U	200	200	ug/L			12/02/13 14:23	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
2-Hexanone	10	U	10	1.0	ug/L			12/02/13 14:23	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/02/13 14:23	1
Isobutyl alcohol	40	U	40	11	ug/L			12/02/13 14:23	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/02/13 14:23	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/02/13 14:23	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/02/13 14:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/02/13 14:23	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/02/13 14:23	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			12/02/13 14:23	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/02/13 14:23	1
o-Xylene	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/02/13 14:23	1
Propionitrile	20	U	20	4.6	ug/L			12/02/13 14:23	1
Propylene oxide	200	U	200	200	ug/L			12/02/13 14:23	1
Styrene	1.0	U	1.0	0.11	ug/L			12/02/13 14:23	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/02/13 14:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/02/13 14:23	1

Client Sample ID: Field Blank 1
Date Collected: 11/25/13 00:00
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/02/13 14:23	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 14:23	1
Toluene	1.0	U	1.0	0.33	ug/L			12/02/13 14:23	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/02/13 14:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/02/13 14:23	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.21	ug/L			12/02/13 14:23	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/02/13 14:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/02/13 14:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/02/13 14:23	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/02/13 14:23	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 14:23	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/02/13 14:23	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/02/13 14:23	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/02/13 14:23	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/02/13 14:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
N,N'-Bis-3-oxapentamethyleneformamidinum	*100*	*T J N*	*ug/L*		*0.98*	*4030-53-9*		*12/02/13 14:23*	*1*
Unknown	*13*	*T J*	*ug/L*		*1.32*			*12/02/13 14:23*	*1*
1,4-Dichlorobenzene-D4	*47*	*T J N*	*ug/L*		*8.33*	*3855-82-1*		*12/02/13 14:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*12/02/13 14:23*	*1*
Dibromofluoromethane	*105*		*70 - 130*		*12/02/13 14:23*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/02/13 14:23*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.9	U	1.9	0.29	ug/L		11/27/13 15:36	12/02/13 17:22	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		11/27/13 15:36	12/02/13 17:22	1
Naphthalene	0.19	U	0.19	0.095	ug/L		11/27/13 15:36	12/02/13 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*30 - 130*	*11/27/13 15:36*	*12/02/13 17:22*	*1*
2-Fluorobiphenyl	*61*		*34 - 130*	*11/27/13 15:36*	*12/02/13 17:22*	*1*
2-Fluorophenol (Surr)	*65*		*25 - 130*	*11/27/13 15:36*	*12/02/13 17:22*	*1*
Terphenyl-d14 (Surr)	*81*		*36 - 130*	*11/27/13 15:36*	*12/02/13 17:22*	*1*
Phenol-d5 (Surr)	*57*		*27 - 130*	*11/27/13 15:36*	*12/02/13 17:22*	*1*
Nitrobenzene-d5 (Surr)	*60*		*32 - 130*	*11/27/13 15:36*	*12/02/13 17:22*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.9	U H	1.9	0.29	ug/L		12/03/13 14:59	12/06/13 20:38	1
Bis(2-chloroethyl)ether	0.95	U H	0.95	0.095	ug/L		12/03/13 14:59	12/06/13 20:38	1
Naphthalene	0.19	U H	0.19	0.095	ug/L		12/03/13 14:59	12/06/13 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*30 - 130*	*12/03/13 14:59*	*12/06/13 20:38*	*1*
2-Fluorobiphenyl	*80*		*34 - 130*	*12/03/13 14:59*	*12/06/13 20:38*	*1*
2-Fluorophenol (Surr)	*70*		*25 - 130*	*12/03/13 14:59*	*12/06/13 20:38*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: Field Blank 1
Date Collected: 11/25/13 00:00
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - RE (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*104*		*36 - 130*	*12/03/13 14:59*	*12/06/13 20:38*	*1*
Phenol-d5 (Surr)	*73*		*27 - 130*	*12/03/13 14:59*	*12/06/13 20:38*	*1*
Nitrobenzene-d5 (Surr)	*78*		*32 - 130*	*12/03/13 14:59*	*12/06/13 20:38*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/09/13 13:12	1
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 13:12	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**6.0**		5.0	1.4	ug/L		11/27/13 10:26	11/28/13 00:57	1
Cadmium	0.50	U	0.50	0.13	ug/L		11/27/13 10:26	11/28/13 00:57	1
Chromium	5.0	U	5.0	2.5	ug/L		11/27/13 10:26	11/28/13 00:57	1
Cobalt	0.50	U	0.50	0.12	ug/L		11/27/13 10:26	11/28/13 00:57	1
Iron	100	U	100	44	ug/L		11/27/13 10:26	11/28/13 00:57	1
Lead	1.5	U	1.5	0.50	ug/L		11/27/13 10:26	11/28/13 00:57	1
Manganese	5.0	U	5.0	2.0	ug/L		11/27/13 10:26	11/28/13 00:57	1
Nickel	5.0	U	5.0	2.0	ug/L		11/27/13 10:26	11/28/13 00:57	1

Client Sample ID: Trip Blank
Lab Sample ID: 680-96566-8
Date Collected: 11/25/13 00:00
Matrix: Water
Date Received: 11/26/13 10:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/02/13 13:53	1
Acetonitrile	40	U	40	10	ug/L			12/02/13 13:53	1
Acrolein	20	U	20	7.4	ug/L			12/02/13 13:53	1
Acrylonitrile	20	U	20	7.2	ug/L			12/02/13 13:53	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/02/13 13:53	1
Benzene	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/02/13 13:53	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/02/13 13:53	1
2-Butanone	**1.0**	**J**	10	1.0	ug/L			12/02/13 13:53	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/02/13 13:53	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/02/13 13:53	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/02/13 13:53	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 13:53	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/02/13 13:53	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/02/13 13:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 13:53	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.11	ug/L			12/02/13 13:53	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/02/13 13:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/02/13 13:53	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/02/13 13:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/02/13 13:53	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/02/13 13:53	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/02/13 13:53	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/02/13 13:53	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
2-Hexanone	10	U	10	1.0	ug/L			12/02/13 13:53	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/02/13 13:53	1
Isobutyl alcohol	40	U	40	11	ug/L			12/02/13 13:53	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/02/13 13:53	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/02/13 13:53	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/02/13 13:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/02/13 13:53	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/02/13 13:53	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/02/13 13:53	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/02/13 13:53	1
Propionitrile	20	U	20	4.6	ug/L			12/02/13 13:53	1
Styrene	1.0	U	1.0	0.11	ug/L			12/02/13 13:53	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/02/13 13:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/02/13 13:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 13:53	1
Toluene	1.0	U	1.0	0.33	ug/L			12/02/13 13:53	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/02/13 13:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/02/13 13:53	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.21	ug/L			12/02/13 13:53	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: Trip Blank
Date Collected: 11/25/13 00:00
Date Received: 11/26/13 10:09

Lab Sample ID: 680-96566-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/02/13 13:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/02/13 13:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/02/13 13:53	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/02/13 13:53	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:53	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/02/13 13:53	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/02/13 13:53	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/02/13 13:53	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/02/13 13:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*36*	*T J*	*ug/L*		*0.99*			*12/02/13 13:53*	*1*
Unknown	*15*	*T J*	*ug/L*		*1.32*			*12/02/13 13:53*	*1*
1,4-Dichlorobenzene-D4	*46*	*T J N*	*ug/L*		*8.33*	*3855-82-1*		*12/02/13 13:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*12/02/13 13:53*	*1*
Dibromofluoromethane	*107*		*70 - 130*		*12/02/13 13:53*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/02/13 13:53*	*1*

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB	TOL	DBFM						
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)						
680-96566-1	NAT-3		102							
680-96566-3	NAT-1		102							
680-96566-4	RAB-MW2		103							
680-96566-7	Field Blank 1	100	100	105						
680-96566-8	Trip Blank	101	101	107						
LCS 680-305616/4	Lab Control Sample	104	107	102						
LCS 680-306176/5	Lab Control Sample	98	106	79						
LCS 680-306390/7	Lab Control Sample	109	108	112						
LCSD 680-305616/5	Lab Control Sample Dup	102	104	98						
LCSD 680-306176/10	Lab Control Sample Dup	95	102	76						
LCSD 680-306390/8	Lab Control Sample Dup	102	100	103						
MB 680-305616/8	Method Blank	103	101	108						
MB 680-306176/9	Method Blank	92	101	86						
MB 680-306390/11	Method Blank	105	102	124						

Surrogate Legend

BFB = 4-Bromofluorobenzene
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	TPH	PHL	NBZ		
Lab Sample ID	Client Sample ID	(30-130)	(34-130)	(25-130)	(36-130)	(27-130)	(32-130)		
680-96566-7	Field Blank 1	88	61	65	81	57	60		
680-96566-7 - RE	Field Blank 1	101	80	70	104	73	78		
LCS 680-305281/7-A	Lab Control Sample	94	67	73	75	60	67		
LCS 680-305856/7-A	Lab Control Sample	111	86	79	112	80	83		
LCSD 680-305856/8-A	Lab Control Sample Dup	99	89	80	105	82	86		
MB 680-305281/6-A	Method Blank	22 X	10 X	3 X	28 X	0.7 X	5 X		
MB 680-305856/6-A	Method Blank	108	96	96	139 X	88	94		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-305616/8
Matrix: Water
Analysis Batch: 305616

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/02/13 13:23	1
Acetonitrile	40	U	40	10	ug/L			12/02/13 13:23	1
Acrolein	20	U	20	7.4	ug/L			12/02/13 13:23	1
Acrylonitrile	20	U	20	7.2	ug/L			12/02/13 13:23	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/02/13 13:23	1
Benzene	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/02/13 13:23	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/02/13 13:23	1
2-Butanone	10	U	10	1.0	ug/L			12/02/13 13:23	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/02/13 13:23	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/02/13 13:23	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/02/13 13:23	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 13:23	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/02/13 13:23	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/02/13 13:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 13:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			12/02/13 13:23	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/02/13 13:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/02/13 13:23	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/02/13 13:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/02/13 13:23	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/02/13 13:23	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/02/13 13:23	1
Diethyl ether	10	U	10	1.0	ug/L			12/02/13 13:23	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/02/13 13:23	1
Ethylene oxide	200	U	200	200	ug/L			12/02/13 13:23	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
2-Hexanone	10	U	10	1.0	ug/L			12/02/13 13:23	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/02/13 13:23	1
Isobutyl alcohol	40	U	40	11	ug/L			12/02/13 13:23	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/02/13 13:23	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/02/13 13:23	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/02/13 13:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/02/13 13:23	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/02/13 13:23	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			12/02/13 13:23	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/02/13 13:23	1
o-Xylene	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/02/13 13:23	1
Propionitrile	20	U	20	4.6	ug/L			12/02/13 13:23	1
Propylene oxide	200	U	200	200	ug/L			12/02/13 13:23	1
Styrene	1.0	U	1.0	0.11	ug/L			12/02/13 13:23	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/02/13 13:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-305616/8
Matrix: Water
Analysis Batch: 305616

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/02/13 13:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/02/13 13:23	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 13:23	1
Toluene	1.0	U	1.0	0.33	ug/L			12/02/13 13:23	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/02/13 13:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/02/13 13:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			12/02/13 13:23	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/02/13 13:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/02/13 13:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/02/13 13:23	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/02/13 13:23	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 13:23	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/02/13 13:23	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/02/13 13:23	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/02/13 13:23	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/02/13 13:23	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/13 13:23*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 130*		*12/02/13 13:23*	*1*
Dibromofluoromethane	*108*		*70 - 130*		*12/02/13 13:23*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/02/13 13:23*	*1*

Lab Sample ID: LCS 680-305616/4
Matrix: Water
Analysis Batch: 305616

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	100		ug/L		100	39 - 162
Benzene	50.0	51.9		ug/L		104	74 - 123
Bromodichloromethane	50.0	54.1		ug/L		108	72 - 129
Bromoform	50.0	49.0		ug/L		98	60 - 134
Bromomethane	50.0	65.8		ug/L		132	10 - 171
2-Butanone	100	100		ug/L		100	55 - 142
Carbon disulfide	50.0	57.6		ug/L		115	63 - 142
Carbon tetrachloride	50.0	52.4		ug/L		105	70 - 131
Chlorobenzene	50.0	49.3		ug/L		99	79 - 120
Chloroethane	50.0	51.1		ug/L		102	47 - 148
Chloroform	50.0	53.7		ug/L		107	76 - 128
Chloromethane	50.0	61.9		ug/L		124	47 - 151
cis-1,2-Dichloroethene	50.0	55.1		ug/L		110	78 - 127
cis-1,3-Dichloropropene	50.0	67.3	*	ug/L		135	73 - 128
Dibromochloromethane	50.0	51.2		ug/L		102	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	48.1		ug/L		96	57 - 126
1,2-Dibromoethane	50.0	50.7		ug/L		101	75 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-305616/4
Matrix: Water
Analysis Batch: 305616

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	50.0	49.2		ug/L		98	75 - 122
Dichlorodifluoromethane	50.0	61.0		ug/L		122	41 - 165
1,1-Dichloroethane	50.0	50.5		ug/L		101	69 - 132
1,2-Dichloroethane	50.0	48.8		ug/L		98	75 - 120
1,1-Dichloroethene	50.0	57.0		ug/L		114	73 - 134
1,2-Dichloropropane	50.0	61.1		ug/L		122	71 - 126
Diethyl ether	50.0	40.0		ug/L		80	40 - 160
Ethylbenzene	50.0	52.8		ug/L		106	78 - 125
2-Hexanone	100	101		ug/L		101	52 - 149
Methylene Chloride	50.0	51.9		ug/L		104	79 - 124
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	51 - 143
Methyl tert-butyl ether	100	108		ug/L		108	76 - 126
Styrene	50.0	52.1		ug/L		104	75 - 129
t-Butanol	50.0	28.1		ug/L		56	49 - 148
1,1,1,2-Tetrachloroethane	50.0	50.0		ug/L		100	68 - 132
1,1,2,2-Tetrachloroethane	50.0	48.1		ug/L		96	71 - 127
Tetrachloroethene	50.0	43.1		ug/L		86	77 - 128
Toluene	50.0	52.6		ug/L		105	77 - 125
trans-1,2-Dichloroethene	50.0	55.2		ug/L		110	78 - 130
trans-1,3-Dichloropropene	50.0	66.5	*	ug/L		133	72 - 127
1,2,3-Trichlorobenzene	50.0	52.3		ug/L		105	63 - 136
1,1,1-Trichloroethane	50.0	46.5		ug/L		93	76 - 126
1,1,2-Trichloroethane	50.0	50.7		ug/L		101	69 - 127
Trichloroethylene	50.0	51.4		ug/L		103	80 - 120
Trichlorofluoromethane	50.0	63.3		ug/L		127	66 - 144
1,2,3-Trichloropropane	50.0	52.3		ug/L		105	74 - 126
Vinyl acetate	100	132		ug/L		132	10 - 200
Vinyl chloride	50.0	57.5		ug/L		115	58 - 141
Xylenes, Total	150	159		ug/L		106	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 680-305616/5
Matrix: Water
Analysis Batch: 305616

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
Acetone	100	97.3		ug/L		97	39 - 162	3	50
Benzene	50.0	50.3		ug/L		101	74 - 123	3	30
Bromodichloromethane	50.0	53.2		ug/L		106	72 - 129	2	30
Bromoform	50.0	48.6		ug/L		97	60 - 134	1	30
Bromomethane	50.0	63.0		ug/L		126	10 - 171	4	50
2-Butanone	100	95.3		ug/L		95	55 - 142	5	30
Carbon disulfide	50.0	52.0		ug/L		104	63 - 142	10	30
Carbon tetrachloride	50.0	47.3		ug/L		95	70 - 131	10	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-305616/5
Matrix: Water
Analysis Batch: 305616

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
Chlorobenzene	50.0	48.9		ug/L		98	79 - 120	1	30
Chloroethane	50.0	47.5		ug/L		95	47 - 148	7	40
Chloroform	50.0	52.0		ug/L		104	76 - 128	3	30
Chloromethane	50.0	58.0		ug/L		116	47 - 151	6	30
cis-1,2-Dichloroethene	50.0	52.9		ug/L		106	78 - 127	4	30
cis-1,3-Dichloropropene	50.0	66.6	*	ug/L		133	73 - 128	1	30
Dibromochloromethane	50.0	51.1		ug/L		102	63 - 134	0	50
1,2-Dibromo-3-Chloropropane	50.0	46.3		ug/L		93	57 - 126	4	50
1,2-Dibromoethane	50.0	51.6		ug/L		103	75 - 127	2	30
Dibromomethane	50.0	49.3		ug/L		99	75 - 122	0	30
Dichlorodifluoromethane	50.0	53.4		ug/L		107	41 - 165	13	50
1,1-Dichloroethane	50.0	48.2		ug/L		96	69 - 132	5	30
1,2-Dichloroethane	50.0	49.0		ug/L		98	75 - 120	0	30
1,1-Dichloroethene	50.0	52.5		ug/L		105	73 - 134	8	30
1,2-Dichloropropane	50.0	60.8		ug/L		122	71 - 126	0	30
Diethyl ether	50.0	38.6		ug/L		77	40 - 160	3	50
Ethylbenzene	50.0	51.2		ug/L		102	78 - 125	3	30
2-Hexanone	100	100		ug/L		100	52 - 149	1	30
Methylene Chloride	50.0	50.9		ug/L		102	79 - 124	2	30
4-Methyl-2-pentanone (MIBK)	100	102		ug/L		102	51 - 143	2	30
Methyl tert-butyl ether	100	105		ug/L		105	76 - 126	2	30
Styrene	50.0	52.7		ug/L		105	75 - 129	1	30
t-Butanol	50.0	26.6		ug/L		53	49 - 148	6	50
1,1,1,2-Tetrachloroethane	50.0	49.3		ug/L		99	68 - 132	2	30
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	71 - 127	3	30
Tetrachloroethene	50.0	40.8		ug/L		82	77 - 128	6	30
Toluene	50.0	51.1		ug/L		102	77 - 125	3	30
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	78 - 130	6	30
trans-1,3-Dichloropropene	50.0	66.7	*	ug/L		133	72 - 127	0	50
1,2,3-Trichlorobenzene	50.0	51.1		ug/L		102	63 - 136	2	30
1,1,1-Trichloroethane	50.0	44.1		ug/L		88	76 - 126	5	30
1,1,2-Trichloroethane	50.0	51.0		ug/L		102	69 - 127	0	30
Trichloroethylene	50.0	49.2		ug/L		98	80 - 120	4	30
Trichlorofluoromethane	50.0	55.1		ug/L		110	66 - 144	14	30
1,2,3-Trichloropropane	50.0	51.1		ug/L		102	74 - 126	2	30
Vinyl acetate	100	129		ug/L		129	10 - 200	2	30
Vinyl chloride	50.0	53.0		ug/L		106	58 - 141	8	30
Xylenes, Total	150	155		ug/L		103	80 - 124	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*98*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-306176/9
Matrix: Water
Analysis Batch: 306176

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/05/13 12:37	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/05/13 12:37	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/05/13 12:37	1
Diethyl ether	10	U	10	1.0	ug/L			12/05/13 12:37	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/05/13 12:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/05/13 12:37	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/05/13 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*12/05/13 12:37*	*1*
Dibromofluoromethane	*86*		*70 - 130*		*12/05/13 12:37*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/05/13 12:37*	*1*

Lab Sample ID: LCS 680-306176/5
Matrix: Water
Analysis Batch: 306176

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	44.9		ug/L		90	76 - 128
1,1-Dichloroethane	50.0	47.7		ug/L		95	69 - 132
1,2-Dichloroethane	50.0	62.1	*	ug/L		124	75 - 120
Diethyl ether	50.0	49.6		ug/L		99	40 - 160
t-Butanol	50.0	42.0		ug/L		84	49 - 148
Tetrachloroethene	50.0	46.8		ug/L		94	77 - 128
Trichloroethene	50.0	52.2		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane	*79*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 680-306176/10
Matrix: Water
Analysis Batch: 306176

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
Chloroform	50.0	42.8		ug/L		86	76 - 128	5	30
1,1-Dichloroethane	50.0	43.8		ug/L		88	69 - 132	9	30
1,2-Dichloroethane	50.0	58.7		ug/L		117	75 - 120	6	30
Diethyl ether	50.0	46.8		ug/L		94	40 - 160	6	50
t-Butanol	50.0	41.4		ug/L		83	49 - 148	2	50
Tetrachloroethene	50.0	45.4		ug/L		91	77 - 128	3	30
Trichloroethene	50.0	49.6		ug/L		99	80 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane	*76*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-306176/10
Matrix: Water
Analysis Batch: 306176

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: MB 680-306390/11
Matrix: Water
Analysis Batch: 306390

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/06/13 12:26	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/06/13 12:26	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/06/13 12:26	1
Diethyl ether	10	U	10	1.0	ug/L			12/06/13 12:26	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/06/13 12:26	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/06/13 12:26	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/06/13 12:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		70 - 130		12/06/13 12:26	1
Dibromofluoromethane	124		70 - 130		12/06/13 12:26	1
Toluene-d8 (Surr)	102		70 - 130		12/06/13 12:26	1

Lab Sample ID: LCS 680-306390/7
Matrix: Water
Analysis Batch: 306390

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	53.5		ug/L		107	76 - 128
1,1-Dichloroethane	50.0	48.7		ug/L		97	69 - 132
1,2-Dichloroethane	50.0	53.3		ug/L		107	75 - 120
Diethyl ether	50.0	29.9		ug/L		60	40 - 160
t-Butanol	50.0	45.2		ug/L		90	49 - 148
Tetrachloroethene	50.0	57.9		ug/L		116	77 - 128
Trichloroethene	50.0	53.7		ug/L		107	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	109		70 - 130
Dibromofluoromethane	112		70 - 130
Toluene-d8 (Surr)	108		70 - 130

Lab Sample ID: LCSD 680-306390/8
Matrix: Water
Analysis Batch: 306390

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
Chloroform	50.0	47.9		ug/L		96	76 - 128	11	30
1,1-Dichloroethane	50.0	45.0		ug/L		90	69 - 132	8	30
1,2-Dichloroethane	50.0	51.3		ug/L		103	75 - 120	4	30
Diethyl ether	50.0	29.4		ug/L		59	40 - 160	2	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-306390/8
Matrix: Water
Analysis Batch: 306390

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
t-Butanol			50.0	43.2		ug/L		86	49 - 148	5	50
Tetrachloroethene			50.0	53.3		ug/L		107	77 - 128	8	30
Trichloroethene			50.0	51.3		ug/L		103	80 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-305281/6-A
Matrix: Water
Analysis Batch: 305625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305281

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		11/27/13 15:36	12/02/13 16:07	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		11/27/13 15:36	12/02/13 16:07	1
Naphthalene	0.20	U	0.20	0.10	ug/L		11/27/13 15:36	12/02/13 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*22*	*X*	*30 - 130*	*11/27/13 15:36*	*12/02/13 16:07*	*1*
2-Fluorobiphenyl	*10*	*X*	*34 - 130*	*11/27/13 15:36*	*12/02/13 16:07*	*1*
2-Fluorophenol (Surr)	*3*	*X*	*25 - 130*	*11/27/13 15:36*	*12/02/13 16:07*	*1*
Terphenyl-d14 (Surr)	*28*	*X*	*36 - 130*	*11/27/13 15:36*	*12/02/13 16:07*	*1*
Phenol-d5 (Surr)	*0.7*	*X*	*27 - 130*	*11/27/13 15:36*	*12/02/13 16:07*	*1*
Nitrobenzene-d5 (Surr)	*5*	*X*	*32 - 130*	*11/27/13 15:36*	*12/02/13 16:07*	*1*

Lab Sample ID: LCS 680-305281/7-A
Matrix: Water
Analysis Batch: 305625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305281

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane			10.0	5.70		ug/L		57	10 - 130
Bis(2-chloroethyl)ether			10.0	6.94		ug/L		69	36 - 130
Naphthalene			10.0	6.17		ug/L		62	35 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*94*		*30 - 130*
2-Fluorobiphenyl	*67*		*34 - 130*
2-Fluorophenol (Surr)	*73*		*25 - 130*
Terphenyl-d14 (Surr)	*75*		*36 - 130*
Phenol-d5 (Surr)	*60*		*27 - 130*
Nitrobenzene-d5 (Surr)	*67*		*32 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-305856/6-A
Matrix: Water
Analysis Batch: 306542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		12/03/13 14:59	12/06/13 19:21	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		12/03/13 14:59	12/06/13 19:21	1
Naphthalene	0.20	U	0.20	0.10	ug/L		12/03/13 14:59	12/06/13 19:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*108*		*30 - 130*	*12/03/13 14:59*	*12/06/13 19:21*	*1*
2-Fluorobiphenyl	*96*		*34 - 130*	*12/03/13 14:59*	*12/06/13 19:21*	*1*
2-Fluorophenol (Surr)	*96*		*25 - 130*	*12/03/13 14:59*	*12/06/13 19:21*	*1*
Terphenyl-d14 (Surr)	*139*	*X*	*36 - 130*	*12/03/13 14:59*	*12/06/13 19:21*	*1*
Phenol-d5 (Surr)	*88*		*27 - 130*	*12/03/13 14:59*	*12/06/13 19:21*	*1*
Nitrobenzene-d5 (Surr)	*94*		*32 - 130*	*12/03/13 14:59*	*12/06/13 19:21*	*1*

Lab Sample ID: LCS 680-305856/7-A
Matrix: Water
Analysis Batch: 306542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305856

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	5.64		ug/L		56	10 - 130		
Bis(2-chloroethyl)ether			10.0	9.20		ug/L		92	36 - 130		
Naphthalene			10.0	7.65		ug/L		76	35 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*111*		*30 - 130*
2-Fluorobiphenyl	*86*		*34 - 130*
2-Fluorophenol (Surr)	*79*		*25 - 130*
Terphenyl-d14 (Surr)	*112*		*36 - 130*
Phenol-d5 (Surr)	*80*		*27 - 130*
Nitrobenzene-d5 (Surr)	*83*		*32 - 130*

Lab Sample ID: LCSD 680-305856/8-A
Matrix: Water
Analysis Batch: 306542

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305856

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			10.0	6.82		ug/L		68	10 - 130	19	50
Bis(2-chloroethyl)ether			10.0	9.81		ug/L		98	36 - 130	6	50
Naphthalene			10.0	8.04		ug/L		80	35 - 130	5	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*99*		*30 - 130*
2-Fluorobiphenyl	*89*		*34 - 130*
2-Fluorophenol (Surr)	*80*		*25 - 130*
Terphenyl-d14 (Surr)	*105*		*36 - 130*
Phenol-d5 (Surr)	*82*		*27 - 130*
Nitrobenzene-d5 (Surr)	*86*		*32 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-306407/8
Matrix: Water
Analysis Batch: 306407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 12:30	1

Lab Sample ID: MB 680-306699/6
Matrix: Water
Analysis Batch: 306699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/09/13 12:46	1
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 12:46	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-305320/1-A
Matrix: Water
Analysis Batch: 305548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	5.0	U	5.0	1.4	ug/L		11/27/13 10:26	11/27/13 23:13	1
Cadmium	0.50	U	0.50	0.13	ug/L		11/27/13 10:26	11/27/13 23:13	1
Chromium	5.0	U	5.0	2.5	ug/L		11/27/13 10:26	11/27/13 23:13	1
Cobalt	0.50	U	0.50	0.12	ug/L		11/27/13 10:26	11/27/13 23:13	1
Iron	100	U	100	44	ug/L		11/27/13 10:26	11/27/13 23:13	1
Lead	1.5	U	1.5	0.50	ug/L		11/27/13 10:26	11/27/13 23:13	1
Manganese	5.0	U	5.0	2.0	ug/L		11/27/13 10:26	11/27/13 23:13	1
Nickel	5.0	U	5.0	2.0	ug/L		11/27/13 10:26	11/27/13 23:13	1

Lab Sample ID: LCS 680-305320/2-A
Matrix: Water
Analysis Batch: 305548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	52.8		ug/L		106	75 - 125
Chromium	100	110		ug/L		110	75 - 125
Lead	50.0	51.7		ug/L		103	75 - 125
Nickel	100	111		ug/L		111	75 - 125

Lab Sample ID: 680-96566-1 MS
Matrix: Water
Analysis Batch: 305548

Client Sample ID: NAT-3
Prep Type: Total/NA
Prep Batch: 305320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.18	J	50.0	50.9		ug/L		101	75 - 125
Chromium	9.7		100	115		ug/L		105	75 - 125
Lead	0.53	J	50.0	48.0		ug/L		95	75 - 125
Nickel	22		100	124		ug/L		102	75 - 125

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96566-1 MSD
Matrix: Water
Analysis Batch: 305548

Client Sample ID: NAT-3
Prep Type: Total/NA
Prep Batch: 305320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.18	J	50.0	48.8		ug/L		97	75 - 125	4	20
Chromium	9.7		100	111		ug/L		101	75 - 125	3	20
Lead	0.53	J	50.0	47.0		ug/L		93	75 - 125	2	20
Nickel	22		100	122		ug/L		99	75 - 125	2	20

GC/MS VOA

Analysis Batch: 305616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-7	Field Blank 1	Total/NA	Water	8260B	
680-96566-8	Trip Blank	Total/NA	Water	8260B	
LCS 680-305616/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-305616/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-305616/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 306176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-3	NAT-1	Total/NA	Water	8260B	
LCS 680-306176/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-306176/10	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-306176/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 306390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-1	NAT-3	Total/NA	Water	8260B	
680-96566-4	RAB-MW2	Total/NA	Water	8260B	
LCS 680-306390/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-306390/8	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-306390/11	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 305281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-7	Field Blank 1	Total/NA	Water	3520C	
LCS 680-305281/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-305281/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 305625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-7	Field Blank 1	Total/NA	Water	8270D LL	305281
LCS 680-305281/7-A	Lab Control Sample	Total/NA	Water	8270D LL	305281
MB 680-305281/6-A	Method Blank	Total/NA	Water	8270D LL	305281

Prep Batch: 305856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-7 - RE	Field Blank 1	Total/NA	Water	3520C	
LCS 680-305856/7-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-305856/8-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 680-305856/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 306542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-7 - RE	Field Blank 1	Total/NA	Water	8270D LL	305856
LCS 680-305856/7-A	Lab Control Sample	Total/NA	Water	8270D LL	305856
LCSD 680-305856/8-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	305856
MB 680-305856/6-A	Method Blank	Total/NA	Water	8270D LL	305856

GC VOA

Analysis Batch: 306407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-2	NAT-2	Total/NA	Water	8015C	
680-96566-4	RAB-MW2	Total/NA	Water	8015C	
LCS 680-306407/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306407/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306407/8	Method Blank	Total/NA	Water	8015C	

Analysis Batch: 306699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-7	Field Blank 1	Total/NA	Water	8015C	
LCS 680-306699/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306699/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306699/6	Method Blank	Total/NA	Water	8015C	

Metals

Prep Batch: 305320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-1	NAT-3	Total/NA	Water	3010A	
680-96566-1 MS	NAT-3	Total/NA	Water	3010A	
680-96566-1 MSD	NAT-3	Total/NA	Water	3010A	
680-96566-2	NAT-2	Total/NA	Water	3010A	
680-96566-3	NAT-1	Total/NA	Water	3010A	
680-96566-4	RAB-MW2	Total/NA	Water	3010A	
680-96566-5	RAB-MW4	Total/NA	Water	3010A	
680-96566-6	RAB-MW3	Total/NA	Water	3010A	
680-96566-7	Field Blank 1	Total/NA	Water	3010A	
LCS 680-305320/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-305320/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 305548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-1	NAT-3	Total/NA	Water	6020A	305320
680-96566-1 MS	NAT-3	Total/NA	Water	6020A	305320
680-96566-1 MSD	NAT-3	Total/NA	Water	6020A	305320
680-96566-2	NAT-2	Total/NA	Water	6020A	305320
680-96566-3	NAT-1	Total/NA	Water	6020A	305320
680-96566-4	RAB-MW2	Total/NA	Water	6020A	305320
680-96566-5	RAB-MW4	Total/NA	Water	6020A	305320
680-96566-6	RAB-MW3	Total/NA	Water	6020A	305320
680-96566-7	Field Blank 1	Total/NA	Water	6020A	305320
LCS 680-305320/2-A	Lab Control Sample	Total/NA	Water	6020A	305320
MB 680-305320/1-A	Method Blank	Total/NA	Water	6020A	305320

Analysis Batch: 305920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96566-4	RAB-MW2	Total/NA	Water	6020A	305320

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: NAT-3

Lab Sample ID: 680-96566-1

Date Collected: 11/25/13 13:35
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	306390	12/06/13 15:03	JD1	TAL SAV
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/27/13 23:28	CME	TAL SAV

Client Sample ID: NAT-2

Lab Sample ID: 680-96566-2

Date Collected: 11/25/13 14:30
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	306407	12/06/13 14:24	AJMC	TAL SAV
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/28/13 00:05	CME	TAL SAV

Client Sample ID: NAT-1

Lab Sample ID: 680-96566-3

Date Collected: 11/25/13 15:25
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	306176	12/05/13 19:21	JD1	TAL SAV
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/28/13 00:12	CME	TAL SAV

Client Sample ID: RAB-MW2

Lab Sample ID: 680-96566-4

Date Collected: 11/25/13 12:00
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	306390	12/06/13 15:25	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 14:49	AJMC	TAL SAV
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/28/13 00:19	CME	TAL SAV
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		4	305920	12/02/13 21:30	BWR	TAL SAV

Client Sample ID: RAB-MW4

Lab Sample ID: 680-96566-5

Date Collected: 11/25/13 12:55
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/28/13 00:42	CME	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Client Sample ID: RAB-MW3

Lab Sample ID: 680-96566-6

Date Collected: 11/25/13 14:05
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/28/13 00:49	CME	TAL SAV

Client Sample ID: Field Blank 1

Lab Sample ID: 680-96566-7

Date Collected: 11/25/13 00:00
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	305616	12/02/13 14:23	JD1	TAL SAV
Total/NA	Prep	3520C			305281	11/27/13 15:36	RNJ	TAL SAV
Total/NA	Analysis	8270D LL		1	305625	12/02/13 17:22	JPM	TAL SAV
Total/NA	Prep	3520C	RE		305856	12/03/13 14:59	RBS	TAL SAV
Total/NA	Analysis	8270D LL	RE	1	306542	12/06/13 20:38	JLW	TAL SAV
Total/NA	Analysis	8015C		1	306699	12/09/13 13:12	AJMC	TAL SAV
Total/NA	Prep	3010A			305320	11/27/13 10:26	BJB	TAL SAV
Total/NA	Analysis	6020A		1	305548	11/28/13 00:57	CME	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-96566-8

Date Collected: 11/25/13 00:00
Matrix: Water
Date Received: 11/26/13 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	305616	12/02/13 13:53	JD1	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-14
Arkansas DEQ	State Program	6	88-0692	02-01-14
California	NELAP	9	3217CA	07-31-14
Colorado	State Program	8	N/A	12-31-13 *
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13 *
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	06-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-13 *
Indiana	State Program	5	N/A	06-30-14
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13 *
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13 *
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-14 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13 *
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14 *
South Carolina	State Program	4	98001	06-30-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13 *
West Virginia DEP	State Program	3	94	06-30-14
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96566-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 81900

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)
Ashland Aqualon		VA
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL	
CLIENT ADDRESS: 235. 13th St. Suite 103, Richmond, VA		
COMPANY CONTRACTING THIS WORK (if applicable)		

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) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	* REQUIRED ANALYSIS: VOCs 8260B	Metals 6020	Methanol 8015	Ethanol 8015	SVOCs 8270								NUMBER OF CONTAINERS SUBMITTED	REMARKS
								HCl	PRESERVATIVE												
11/25/13	1335	NAT-3	G	X				X	X												* See attached table for specific VOCs/metals to run/report
	1330	NAT-2						X	X	X											
	1525	NAT-1						X	X												
	12:00	RAB-MW2						X	X	X											
	12:55	RAB-MW4							X												
	14:05	RAB-MW3							X												
		Field Blank 1						X	X	X	X	X									No preserve. for Field Blank 1 VOCs
		Trip Blank						X													

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	11/25/13	17:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.
	11/26/13	1009	YES ◯ NO ◯		

680-96566 Chain of Custody

1.6°C

TAL8240-680 (1008)

Page 35 of 36

12/12/2013

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-96566-1

Login Number: 96566

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

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.	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	

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: 680-96695-1
Client Project/Site: Hercules Aqualon Corrective Action

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
1/3/2014 10:07:56 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time

GC VOA

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

HPLC/IC

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

Metals

Qualifier	Qualifier Description
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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS/MSD Recovery and/or RPD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-96695-1	MW-2	Water	12/02/13 10:25	12/03/13 10:08
680-96695-2	MW-1	Water	12/02/13 11:50	12/03/13 10:08
680-96695-3	SDB-MW-2	Water	12/02/13 15:00	12/03/13 10:08
680-96695-4	MW-8U	Water	12/02/13 15:23	12/03/13 10:08
680-96695-5	MW-8D	Water	12/02/13 12:48	12/03/13 10:08
680-96695-6	Field Blank #2	Water	12/02/13 11:55	12/03/13 10:08
680-96695-7	Equipment Blank #2	Water	12/02/13 12:10	12/03/13 10:08
680-96695-8	MW-8U	Water	12/02/13 15:18	12/03/13 10:08
680-96695-9	MW-8L-R	Water	12/02/13 13:47	12/03/13 10:08
680-96695-10	MW-8D	Water	12/02/13 12:43	12/03/13 10:08
680-96695-11	SDB-MW-1	Water	12/02/13 15:00	12/03/13 10:08
680-96695-12	Trip Blank	Water	12/02/13 00:00	12/03/13 10:08

Job ID: 680-96695-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-96695-1

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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/03/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.8º C and 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-2 (680-96695-1), MW-8U (680-96695-8), MW-8L-R (680-96695-9), SDB-MW-1 (680-96695-11) and Trip Blank (680-96695-12) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/09/2013 and 12/10/2013.

t-Butanol failed the recovery criteria high for LCS 680-306654/7. t-Butanol failed the recovery criteria high for LCSD 680-306654/8.

Samples MW-2 (680-96695-1)[100X], MW-8U (680-96695-8)[25X] and MW-8L-R (680-96695-9)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples MW-2 (680-96695-1), MW-1 (680-96695-2) and MW-8L-R (680-96695-9) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 12/04/2013 and 12/20/2013 and analyzed on 01/01/2014, 12/10/2013 and 12/14/2013.

2,4,6-Tribromophenol (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr), Phenol-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for MW-2 (680-96695-1). Phenol-d5 (Surr) failed the surrogate recovery criteria low for MW-8L-R (680-96695-9).

Phenol-d5 (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria low for MW-1 (680-96695-2). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results.

Sample MW-2 (680-96695-1)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 680-96695-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

No other difficulties were encountered during the SVOAs analysis.

All other quality control parameters were within the acceptance limits.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Sample MW-2 (680-96695-1) was analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 12/09/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 12/03/2013 and analyzed on 12/05/2013.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), Field Blank #2 (680-96695-6), Equipment Blank #2 (680-96695-7), MW-8U (680-96695-8), MW-8L-R (680-96695-9), MW-8D (680-96695-10) and SDB-MW-1 (680-96695-11) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 12/04/2013 and 12/05/2013 and analyzed on 12/05/2013 and 12/06/2013.

Antimony failed the recovery criteria high for LCS 680-306179/2-A. Refer to the QC report for details.

Iron failed the recovery criteria low for the MS of sample MW-2MS (680-96695-1) in batch 680-306306.

Manganese failed the recovery criteria high for the MSD of sample MW-2MSD (680-96695-1) in batch 680-306306.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 12/06/2013.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

AMMONIA

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/04/2013.

Ammonia failed the recovery criteria low for the MS/MSD of sample MW-2MS/MSD (680-96695-1) in batch 680-306162.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

Job ID: 680-96695-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

ORTHOPHOSPHATE

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 12/03/2013.

No difficulties were encountered during the orthophosphate analysis.

All quality control parameters were within the acceptance limits.

SULFIDE

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 12/06/2013.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

SULFIDE

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 12/06/2013.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

9056 ANIONS

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 12/12/2013 and 12/13/2013.

Sulfate failed the recovery criteria low for the MS of sample MW-1MS (680-96695-2) in batch 680-307268.

Chloride and Sulfate failed the recovery criteria low for the MSD of sample MW-1MSD (680-96695-2) in batch 680-307268.

Samples MW-2 (680-96695-1)[10X], MW-2 (680-96695-1)[25X], MW-1 (680-96695-2)[20X], SDB-MW-2 (680-96695-3)[4X], SDB-MW-2 (680-96695-3)[50X] and MW-8U (680-96695-4)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the 9056 Anions analysis.

All other quality control parameters were within the acceptance limits.

ANIONS BY IC (NITRATE/NITRITE)

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 12/03/2013 and 12/04/2013.

Samples MW-2 (680-96695-1)[2X] and MW-8U (680-96695-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Anions by IC (Nitrate/Nitrite) analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED ORGANIC CARBON

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/14/2013.

Job ID: 680-96695-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

UNIONIZED AMMONIA

Samples MW-2 (680-96695-1), MW-1 (680-96695-2), SDB-MW-2 (680-96695-3), MW-8U (680-96695-4) and MW-8D (680-96695-5) were analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 12/12/2013.

No difficulties were encountered during the unionized ammonia analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-2 — Lab Sample ID: 680-96695-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl ether	9200		1000	100	ug/L	100		8260B	Total/NA
1,4-Dioxane	50		19	3.0	ug/L	10		8270D LL	Total/NA
Ethanol	9.3		5.0	0.33	mg/L	1		8015C	Total/NA
Chloride	1000		13	6.3	mg/L	25		9056A	Total/NA
Nitrate as N	0.062	J	0.10	0.050	mg/L	2		9056A	Total/NA
Sulfate	470		5.0	2.5	mg/L	10		9056A	Total/NA
Aluminum	110		100	50	ug/L	1		6020A	Total/NA
Iron	160000		100	44	ug/L	1		6020A	Total/NA
Manganese	11000		5.0	2.0	ug/L	1		6020A	Total/NA
Calcium, Dissolved	270000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	150000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	92000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	10000		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	3900		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	350000		500	250	ug/L	1		6020	Dissolved
Ammonia	0.38		0.050	0.026	mg/L	1		350.1	Dissolved
Orthophosphate, Dissolved	0.19		0.050	0.016	mg/L	1		365.1	Dissolved
Sulfide	1.1		1.0	1.0	mg/L	1		9034	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Sulfide	2.2		1.0	1.0	mg/L	1		9034	Total/NA
Alkalinity	150		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	150		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.49		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	5.4		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	20		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	5.0		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-1 — Lab Sample ID: 680-96695-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	19		1.9	0.30	ug/L	1		8270D LL	Total/NA
1,4-Dioxane - RE	9.2	H	1.9	0.30	ug/L	1		8270D LL	Total/NA
Chloride	220		10	5.0	mg/L	20		9056A	Total/NA
Sulfate	800		10	5.0	mg/L	20		9056A	Total/NA
Chromium	3.8	J	5.0	2.5	ug/L	1		6020A	Total/NA
Calcium, Dissolved	170000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	6400		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	49000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	2700		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	3600		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	250000		500	250	ug/L	1		6020	Dissolved
Ammonia	0.044	J	0.050	0.026	mg/L	1		350.1	Dissolved
Orthophosphate, Dissolved	0.42		0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	110		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.057		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	5.5		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	19		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	3.4		1.0	1.0	mg/L	1		9060	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: SDB-MW-2 — Lab Sample ID: 680-96695-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	120		2.0	1.0	mg/L	4		9056A	Total/NA
Sulfate	1300		25	13	mg/L	50		9056A	Total/NA
Calcium, Dissolved	400000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	460		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	98000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	1400		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	1500		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	270000		500	250	ug/L	1		6020	Dissolved
Orthophosphate, Dissolved	0.091		0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	360		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	360		5.0	5.0	mg/L	1		SM 2320B	Total/NA
pH	6.0		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	18		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	4.4		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-8U — Lab Sample ID: 680-96695-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	450		10	5.0	mg/L	20		9056A	Total/NA
Nitrate as N	0.18	J	0.25	0.13	mg/L	5		9056A	Total/NA
Sulfate	530		10	5.0	mg/L	20		9056A	Total/NA
Calcium, Dissolved	180000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	61000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	51000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	1500		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	34000		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	430000		500	250	ug/L	1		6020	Dissolved
Ammonia	12		0.50	0.26	mg/L	10		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	460		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	460		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	15		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	6.6		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	22		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	12		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-8D — Lab Sample ID: 680-96695-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.8		0.50	0.25	mg/L	1		9056A	Total/NA
Nitrate as N	0.026	J	0.050	0.025	mg/L	1		9056A	Total/NA
Sulfate	5.1		0.50	0.25	mg/L	1		9056A	Total/NA
Calcium, Dissolved	35000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	460		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	3200		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	230		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	4400		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	12000		500	250	ug/L	1		6020	Dissolved
Ammonia	0.050		0.050	0.026	mg/L	1		350.1	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-8D (Continued) — Lab Sample ID: 680-96695-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Orthophosphate, Dissolved	0.19		0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	100		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	5.0	mg/L	1		SM 2320B	Total/NA
pH	6.7		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	19		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA

Client Sample ID: Field Blank #2 — Lab Sample ID: 680-96695-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	5.9		5.0	1.4	ug/L	1		6020A	Total/NA

Client Sample ID: Equipment Blank #2 — Lab Sample ID: 680-96695-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	6.2		5.0	1.4	ug/L	1		6020A	Total/NA
Copper	1.6	J	5.0	1.1	ug/L	1		6020A	Total/NA

Client Sample ID: MW-8U — Lab Sample ID: 680-96695-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	240		100	50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-8L-R — Lab Sample ID: 680-96695-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	5500		500	260	ug/L	100		8260B	Total/NA
1,4-Dioxane	15		1.9	0.30	ug/L	1		8270D LL	Total/NA
Aluminum	110		100	50	ug/L	1		6020A	Total/NA
Arsenic	38		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: MW-8D — Lab Sample ID: 680-96695-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	170		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.64		0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: SDB-MW-1 — Lab Sample ID: 680-96695-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	320		100	50	ug/L	1		6020A	Total/NA
Chromium	3.2	J	5.0	2.5	ug/L	1		6020A	Total/NA
Iron	200000		100	44	ug/L	1		6020A	Total/NA
Lead	1.2	J	1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	2200		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	2.1	J	5.0	2.0	ug/L	1		6020A	Total/NA
Arsenic	8.2		2.5	1.3	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: Trip Blank **Lab Sample ID: 680-96695-12**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-2
Date Collected: 12/02/13 10:25
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	9200		1000	100	ug/L			12/09/13 16:40	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/09/13 16:40*	*100*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	50		19	3.0	ug/L		12/04/13 14:58	12/14/13 20:57	10
Bis(2-chloroethyl)ether	9.7	U	9.7	0.97	ug/L		12/04/13 14:58	12/14/13 20:57	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D*	*30 - 130*	*12/04/13 14:58*	*12/14/13 20:57*	*10*
2-Fluorophenol (Surr)	*0*	*D*	*25 - 130*	*12/04/13 14:58*	*12/14/13 20:57*	*10*
Terphenyl-d14 (Surr)	*0*	*D*	*36 - 130*	*12/04/13 14:58*	*12/14/13 20:57*	*10*
Phenol-d5 (Surr)	*0*	*D*	*27 - 130*	*12/04/13 14:58*	*12/14/13 20:57*	*10*
Nitrobenzene-d5 (Surr)	*0*	*D*	*32 - 130*	*12/04/13 14:58*	*12/14/13 20:57*	*10*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	9.3		5.0	0.33	mg/L			12/09/13 14:00	1
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 14:00	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1000		13	6.3	mg/L			12/12/13 16:53	25
Nitrate as N	0.062	J	0.10	0.050	mg/L			12/03/13 23:07	2
Nitrite as N	0.10	U	0.10	0.050	mg/L			12/03/13 23:07	2
Sulfate	470		5.0	2.5	mg/L			12/12/13 14:02	10

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	110		100	50	ug/L		12/04/13 08:57	12/05/13 01:29	1
Iron	160000		100	44	ug/L		12/04/13 08:57	12/05/13 01:29	1
Manganese	11000		5.0	2.0	ug/L		12/04/13 08:57	12/05/13 01:29	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	270000		250	130	ug/L		12/03/13 18:05	12/05/13 20:11	1
Iron, Dissolved	150000		100	33	ug/L		12/03/13 18:05	12/05/13 20:11	1
Magnesium, Dissolved	92000		250	43	ug/L		12/03/13 18:05	12/05/13 20:11	1
Manganese, Dissolved	10000		5.0	1.0	ug/L		12/03/13 18:05	12/05/13 20:11	1
Potassium, Dissolved	3900		500	170	ug/L		12/03/13 18:05	12/05/13 20:11	1
Sodium, Dissolved	350000		500	250	ug/L		12/03/13 18:05	12/05/13 20:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	2.2		1.0	1.0	mg/L			12/06/13 13:44	1
Alkalinity	150		5.0	5.0	mg/L			12/06/13 14:45	1
Bicarbonate Alkalinity as CaCO3	150		5.0	5.0	mg/L			12/06/13 14:45	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 14:45	1
Ammonium ion as NH4	0.49		0.030	0.030	mg/L			12/12/13 13:26	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-2
Date Collected: 12/02/13 10:25
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.4		1.0	1.0	SU			12/12/13 13:26	1
Temperature	20		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.38		0.050	0.026	mg/L			12/04/13 11:49	1
Orthophosphate, Dissolved	0.19		0.050	0.016	mg/L			12/03/13 14:01	1
Sulfide	1.1		1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	5.0		1.0	1.0	mg/L			12/14/13 02:03	1

Client Sample ID: MW-1

Date Collected: 12/02/13 11:50
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-2

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	19		1.9	0.30	ug/L		12/04/13 14:58	12/10/13 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*165*	*X*	*30 - 130*	*12/04/13 14:58*	*12/10/13 23:08*	*1*
2-Fluorophenol (Surr)	*126*		*25 - 130*	*12/04/13 14:58*	*12/10/13 23:08*	*1*
Terphenyl-d14 (Surr)	*254*	*X*	*36 - 130*	*12/04/13 14:58*	*12/10/13 23:08*	*1*
Phenol-d5 (Surr)	*11*	*X*	*27 - 130*	*12/04/13 14:58*	*12/10/13 23:08*	*1*
Nitrobenzene-d5 (Surr)	*108*		*32 - 130*	*12/04/13 14:58*	*12/10/13 23:08*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	9.2	H	1.9	0.30	ug/L		12/20/13 16:51	01/01/14 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*30 - 130*	*12/20/13 16:51*	*01/01/14 17:55*	*1*
2-Fluorophenol (Surr)	*63*		*25 - 130*	*12/20/13 16:51*	*01/01/14 17:55*	*1*
Terphenyl-d14 (Surr)	*83*		*36 - 130*	*12/20/13 16:51*	*01/01/14 17:55*	*1*
Phenol-d5 (Surr)	*15*	*X*	*27 - 130*	*12/20/13 16:51*	*01/01/14 17:55*	*1*
Nitrobenzene-d5 (Surr)	*81*		*32 - 130*	*12/20/13 16:51*	*01/01/14 17:55*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		10	5.0	mg/L			12/12/13 17:06	20
Nitrate as N	0.050	U	0.050	0.025	mg/L			12/03/13 23:22	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			12/03/13 23:22	1
Sulfate	800		10	5.0	mg/L			12/12/13 17:06	20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	3.8	J	5.0	2.5	ug/L		12/04/13 08:57	12/05/13 02:06	1
Lead	1.5	U	1.5	0.50	ug/L		12/04/13 08:57	12/05/13 02:06	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	170000		250	130	ug/L		12/03/13 18:05	12/05/13 20:16	1
Iron, Dissolved	6400		100	33	ug/L		12/03/13 18:05	12/05/13 20:16	1
Magnesium, Dissolved	49000		250	43	ug/L		12/03/13 18:05	12/05/13 20:16	1
Manganese, Dissolved	2700		5.0	1.0	ug/L		12/03/13 18:05	12/05/13 20:16	1
Potassium, Dissolved	3600		500	170	ug/L		12/03/13 18:05	12/05/13 20:16	1
Sodium, Dissolved	250000		500	250	ug/L		12/03/13 18:05	12/05/13 20:16	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1
Alkalinity	110		5.0	5.0	mg/L			12/06/13 15:00	1
Bicarbonate Alkalinity as CaCO3	110		5.0	5.0	mg/L			12/06/13 15:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 15:00	1
Ammonium ion as NH4	0.057		0.030	0.030	mg/L			12/12/13 13:26	1
pH	5.5		1.0	1.0	SU			12/12/13 13:26	1
Temperature	19		1.0	1.0	Degrees C			12/12/13 13:26	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-1
Date Collected: 12/02/13 11:50
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-2
Matrix: Water

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.044	J	0.050	0.026	mg/L			12/04/13 11:49	1
Orthophosphate, Dissolved	0.42		0.050	0.016	mg/L			12/03/13 14:01	1
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	3.4		1.0	1.0	mg/L			12/14/13 02:21	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: SDB-MW-2
Date Collected: 12/02/13 15:00
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-3
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		2.0	1.0	mg/L			12/12/13 17:31	4
Nitrate as N	0.050	U	0.050	0.025	mg/L			12/04/13 00:08	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			12/04/13 00:08	1
Sulfate	**1300**		25	13	mg/L			12/13/13 14:58	50

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**400000**		250	130	ug/L		12/03/13 18:05	12/05/13 20:21	1
Iron, Dissolved	**460**		100	33	ug/L		12/03/13 18:05	12/05/13 20:21	1
Magnesium, Dissolved	**98000**		250	43	ug/L		12/03/13 18:05	12/05/13 20:21	1
Manganese, Dissolved	**1400**		5.0	1.0	ug/L		12/03/13 18:05	12/05/13 20:21	1
Potassium, Dissolved	**1500**		500	170	ug/L		12/03/13 18:05	12/05/13 20:21	1
Sodium, Dissolved	**270000**		500	250	ug/L		12/03/13 18:05	12/05/13 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1
Alkalinity	**360**		5.0	5.0	mg/L			12/06/13 14:54	1
Bicarbonate Alkalinity as CaCO3	**360**		5.0	5.0	mg/L			12/06/13 14:54	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 14:54	1
Ammonium ion as NH4	0.030	U	0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.0**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**18**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			12/04/13 11:49	1
Orthophosphate, Dissolved	**0.091**		0.050	0.016	mg/L			12/03/13 14:01	1
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**4.4**		1.0	1.0	mg/L			12/14/13 02:39	1

Client Sample ID: MW-8U
Date Collected: 12/02/13 15:23
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-4
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**450**		10	5.0	mg/L			12/12/13 17:55	20
Nitrate as N	**0.18**	**J**	0.25	0.13	mg/L			12/04/13 00:24	5
Nitrite as N	0.25	U	0.25	0.13	mg/L			12/04/13 00:24	5
Sulfate	**530**		10	5.0	mg/L			12/12/13 17:55	20

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**180000**		250	130	ug/L		12/03/13 18:05	12/05/13 20:27	1
Iron, Dissolved	**61000**		100	33	ug/L		12/03/13 18:05	12/05/13 20:27	1
Magnesium, Dissolved	**51000**		250	43	ug/L		12/03/13 18:05	12/05/13 20:27	1
Manganese, Dissolved	**1500**		5.0	1.0	ug/L		12/03/13 18:05	12/05/13 20:27	1
Potassium, Dissolved	**34000**		500	170	ug/L		12/03/13 18:05	12/05/13 20:27	1
Sodium, Dissolved	**430000**		500	250	ug/L		12/03/13 18:05	12/05/13 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 15:08	1
Alkalinity	**460**		5.0	5.0	mg/L			12/06/13 15:08	1
Bicarbonate Alkalinity as CaCO3	**460**		5.0	5.0	mg/L			12/06/13 15:08	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 15:08	1
Ammonium ion as NH4	**15**		0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.6**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**22**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**12**		0.50	0.26	mg/L			12/04/13 12:29	10
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			12/03/13 14:14	1
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**12**		1.0	1.0	mg/L			12/14/13 02:55	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-8D
Date Collected: 12/02/13 12:48
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-5
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.8**		0.50	0.25	mg/L			12/12/13 15:16	1
Nitrate as N	**0.026**	**J**	0.050	0.025	mg/L			12/04/13 00:39	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			12/04/13 00:39	1
Sulfate	**5.1**		0.50	0.25	mg/L			12/12/13 15:16	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**35000**		250	130	ug/L		12/03/13 18:05	12/05/13 20:32	1
Iron, Dissolved	**460**		100	33	ug/L		12/03/13 18:05	12/05/13 20:32	1
Magnesium, Dissolved	**3200**		250	43	ug/L		12/03/13 18:05	12/05/13 20:32	1
Manganese, Dissolved	**230**		5.0	1.0	ug/L		12/03/13 18:05	12/05/13 20:32	1
Potassium, Dissolved	**4400**		500	170	ug/L		12/03/13 18:05	12/05/13 20:32	1
Sodium, Dissolved	**12000**		500	250	ug/L		12/03/13 18:05	12/05/13 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 15:08	1
Alkalinity	**100**		5.0	5.0	mg/L			12/06/13 15:14	1
Bicarbonate Alkalinity as CaCO3	**100**		5.0	5.0	mg/L			12/06/13 15:14	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 15:14	1
Ammonium ion as NH4	0.030	U	0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.7**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**19**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.050**		0.050	0.026	mg/L			12/04/13 11:49	1
Orthophosphate, Dissolved	**0.19**		0.050	0.016	mg/L			12/03/13 14:01	1
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			12/14/13 03:15	1

Client Sample Results

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: Field Blank #2
Date Collected: 12/02/13 11:55
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-6
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/04/13 08:57	12/05/13 02:13	1
Antimony	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 02:13	1
Barium	**5.9**		5.0	1.4	ug/L		12/04/13 08:57	12/05/13 02:13	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/04/13 08:57	12/06/13 04:49	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/04/13 08:57	12/05/13 02:13	1
Chromium	5.0	U	5.0	2.5	ug/L		12/04/13 08:57	12/05/13 02:13	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/04/13 08:57	12/05/13 02:13	1
Copper	5.0	U	5.0	1.1	ug/L		12/04/13 08:57	12/05/13 02:13	1
Iron	100	U	100	44	ug/L		12/04/13 08:57	12/05/13 02:13	1
Lead	1.5	U	1.5	0.50	ug/L		12/04/13 08:57	12/05/13 02:13	1
Manganese	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 02:13	1
Mercury	0.80	U	0.80	0.40	ug/L		12/04/13 08:57	12/05/13 02:13	1
Nickel	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 02:13	1
Selenium	2.5	U	2.5	1.1	ug/L		12/04/13 08:57	12/05/13 02:13	1
Vanadium	10	U	10	3.2	ug/L		12/04/13 08:57	12/05/13 02:13	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/04/13 08:57	12/05/13 02:13	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: Equipment Blank #2
Date Collected: 12/02/13 12:10
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-7
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/04/13 08:57	12/05/13 02:21	1
Antimony	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 02:21	1
Barium	**6.2**		5.0	1.4	ug/L		12/04/13 08:57	12/05/13 02:21	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/04/13 08:57	12/06/13 04:55	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/04/13 08:57	12/05/13 02:21	1
Chromium	5.0	U	5.0	2.5	ug/L		12/04/13 08:57	12/05/13 02:21	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/04/13 08:57	12/05/13 02:21	1
Copper	**1.6**	**J**	5.0	1.1	ug/L		12/04/13 08:57	12/05/13 02:21	1
Iron	100	U	100	44	ug/L		12/04/13 08:57	12/05/13 02:21	1
Lead	1.5	U	1.5	0.50	ug/L		12/04/13 08:57	12/05/13 02:21	1
Manganese	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 02:21	1
Mercury	0.80	U	0.80	0.40	ug/L		12/04/13 08:57	12/05/13 02:21	1
Nickel	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 02:21	1
Selenium	2.5	U	2.5	1.1	ug/L		12/04/13 08:57	12/05/13 02:21	1
Vanadium	10	U	10	3.2	ug/L		12/04/13 08:57	12/05/13 02:21	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/04/13 08:57	12/05/13 02:21	1

Client Sample ID: MW-8U
Date Collected: 12/02/13 15:18
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	130	U *	130	65	ug/L			12/09/13 17:12	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/09/13 17:12*	*25*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**240**		100	50	ug/L		12/05/13 09:00	12/06/13 06:30	1
Chromium	5.0	U	5.0	2.5	ug/L		12/05/13 09:00	12/06/13 06:30	1
Lead	1.5	U	1.5	0.50	ug/L		12/05/13 09:00	12/06/13 06:30	1

Client Sample ID: MW-8L-R
Date Collected: 12/02/13 13:47
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5500		500	260	ug/L			12/10/13 13:41	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/10/13 13:41*	*100*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	15		1.9	0.30	ug/L		12/04/13 14:58	12/10/13 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*93*		*30 - 130*	*12/04/13 14:58*	*12/10/13 23:33*	*1*
2-Fluorophenol (Surr)	*61*		*25 - 130*	*12/04/13 14:58*	*12/10/13 23:33*	*1*
Terphenyl-d14 (Surr)	*92*		*36 - 130*	*12/04/13 14:58*	*12/10/13 23:33*	*1*
Phenol-d5 (Surr)	*10*	*X*	*27 - 130*	*12/04/13 14:58*	*12/10/13 23:33*	*1*
Nitrobenzene-d5 (Surr)	*75*		*32 - 130*	*12/04/13 14:58*	*12/10/13 23:33*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	110		100	50	ug/L		12/04/13 08:57	12/05/13 02:43	1
Arsenic	38		2.5	1.3	ug/L		12/04/13 08:57	12/05/13 02:43	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-8D
Date Collected: 12/02/13 12:43
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-10
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**170**		100	50	ug/L		12/04/13 08:57	12/05/13 02:50	1
Cadmium	**0.64**		0.50	0.13	ug/L		12/04/13 08:57	12/05/13 02:50	1
Lead	1.5	U	1.5	0.50	ug/L		12/04/13 08:57	12/05/13 02:50	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: SDB-MW-1
Date Collected: 12/02/13 15:00
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U *	5.0	2.6	ug/L			12/09/13 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/09/13 18:17*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**320**		100	50	ug/L		12/05/13 09:00	12/06/13 06:35	1
Chromium	**3.2**	**J**	5.0	2.5	ug/L		12/05/13 09:00	12/06/13 06:35	1
Iron	**200000**		100	44	ug/L		12/05/13 09:00	12/06/13 06:35	1
Lead	**1.2**	**J**	1.5	0.50	ug/L		12/05/13 09:00	12/06/13 06:35	1
Manganese	**2200**		5.0	2.0	ug/L		12/05/13 09:00	12/06/13 06:35	1
Nickel	**2.1**	**J**	5.0	2.0	ug/L		12/05/13 09:00	12/06/13 06:35	1
Arsenic	**8.2**		2.5	1.3	ug/L		12/05/13 09:00	12/06/13 06:35	1

Client Sample ID: Trip Blank
Date Collected: 12/02/13 00:00
Date Received: 12/03/13 10:08

Lab Sample ID: 680-96695-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/09/13 15:06	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/09/13 15:06	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/09/13 15:06	1
Diethyl ether	10	U	10	1.0	ug/L			12/09/13 15:06	1
t-Butanol	5.0	U *	5.0	2.6	ug/L			12/09/13 15:06	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/09/13 15:06	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/09/13 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*12/09/13 15:06*	*1*
Dibromofluoromethane	*110*		*70 - 130*		*12/09/13 15:06*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/09/13 15:06*	*1*

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-96695-1	MW-2			102
680-96695-8	MW-8U			102
680-96695-9	MW-8L-R			100
680-96695-11	SDB-MW-1			101
680-96695-12	Trip Blank	101	110	98
LCS 680-306654/7	Lab Control Sample	112	99	112
LCS 680-306828/4	Lab Control Sample	106	104	106
LCSD 680-306654/8	Lab Control Sample Dup	105	100	108
LCSD 680-306828/5	Lab Control Sample Dup	107	105	106
MB 680-306654/11	Method Blank	100	105	101
MB 680-306828/8	Method Blank	101	111	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	TPH	PHL	NBZ
Lab Sample ID	Client Sample ID	(30-130)	(34-130)	(25-130)	(36-130)	(27-130)	(32-130)
680-96695-1	MW-2	0 D		0 D	0 D	0 D	0 D
680-96695-2	MW-1	165 X		126	254 X	11 X	108
680-96695-2 - RE	MW-1	95		63	83	15 X	81
680-96695-9	MW-8L-R	93		61	92	10 X	75
LCS 680-306008/14-A	Lab Control Sample	100	83	81	100	74	82
LCS 680-308608/17-A	Lab Control Sample	98	77	76	81	72	84
LCSD 680-308608/18-A	Lab Control Sample Dup	95	75	73	85	69	87
MB 680-306008/13-A	Method Blank	77	73	69	99	64	74
MB 680-308608/16-A	Method Blank	101	94	89	115	84	102

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-306654/11
Matrix: Water
Analysis Batch: 306654

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/09/13 14:34	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/09/13 14:34	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/09/13 14:34	1
Diethyl ether	10	U	10	1.0	ug/L			12/09/13 14:34	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/09/13 14:34	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/09/13 14:34	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/09/13 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*12/09/13 14:34*	*1*
Dibromofluoromethane	*105*		*70 - 130*		*12/09/13 14:34*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/09/13 14:34*	*1*

Lab Sample ID: LCS 680-306654/7
Matrix: Water
Analysis Batch: 306654

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	47.3		ug/L		95	76 - 128		
1,1-Dichloroethane			50.0	46.4		ug/L		93	69 - 132		
1,2-Dichloroethane			50.0	54.5		ug/L		109	75 - 120		
Diethyl ether			50.0	47.7		ug/L		95	40 - 160		
t-Butanol			50.0	76.9	*	ug/L		154	49 - 148		
Tetrachloroethene			50.0	52.2		ug/L		104	77 - 128		
Trichloroethene			50.0	49.7		ug/L		99	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*70 - 130*
Dibromofluoromethane	*99*		*70 - 130*
Toluene-d8 (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 680-306654/8
Matrix: Water
Analysis Batch: 306654

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
Chloroform			50.0	47.9		ug/L		96	76 - 128	1	30
1,1-Dichloroethane			50.0	48.0		ug/L		96	69 - 132	3	30
1,2-Dichloroethane			50.0	51.5		ug/L		103	75 - 120	6	30
Diethyl ether			50.0	47.1		ug/L		94	40 - 160	1	50
t-Butanol			50.0	82.7	*	ug/L		165	49 - 148	7	50
Tetrachloroethene			50.0	50.0		ug/L		100	77 - 128	4	30
Trichloroethene			50.0	49.0		ug/L		98	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-306654/8
Matrix: Water
Analysis Batch: 306654

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	108		70 - 130

Lab Sample ID: MB 680-306828/8
Matrix: Water
Analysis Batch: 306828

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/10/13 12:37	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/10/13 12:37	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/10/13 12:37	1
Diethyl ether	10	U	10	1.0	ug/L			12/10/13 12:37	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/10/13 12:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/10/13 12:37	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/10/13 12:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		70 - 130		12/10/13 12:37	1
Dibromofluoromethane	111		70 - 130		12/10/13 12:37	1
Toluene-d8 (Surr)	99		70 - 130		12/10/13 12:37	1

Lab Sample ID: LCS 680-306828/4
Matrix: Water
Analysis Batch: 306828

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	50.6		ug/L		101	76 - 128
1,1-Dichloroethane	50.0	49.2		ug/L		98	69 - 132
1,2-Dichloroethane	50.0	52.2		ug/L		104	75 - 120
Diethyl ether	50.0	39.9		ug/L		80	40 - 160
t-Butanol	50.0	55.8		ug/L		112	49 - 148
Tetrachloroethene	50.0	53.2		ug/L		106	77 - 128
Trichloroethene	50.0	50.4		ug/L		101	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	106		70 - 130
Dibromofluoromethane	104		70 - 130
Toluene-d8 (Surr)	106		70 - 130

Lab Sample ID: LCSD 680-306828/5
Matrix: Water
Analysis Batch: 306828

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
Chloroform	50.0	50.8		ug/L		102	76 - 128	0	30
1,1-Dichloroethane	50.0	50.0		ug/L		100	69 - 132	2	30
1,2-Dichloroethane	50.0	49.5		ug/L		99	75 - 120	5	30
Diethyl ether	50.0	46.7		ug/L		93	40 - 160	16	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-306828/5
Matrix: Water
Analysis Batch: 306828

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
t-Butanol			50.0	52.1		ug/L		104	49 - 148	7	50
Tetrachloroethene			50.0	49.3		ug/L		99	77 - 128	8	30
Trichloroethene			50.0	49.1		ug/L		98	80 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-306008/13-A
Matrix: Water
Analysis Batch: 306930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 306008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		12/04/13 14:58	12/10/13 18:32	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		12/04/13 14:58	12/10/13 18:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*30 - 130*	*12/04/13 14:58*	*12/10/13 18:32*	*1*
2-Fluorophenol (Surr)	*69*		*25 - 130*	*12/04/13 14:58*	*12/10/13 18:32*	*1*
Terphenyl-d14 (Surr)	*99*		*36 - 130*	*12/04/13 14:58*	*12/10/13 18:32*	*1*
Phenol-d5 (Surr)	*64*		*27 - 130*	*12/04/13 14:58*	*12/10/13 18:32*	*1*
Nitrobenzene-d5 (Surr)	*74*		*32 - 130*	*12/04/13 14:58*	*12/10/13 18:32*	*1*

Lab Sample ID: LCS 680-306008/14-A
Matrix: Water
Analysis Batch: 306930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 306008

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane			10.0	7.10		ug/L		71	10 - 130
Bis(2-chloroethyl)ether			10.0	9.35		ug/L		94	36 - 130
Naphthalene			10.0	6.97		ug/L		70	35 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*100*		*30 - 130*
2-Fluorobiphenyl	*83*		*34 - 130*
2-Fluorophenol (Surr)	*81*		*25 - 130*
Terphenyl-d14 (Surr)	*100*		*36 - 130*
Phenol-d5 (Surr)	*74*		*27 - 130*
Nitrobenzene-d5 (Surr)	*82*		*32 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-308608/16-A
Matrix: Water
Analysis Batch: 310085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		12/20/13 16:51	01/01/14 16:40	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		12/20/13 16:51	01/01/14 16:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*30 - 130*	*12/20/13 16:51*	*01/01/14 16:40*	*1*
2-Fluorophenol (Surr)	*89*		*25 - 130*	*12/20/13 16:51*	*01/01/14 16:40*	*1*
Terphenyl-d14 (Surr)	*115*		*36 - 130*	*12/20/13 16:51*	*01/01/14 16:40*	*1*
Phenol-d5 (Surr)	*84*		*27 - 130*	*12/20/13 16:51*	*01/01/14 16:40*	*1*
Nitrobenzene-d5 (Surr)	*102*		*32 - 130*	*12/20/13 16:51*	*01/01/14 16:40*	*1*

Lab Sample ID: LCS 680-308608/17-A
Matrix: Water
Analysis Batch: 310085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308608

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	6.56		ug/L		66	10 - 130		
Bis(2-chloroethyl)ether			10.0	8.48		ug/L		85	36 - 130		
Naphthalene			10.0	7.58		ug/L		76	35 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*30 - 130*
2-Fluorobiphenyl	*77*		*34 - 130*
2-Fluorophenol (Surr)	*76*		*25 - 130*
Terphenyl-d14 (Surr)	*81*		*36 - 130*
Phenol-d5 (Surr)	*72*		*27 - 130*
Nitrobenzene-d5 (Surr)	*84*		*32 - 130*

Lab Sample ID: LCSD 680-308608/18-A
Matrix: Water
Analysis Batch: 310085

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 308608

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			10.0	6.83		ug/L		68	10 - 130	4	50
Bis(2-chloroethyl)ether			10.0	8.80		ug/L		88	36 - 130	4	50
Naphthalene			10.0	7.77		ug/L		78	35 - 130	3	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*95*		*30 - 130*
2-Fluorobiphenyl	*75*		*34 - 130*
2-Fluorophenol (Surr)	*73*		*25 - 130*
Terphenyl-d14 (Surr)	*85*		*36 - 130*
Phenol-d5 (Surr)	*69*		*27 - 130*
Nitrobenzene-d5 (Surr)	*87*		*32 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-306699/6
Matrix: Water
Analysis Batch: 306699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/09/13 12:46	1
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 12:46	1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-305943/55
Matrix: Water
Analysis Batch: 305943

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			12/03/13 22:05	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			12/03/13 22:05	1

Lab Sample ID: LCS 680-305943/56
Matrix: Water
Analysis Batch: 305943

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.03		mg/L		103	90 - 110
Nitrite as N	0.997	1.01		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-305943/57
Matrix: Water
Analysis Batch: 305943

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
Nitrate as N	0.999	1.04		mg/L		104	90 - 110	1	30
Nitrite as N	0.997	1.01		mg/L		101	90 - 110	0	30

Lab Sample ID: 680-96695-2 MS
Matrix: Water
Analysis Batch: 305943

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.050	U	0.999	0.978		mg/L		98	80 - 120
Nitrite as N	0.050	U	0.997	0.966		mg/L		97	80 - 120

Lab Sample ID: 680-96695-2 MSD
Matrix: Water
Analysis Batch: 305943

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.050	U	0.999	0.990		mg/L		99	80 - 120	1	30
Nitrite as N	0.050	U	0.997	0.989		mg/L		99	80 - 120	2	30

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 680-307268/5
Matrix: Water
Analysis Batch: 307268

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			12/12/13 12:35	1
Sulfate	0.50	U	0.50	0.25	mg/L			12/12/13 12:35	1

Lab Sample ID: LCS 680-307268/6
Matrix: Water
Analysis Batch: 307268

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.0		mg/L		100	90 - 110		
Sulfate			10.0	10.4		mg/L		104	90 - 110		

Lab Sample ID: LCSD 680-307268/7
Matrix: Water
Analysis Batch: 307268

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
Chloride			10.0	10.0		mg/L		100	90 - 110	0	30
Sulfate			10.0	10.4		mg/L		104	90 - 110	0	30

Lab Sample ID: 680-96695-2 MS
Matrix: Water
Analysis Batch: 307268

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	210		10.0	220	E 4	mg/L		81	80 - 120		
Sulfate	710		10.0	716	E 4	mg/L		63	80 - 120		

Lab Sample ID: 680-96695-2 MS
Matrix: Water
Analysis Batch: 307268

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	220		200	418		mg/L		100	80 - 120		
Sulfate	800		200	994		mg/L		99	80 - 120		

Lab Sample ID: 680-96695-2 MSD
Matrix: Water
Analysis Batch: 307268

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	210		10.0	217	E 4	mg/L		54	80 - 120	1	30
Sulfate	710		10.0	704	E 4	mg/L		-63	80 - 120	2	30

Lab Sample ID: MB 680-307514/5
Matrix: Water
Analysis Batch: 307514

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.50	U	0.50	0.25	mg/L			12/13/13 14:08	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 680-307514/6
Matrix: Water
Analysis Batch: 307514

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.6		mg/L		106	90 - 110

Lab Sample ID: LCSD 680-307514/7
Matrix: Water
Analysis Batch: 307514

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
Sulfate	10.0	10.6		mg/L		106	90 - 110	0	30

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 680-305970/1-A
Matrix: Water
Analysis Batch: 306464

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 305970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	250	U	250	130	ug/L		12/03/13 18:05	12/05/13 20:00	1
Iron, Dissolved	100	U	100	33	ug/L		12/03/13 18:05	12/05/13 20:00	1
Magnesium, Dissolved	250	U	250	43	ug/L		12/03/13 18:05	12/05/13 20:00	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		12/03/13 18:05	12/05/13 20:00	1
Potassium, Dissolved	500	U	500	170	ug/L		12/03/13 18:05	12/05/13 20:00	1
Sodium, Dissolved	500	U	500	250	ug/L		12/03/13 18:05	12/05/13 20:00	1

Lab Sample ID: LCS 680-305970/2-A
Matrix: Water
Analysis Batch: 306464

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 305970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	5000	5430		ug/L		109	75 - 125
Iron, Dissolved	5000	5530		ug/L		111	75 - 125
Magnesium, Dissolved	5000	5400		ug/L		108	75 - 125
Manganese, Dissolved	500	544		ug/L		109	75 - 125
Potassium, Dissolved	5000	5170		ug/L		103	75 - 125
Sodium, Dissolved	5000	5530		ug/L		111	75 - 125

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-305998/1-A
Matrix: Water
Analysis Batch: 306306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/04/13 08:57	12/05/13 01:14	1
Antimony	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 01:14	1
Barium	5.0	U	5.0	1.4	ug/L		12/04/13 08:57	12/05/13 01:14	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/04/13 08:57	12/05/13 01:14	1
Chromium	5.0	U	5.0	2.5	ug/L		12/04/13 08:57	12/05/13 01:14	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/04/13 08:57	12/05/13 01:14	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-305998/1-A
Matrix: Water
Analysis Batch: 306306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	5.0	U	5.0	1.1	ug/L		12/04/13 08:57	12/05/13 01:14	1
Iron	100	U	100	44	ug/L		12/04/13 08:57	12/05/13 01:14	1
Lead	1.5	U	1.5	0.50	ug/L		12/04/13 08:57	12/05/13 01:14	1
Manganese	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 01:14	1
Mercury	0.80	U	0.80	0.40	ug/L		12/04/13 08:57	12/05/13 01:14	1
Nickel	5.0	U	5.0	2.0	ug/L		12/04/13 08:57	12/05/13 01:14	1
Selenium	2.5	U	2.5	1.1	ug/L		12/04/13 08:57	12/05/13 01:14	1
Vanadium	10	U	10	3.2	ug/L		12/04/13 08:57	12/05/13 01:14	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/04/13 08:57	12/05/13 01:14	1

Lab Sample ID: MB 680-305998/1-A
Matrix: Water
Analysis Batch: 306464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.50	U	0.50	0.15	ug/L		12/04/13 08:57	12/06/13 04:07	1

Lab Sample ID: LCS 680-305998/2-A
Matrix: Water
Analysis Batch: 306306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5220		ug/L		104	75 - 125
Antimony	50.0	52.7		ug/L		105	75 - 125
Barium	100	102		ug/L		102	75 - 125
Cadmium	50.0	50.4		ug/L		101	75 - 125
Chromium	100	103		ug/L		103	75 - 125
Cobalt	50.0	49.1		ug/L		98	75 - 125
Copper	100	105		ug/L		105	75 - 125
Iron	5000	5370		ug/L		107	75 - 125
Lead	50.0	50.8		ug/L		102	75 - 125
Manganese	500	526		ug/L		105	75 - 125
Mercury	5.00	5.10		ug/L		102	75 - 125
Nickel	100	104		ug/L		104	75 - 125
Selenium	100	105		ug/L		105	75 - 125
Vanadium	100	102		ug/L		102	75 - 125
Arsenic	100	106		ug/L		106	75 - 125

Lab Sample ID: LCS 680-305998/2-A
Matrix: Water
Analysis Batch: 306464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	50.0	52.8		ug/L		106	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96695-1 MS
Matrix: Water
Analysis Batch: 306306

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 305998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	110		5000	5080		ug/L		99	75 - 125
Antimony	5.0		50.0	54.8		ug/L		110	75 - 125
Barium	120		100	221		ug/L		102	75 - 125
Cadmium	0.50		50.0	49.4		ug/L		99	75 - 125
Chromium	7.2		100	109		ug/L		101	75 - 125
Cobalt	11		50.0	58.9		ug/L		97	75 - 125
Copper	20		100	117		ug/L		97	75 - 125
Iron	160000		5000	161000	4	ug/L		-24	75 - 125
Lead	4.1		50.0	52.1		ug/L		96	75 - 125
Manganese	11000		500	11400	4	ug/L		94	75 - 125
Mercury	0.80		5.00	5.47		ug/L		109	75 - 125
Nickel	7.7		100	105		ug/L		97	75 - 125
Selenium	2.5		100	102		ug/L		102	75 - 125
Vanadium	10		100	104		ug/L		104	75 - 125
Arsenic	3.9		100	109		ug/L		106	75 - 125

Lab Sample ID: 680-96695-1 MS
Matrix: Water
Analysis Batch: 306464

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 305998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.15		50.0	52.4		ug/L		104	75 - 125

Lab Sample ID: 680-96695-1 MSD
Matrix: Water
Analysis Batch: 306306

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 305998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	110		5000	5380		ug/L		105	75 - 125	6	20
Antimony	5.0		50.0	54.9		ug/L		110	75 - 125	0	20
Barium	120		100	226		ug/L		107	75 - 125	2	20
Cadmium	0.50		50.0	50.6		ug/L		101	75 - 125	2	20
Chromium	7.2		100	111		ug/L		104	75 - 125	2	20
Cobalt	11		50.0	59.6		ug/L		98	75 - 125	1	20
Copper	20		100	120		ug/L		100	75 - 125	3	20
Iron	160000		5000	167000	4	ug/L		97	75 - 125	4	20
Lead	4.1		50.0	52.6		ug/L		97	75 - 125	1	20
Manganese	11000		500	11700	4	ug/L		143	75 - 125	2	20
Mercury	0.80		5.00	5.54		ug/L		111	75 - 125	1	20
Nickel	7.7		100	107		ug/L		100	75 - 125	2	20
Selenium	2.5		100	103		ug/L		103	75 - 125	1	20
Vanadium	10		100	107		ug/L		107	75 - 125	3	20
Arsenic	3.9		100	112		ug/L		108	75 - 125	2	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96695-1 MSD — **Client Sample ID: MW-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306464 — **Prep Batch: 305998**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	0.15		50.0	51.6		ug/L		103	75 - 125	1	20

Lab Sample ID: MB 680-306179/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306464 — **Prep Batch: 306179**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/05/13 09:00	12/06/13 05:48	1
Antimony	5.0	U	5.0	2.0	ug/L		12/05/13 09:00	12/06/13 05:48	1
Barium	5.0	U	5.0	1.4	ug/L		12/05/13 09:00	12/06/13 05:48	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/05/13 09:00	12/06/13 05:48	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/05/13 09:00	12/06/13 05:48	1
Chromium	5.0	U	5.0	2.5	ug/L		12/05/13 09:00	12/06/13 05:48	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/05/13 09:00	12/06/13 05:48	1
Copper	5.0	U	5.0	1.1	ug/L		12/05/13 09:00	12/06/13 05:48	1
Iron	100	U	100	44	ug/L		12/05/13 09:00	12/06/13 05:48	1
Lead	1.5	U	1.5	0.50	ug/L		12/05/13 09:00	12/06/13 05:48	1
Manganese	5.0	U	5.0	2.0	ug/L		12/05/13 09:00	12/06/13 05:48	1
Mercury	0.80	U	0.80	0.40	ug/L		12/05/13 09:00	12/06/13 05:48	1
Nickel	5.0	U	5.0	2.0	ug/L		12/05/13 09:00	12/06/13 05:48	1
Selenium	2.5	U	2.5	1.1	ug/L		12/05/13 09:00	12/06/13 05:48	1
Vanadium	10	U	10	3.2	ug/L		12/05/13 09:00	12/06/13 05:48	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/05/13 09:00	12/06/13 05:48	1

Lab Sample ID: LCS 680-306179/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 306464 — **Prep Batch: 306179**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5680		ug/L		114	75 - 125
Antimony	50.0	63.2	*	ug/L		126	75 - 125
Barium	100	111		ug/L		111	75 - 125
Beryllium	50.0	58.0		ug/L		116	75 - 125
Cadmium	50.0	54.7		ug/L		109	75 - 125
Chromium	100	111		ug/L		111	75 - 125
Cobalt	50.0	55.1		ug/L		110	75 - 125
Copper	100	110		ug/L		110	75 - 125
Iron	5000	5570		ug/L		111	75 - 125
Lead	50.0	55.6		ug/L		111	75 - 125
Manganese	500	558		ug/L		112	75 - 125
Mercury	5.00	5.40		ug/L		108	75 - 125
Nickel	100	111		ug/L		111	75 - 125
Selenium	100	99.4		ug/L		99	75 - 125
Vanadium	100	111		ug/L		111	75 - 125
Arsenic	100	116		ug/L		116	75 - 125

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-306162/12
Matrix: Water
Analysis Batch: 306162

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			12/04/13 12:29	1

Lab Sample ID: LCS 680-306162/14
Matrix: Water
Analysis Batch: 306162

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: 680-96695-1 MS
Matrix: Water
Analysis Batch: 306162

Client Sample ID: MW-2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.38		1.00	0.847	F	mg/L		46	90 - 110

Lab Sample ID: 680-96695-1 MSD
Matrix: Water
Analysis Batch: 306162

Client Sample ID: MW-2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.38		1.00	0.848	F	mg/L		47	90 - 110	0	30

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-305942/7
Matrix: Water
Analysis Batch: 305942

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			12/03/13 13:45	1

Lab Sample ID: LCS 680-305942/6
Matrix: Water
Analysis Batch: 305942

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.21		mg/L		101	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-306473/1
Matrix: Water
Analysis Batch: 306473

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 13:44	1

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 680-306473/2
Matrix: Water
Analysis Batch: 306473

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.4		mg/L		104	75 - 125

Lab Sample ID: LCSD 680-306473/3
Matrix: Water
Analysis Batch: 306473

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
Sulfide	10.0	10.4		mg/L		104	75 - 125	0	30

Lab Sample ID: MB 680-306504/1
Matrix: Water
Analysis Batch: 306504

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/06/13 15:08	1

Lab Sample ID: LCS 680-306504/2
Matrix: Water
Analysis Batch: 306504

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.1		mg/L		101	75 - 125

Lab Sample ID: 680-96695-4 DU
Matrix: Water
Analysis Batch: 306504

Client Sample ID: MW-8U
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-307748/23
Matrix: Water
Analysis Batch: 307748

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			12/13/13 23:47	1

Lab Sample ID: LCS 680-307748/22
Matrix: Water
Analysis Batch: 307748

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	20.0	16.9		mg/L		85	80 - 120

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-306641/5
Matrix: Water
Analysis Batch: 306641

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			12/06/13 13:16	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 13:16	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/06/13 13:16	1

Lab Sample ID: LCS 680-306641/6
Matrix: Water
Analysis Batch: 306641

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	210		mg/L		84	80 - 120		

GC/MS VOA

Analysis Batch: 306654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	8260B	
680-96695-8	MW-8U	Total/NA	Water	8260B	
680-96695-11	SDB-MW-1	Total/NA	Water	8260B	
680-96695-12	Trip Blank	Total/NA	Water	8260B	
LCS 680-306654/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-306654/8	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-306654/11	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 306828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-9	MW-8L-R	Total/NA	Water	8260B	
LCS 680-306828/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-306828/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-306828/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 306008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	3520C	
680-96695-2	MW-1	Total/NA	Water	3520C	
680-96695-9	MW-8L-R	Total/NA	Water	3520C	
LCS 680-306008/14-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-306008/13-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 306930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-2	MW-1	Total/NA	Water	8270D LL	306008
680-96695-9	MW-8L-R	Total/NA	Water	8270D LL	306008
LCS 680-306008/14-A	Lab Control Sample	Total/NA	Water	8270D LL	306008
MB 680-306008/13-A	Method Blank	Total/NA	Water	8270D LL	306008

Analysis Batch: 307606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	8270D LL	306008

Prep Batch: 308608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-2 - RE	MW-1	Total/NA	Water	3520C	
LCS 680-308608/17-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-308608/18-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 680-308608/16-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 310085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-2 - RE	MW-1	Total/NA	Water	8270D LL	308608
LCS 680-308608/17-A	Lab Control Sample	Total/NA	Water	8270D LL	308608
LCSD 680-308608/18-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	308608
MB 680-308608/16-A	Method Blank	Total/NA	Water	8270D LL	308608

QC Association Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

GC VOA

Analysis Batch: 306699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	8015C	
LCS 680-306699/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306699/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306699/6	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 305943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	9056A	
680-96695-2	MW-1	Total/NA	Water	9056A	
680-96695-2 MS	MW-1	Total/NA	Water	9056A	
680-96695-2 MSD	MW-1	Total/NA	Water	9056A	
680-96695-3	SDB-MW-2	Total/NA	Water	9056A	
680-96695-4	MW-8U	Total/NA	Water	9056A	
680-96695-5	MW-8D	Total/NA	Water	9056A	
LCS 680-305943/56	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-305943/57	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-305943/55	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 307268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	9056A	
680-96695-1	MW-2	Total/NA	Water	9056A	
680-96695-2	MW-1	Total/NA	Water	9056A	
680-96695-2 MS	MW-1	Total/NA	Water	9056A	
680-96695-2 MS	MW-1	Total/NA	Water	9056A	
680-96695-2 MSD	MW-1	Total/NA	Water	9056A	
680-96695-3	SDB-MW-2	Total/NA	Water	9056A	
680-96695-4	MW-8U	Total/NA	Water	9056A	
680-96695-5	MW-8D	Total/NA	Water	9056A	
LCS 680-307268/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-307268/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-307268/5	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 307514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-3	SDB-MW-2	Total/NA	Water	9056A	
LCS 680-307514/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-307514/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-307514/5	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 305970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Dissolved	Water	3005A	
680-96695-2	MW-1	Dissolved	Water	3005A	
680-96695-3	SDB-MW-2	Dissolved	Water	3005A	
680-96695-4	MW-8U	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 305970 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-5	MW-8D	Dissolved	Water	3005A	
LCS 680-305970/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-305970/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 305998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	3010A	
680-96695-1 MS	MW-2	Total/NA	Water	3010A	
680-96695-1 MSD	MW-2	Total/NA	Water	3010A	
680-96695-2	MW-1	Total/NA	Water	3010A	
680-96695-6	Field Blank #2	Total/NA	Water	3010A	
680-96695-7	Equipment Blank #2	Total/NA	Water	3010A	
680-96695-9	MW-8L-R	Total/NA	Water	3010A	
680-96695-10	MW-8D	Total/NA	Water	3010A	
LCS 680-305998/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-305998/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 306179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-8	MW-8U	Total/NA	Water	3010A	
680-96695-11	SDB-MW-1	Total/NA	Water	3010A	
LCS 680-306179/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-306179/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 306306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	6020A	305998
680-96695-1 MS	MW-2	Total/NA	Water	6020A	305998
680-96695-1 MSD	MW-2	Total/NA	Water	6020A	305998
680-96695-2	MW-1	Total/NA	Water	6020A	305998
680-96695-6	Field Blank #2	Total/NA	Water	6020A	305998
680-96695-7	Equipment Blank #2	Total/NA	Water	6020A	305998
680-96695-9	MW-8L-R	Total/NA	Water	6020A	305998
680-96695-10	MW-8D	Total/NA	Water	6020A	305998
LCS 680-305998/2-A	Lab Control Sample	Total/NA	Water	6020A	305998
MB 680-305998/1-A	Method Blank	Total/NA	Water	6020A	305998

Analysis Batch: 306464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Dissolved	Water	6020	305970
680-96695-1 MS	MW-2	Total/NA	Water	6020A	305998
680-96695-1 MSD	MW-2	Total/NA	Water	6020A	305998
680-96695-2	MW-1	Dissolved	Water	6020	305970
680-96695-3	SDB-MW-2	Dissolved	Water	6020	305970
680-96695-4	MW-8U	Dissolved	Water	6020	305970
680-96695-5	MW-8D	Dissolved	Water	6020	305970
680-96695-6	Field Blank #2	Total/NA	Water	6020A	305998
680-96695-7	Equipment Blank #2	Total/NA	Water	6020A	305998
680-96695-8	MW-8U	Total/NA	Water	6020A	306179
680-96695-11	SDB-MW-1	Total/NA	Water	6020A	306179
LCS 680-305970/2-A	Lab Control Sample	Total Recoverable	Water	6020	305970

Metals (Continued)

Analysis Batch: 306464 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-305998/2-A	Lab Control Sample	Total/NA	Water	6020A	305998
LCS 680-306179/2-A	Lab Control Sample	Total/NA	Water	6020A	306179
MB 680-305970/1-A	Method Blank	Total Recoverable	Water	6020	305970
MB 680-305998/1-A	Method Blank	Total/NA	Water	6020A	305998
MB 680-306179/1-A	Method Blank	Total/NA	Water	6020A	306179

General Chemistry

Analysis Batch: 305942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Dissolved	Water	365.1	
680-96695-2	MW-1	Dissolved	Water	365.1	
680-96695-3	SDB-MW-2	Dissolved	Water	365.1	
680-96695-4	MW-8U	Dissolved	Water	365.1	
680-96695-5	MW-8D	Dissolved	Water	365.1	
LCS 680-305942/6	Lab Control Sample	Total/NA	Water	365.1	
MB 680-305942/7	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 306162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Dissolved	Water	350.1	
680-96695-1 MS	MW-2	Dissolved	Water	350.1	
680-96695-1 MSD	MW-2	Dissolved	Water	350.1	
680-96695-2	MW-1	Dissolved	Water	350.1	
680-96695-3	SDB-MW-2	Dissolved	Water	350.1	
680-96695-4	MW-8U	Dissolved	Water	350.1	
680-96695-5	MW-8D	Dissolved	Water	350.1	
LCS 680-306162/14	Lab Control Sample	Total/NA	Water	350.1	
MB 680-306162/12	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 306473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Dissolved	Water	9034	
680-96695-1	MW-2	Total/NA	Water	9034	
680-96695-2	MW-1	Dissolved	Water	9034	
680-96695-2	MW-1	Total/NA	Water	9034	
680-96695-3	SDB-MW-2	Dissolved	Water	9034	
680-96695-3	SDB-MW-2	Total/NA	Water	9034	
680-96695-4	MW-8U	Dissolved	Water	9034	
680-96695-5	MW-8D	Dissolved	Water	9034	
LCS 680-306473/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-306473/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-306473/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 306504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-4	MW-8U	Total/NA	Water	9034	
680-96695-4 DU	MW-8U	Total/NA	Water	9034	
680-96695-5	MW-8D	Total/NA	Water	9034	
LCS 680-306504/2	Lab Control Sample	Total/NA	Water	9034	

General Chemistry (Continued)

Analysis Batch: 306504 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-306504/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 306641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	SM 2320B	
680-96695-2	MW-1	Total/NA	Water	SM 2320B	
680-96695-3	SDB-MW-2	Total/NA	Water	SM 2320B	
680-96695-4	MW-8U	Total/NA	Water	SM 2320B	
680-96695-5	MW-8D	Total/NA	Water	SM 2320B	
LCS 680-306641/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 680-306641/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 307265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Total/NA	Water	UnionizedNH3	
680-96695-2	MW-1	Total/NA	Water	UnionizedNH3	
680-96695-3	SDB-MW-2	Total/NA	Water	UnionizedNH3	
680-96695-4	MW-8U	Total/NA	Water	UnionizedNH3	
680-96695-5	MW-8D	Total/NA	Water	UnionizedNH3	

Analysis Batch: 307748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96695-1	MW-2	Dissolved	Water	9060	
680-96695-2	MW-1	Dissolved	Water	9060	
680-96695-3	SDB-MW-2	Dissolved	Water	9060	
680-96695-4	MW-8U	Dissolved	Water	9060	
680-96695-5	MW-8D	Dissolved	Water	9060	
LCS 680-307748/22	Lab Control Sample	Dissolved	Water	9060	
MB 680-307748/23	Method Blank	Dissolved	Water	9060	

Client Sample ID: MW-2

Lab Sample ID: 680-96695-1

Date Collected: 12/02/13 10:25

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	306654	12/09/13 16:40	JD1	TAL SAV
Total/NA	Prep	3520C			306008	12/04/13 14:58	RNJ	TAL SAV
Total/NA	Analysis	8270D LL		10	307606	12/14/13 20:57	JPM	TAL SAV
Total/NA	Analysis	8015C		1	306699	12/09/13 14:00	AJMC	TAL SAV
Total/NA	Analysis	9056A		2	305943	12/03/13 23:07	PAT	TAL SAV
Total/NA	Analysis	9056A		10	307268	12/12/13 14:02	PAT	TAL SAV
Total/NA	Analysis	9056A		25	307268	12/12/13 16:53	PAT	TAL SAV
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/05/13 01:29	BWR	TAL SAV
Dissolved	Prep	3005A			305970	12/03/13 18:05	DAS	TAL SAV
Dissolved	Analysis	6020		1	306464	12/05/13 20:11	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305942	12/03/13 14:01	CRW	TAL SAV
Dissolved	Analysis	350.1		1	306162	12/04/13 11:49	JME	TAL SAV
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306641	12/06/13 14:45	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 02:03	JER	TAL SAV

Client Sample ID: MW-1

Lab Sample ID: 680-96695-2

Date Collected: 12/02/13 11:50

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			306008	12/04/13 14:58	RNJ	TAL SAV
Total/NA	Analysis	8270D LL		1	306930	12/10/13 23:08	JLW	TAL SAV
Total/NA	Prep	3520C	RE		308608	12/20/13 16:51	RBS	TAL SAV
Total/NA	Analysis	8270D LL	RE	1	310085	01/01/14 17:55	JLW	TAL SAV
Total/NA	Analysis	9056A		1	305943	12/03/13 23:22	PAT	TAL SAV
Total/NA	Analysis	9056A		20	307268	12/12/13 17:06	PAT	TAL SAV
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/05/13 02:06	BWR	TAL SAV
Dissolved	Prep	3005A			305970	12/03/13 18:05	DAS	TAL SAV
Dissolved	Analysis	6020		1	306464	12/05/13 20:16	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305942	12/03/13 14:01	CRW	TAL SAV
Dissolved	Analysis	350.1		1	306162	12/04/13 11:49	JME	TAL SAV
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306641	12/06/13 15:00	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 02:21	JER	TAL SAV

Client Sample ID: SDB-MW-2

Lab Sample ID: 680-96695-3

Date Collected: 12/02/13 15:00

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	305943	12/04/13 00:08	PAT	TAL SAV
Total/NA	Analysis	9056A		4	307268	12/12/13 17:31	PAT	TAL SAV
Total/NA	Analysis	9056A		50	307514	12/13/13 14:58	PAT	TAL SAV
Dissolved	Prep	3005A			305970	12/03/13 18:05	DAS	TAL SAV
Dissolved	Analysis	6020		1	306464	12/05/13 20:21	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305942	12/03/13 14:01	CRW	TAL SAV
Dissolved	Analysis	350.1		1	306162	12/04/13 11:49	JME	TAL SAV
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306641	12/06/13 14:54	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 02:39	JER	TAL SAV

Client Sample ID: MW-8U

Lab Sample ID: 680-96695-4

Date Collected: 12/02/13 15:23

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	305943	12/04/13 00:24	PAT	TAL SAV
Total/NA	Analysis	9056A		20	307268	12/12/13 17:55	PAT	TAL SAV
Dissolved	Prep	3005A			305970	12/03/13 18:05	DAS	TAL SAV
Dissolved	Analysis	6020		1	306464	12/05/13 20:27	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305942	12/03/13 14:14	CRW	TAL SAV
Dissolved	Analysis	350.1		10	306162	12/04/13 12:29	JME	TAL SAV
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306504	12/06/13 15:08	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306641	12/06/13 15:08	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 02:55	JER	TAL SAV

Client Sample ID: MW-8D

Lab Sample ID: 680-96695-5

Date Collected: 12/02/13 12:48

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	305943	12/04/13 00:39	PAT	TAL SAV
Total/NA	Analysis	9056A		1	307268	12/12/13 15:16	PAT	TAL SAV
Dissolved	Prep	3005A			305970	12/03/13 18:05	DAS	TAL SAV
Dissolved	Analysis	6020		1	306464	12/05/13 20:32	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305942	12/03/13 14:01	CRW	TAL SAV
Dissolved	Analysis	350.1		1	306162	12/04/13 11:49	JME	TAL SAV

Client Sample ID: MW-8D

Lab Sample ID: 680-96695-5

Date Collected: 12/02/13 12:48

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	9034		1	306473	12/06/13 13:44	AJO	TAL SAV
Total/NA	Analysis	9034		1	306504	12/06/13 15:08	AJO	TAL SAV
Total/NA	Analysis	SM 2320B		1	306641	12/06/13 15:14	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 03:15	JER	TAL SAV

Client Sample ID: Field Blank #2

Lab Sample ID: 680-96695-6

Date Collected: 12/02/13 11:55

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/05/13 02:13	BWR	TAL SAV
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306464	12/06/13 04:49	BWR	TAL SAV

Client Sample ID: Equipment Blank #2

Lab Sample ID: 680-96695-7

Date Collected: 12/02/13 12:10

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/05/13 02:21	BWR	TAL SAV
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306464	12/06/13 04:55	BWR	TAL SAV

Client Sample ID: MW-8U

Lab Sample ID: 680-96695-8

Date Collected: 12/02/13 15:18

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	306654	12/09/13 17:12	JD1	TAL SAV
Total/NA	Prep	3010A			306179	12/05/13 09:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306464	12/06/13 06:30	BWR	TAL SAV

Client Sample ID: MW-8L-R

Lab Sample ID: 680-96695-9

Date Collected: 12/02/13 13:47

Matrix: Water

Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	306828	12/10/13 13:41	JD1	TAL SAV
Total/NA	Prep	3520C			306008	12/04/13 14:58	RNJ	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Client Sample ID: MW-8L-R

Lab Sample ID: 680-96695-9

Date Collected: 12/02/13 13:47
Matrix: Water
Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D LL		1	306930	12/10/13 23:33	JLW	TAL SAV
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/05/13 02:43	BWR	TAL SAV

Client Sample ID: MW-8D

Lab Sample ID: 680-96695-10

Date Collected: 12/02/13 12:43
Matrix: Water
Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305998	12/04/13 08:57	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/05/13 02:50	BWR	TAL SAV

Client Sample ID: SDB-MW-1

Lab Sample ID: 680-96695-11

Date Collected: 12/02/13 15:00
Matrix: Water
Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	306654	12/09/13 18:17	JD1	TAL SAV
Total/NA	Prep	3010A			306179	12/05/13 09:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306464	12/06/13 06:35	BWR	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-96695-12

Date Collected: 12/02/13 00:00
Matrix: Water
Date Received: 12/03/13 10:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	306654	12/09/13 15:06	JD1	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-14
Arkansas DEQ	State Program	6	88-0692	02-01-14
California	NELAP	9	3217CA	07-31-14
Colorado	State Program	8	N/A	12-31-13 *
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13 *
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	04-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-14
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13 *
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-14
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14 *
South Carolina	State Program	4	98001	06-30-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13 *
West Virginia DEP	State Program	3	94	06-30-14
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96695-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020	Metals (ICP/MS)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 81903

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Geochemical Analyses

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: Ashland Aqualon	PROJECT NO.	PROJECT LOCATION (STATE): VA
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL	
CLIENT ADDRESS: Richmond VA		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF

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) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: Diss Iron 6020	Diss. Major Cations 6020	Diss ortho phosphate 365.1	Diss. Ammonia 350.1	Total Sulfide 9034	Alkalinity 2320B	Major Anions 9056A	Diss Organic Carbon 9060	Diss. Sulfide 9034	REMARKS
								PRESERVATIVE									
12/2/13	10:25	MW-2	G	X				NUMBER OF CONTAINERS SUBMITTED: X	X	X	X	X	X	X	X	X	
	11:50	MW-1						X	X	X	X	X	X	X	X	X	Dissolved samples were field filtered
	1500	SDB-MW-2						X	X	X	X	X	X	X	X	X	
	1523	MW-8V						X	X	X	X	X	X	X	X	X	
	1248	MW-8D						X	X	X	X	X	X	X	X	X	

680-96695 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Mark Brown	12/2/13	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	12/03/13	10:08	YES ○ NO ○			0.8°C, 2.6°C 680-96695

TAL8240-680 (1008)

1/3/2014

Serial Number 81905

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: Ashland - Aqualon	PROJECT NO.	PROJECT LOCATION (STATE): VA	PAGE 1 OF
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.	STANDARD REPORT DELIVERY ✓
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX	DATE DUE
CLIENT NAME: GES	CLIENT E-MAIL		EXPEDITED REPORT DELIVERY (SURCHARGE) ○
CLIENT ADDRESS: Richmond VA			DATE DUE
COMPANY CONTRACTING THIS WORK (if applicable)			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: VOC's 8260	SVOC 8270	metals 6020	8015 Ethanol / Methanol							NUMBER OF CONTAINERS SUBMITTED	REMARKS
								PRESERVATIVE											
12/2/13	10:25	MW-2	6	X				X	X	X	X								SEE Attached table for specific analysis
	11:50	MW-1							X	X									
	11:55	Field Blank #2								X									
	12:10	Equipment Blank #2								X									
	15:15	MW-8U						X		X									
	13:47	MW-8L-R						X	X	X									
	12:43	MW-8D								X									
	15:00	SDB-MW-1						X		X									
		Trip Blank	X	X				X											

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	12/2/13	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	12/03/13	10:08	YES ○ NO ○			0.8°C, 2.6°C 680-96695

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-96695-1

Login Number: 96695

List Source: TestAmerica Savannah

List Number: 1

Creator: Contreras, Cesar A

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.	False	Sample 680-96695-H-4 has time 15:18. Should be 1523
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
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: 680-96611-1
Client Project/Site: Hercules Aqualon Corrective Action
Revision: 2

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
2/3/2014 1:54:01 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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.
*	LCS or LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi 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.
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits
B	Compound was found in the blank and sample.
F	MS/MSD Recovery and/or RPD exceeds the control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC 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.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
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.
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.
F1	MS and/or MSD Recovery exceeds the control limits

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.
U	Indicates the analyte was analyzed for but not detected.
F	MS/MSD Recovery and/or RPD exceeds the control limits

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-96611-1	RAB-MW1R	Water	11/26/13 09:40	11/27/13 10:13
680-96611-2	NAT-4	Water	11/26/13 12:40	11/27/13 10:13
680-96611-3	MW-10	Water	11/26/13 14:00	11/27/13 10:13
680-96611-4	Field Dup1	Water	11/26/13 00:00	11/27/13 10:13
680-96611-5	Equipment Blank 1	Water	11/26/13 00:00	11/27/13 10:13
680-96611-6	Trip Blank	Water	11/26/13 00:00	11/27/13 10:13
680-96611-7	MW-3	Water	11/26/13 11:15	11/27/13 10:13
680-96611-8	MW-4	Water	11/26/13 12:50	11/27/13 10:13
680-96611-9	MW-4U	Water	11/26/13 14:30	11/27/13 10:13
680-96611-10	MW-3	Water	11/26/13 11:15	11/27/13 10:13
680-96611-11	MW-4	Water	11/26/13 12:50	11/27/13 10:13
680-96611-12	MW-4U	Water	11/26/13 14:30	11/27/13 10:13

Job ID: 680-96611-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-96611-1

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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/27/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.4º C and 1.2º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples RAB-MW1R (680-96611-1), NAT-4 (680-96611-2), MW-10 (680-96611-3), Field Dup1 (680-96611-4), Equipment Blank 1 (680-96611-5), Trip Blank (680-96611-6), MW-4 (680-96611-8) and MW-4U (680-96611-9) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/02/2013 and 12/03/2013.

Methylene Chloride failed the recovery criteria low for LCS 680-305600/14. 1,2-Dichloroethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene and trans-1,3-Dichloropropene failed the recovery criteria high. 1,2-Dichloroethane failed the recovery criteria high for LCSD 680-305600/15. Refer to the QC report for details.

Samples RAB-MW1R (680-96611-1)[500X], NAT-4 (680-96611-2)[10X], Field Dup1 (680-96611-4)[1000X], MW-4 (680-96611-8)[50X] and MW-4U (680-96611-9)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples RAB-MW1R (680-96611-1), MW-10 (680-96611-3), Field Dup1 (680-96611-4), Equipment Blank 1 (680-96611-5) and MW-3 (680-96611-7) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 12/02/2013 and analyzed on 12/05/2013 and 12/14/2013.

Diethyl phthalate and Di-n-octyl phthalate were detected in method blank MB 680-305704/6-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have 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.

2,4,6-Tribromophenol (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr), Phenol-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for MW-10 (680-96611-3). 2,4,6-Tribromophenol, 2-Fluorobiphenyl, 2-Fluorophenol, Nitrobenzene-d5, Phenol-d5 and Terphenyl-d14 failed the surrogate recovery criteria low for Field Dup1 (680-96611-4). 2,4,6-Tribromophenol,

Job ID: 680-96611-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

2-Fluorobiphenyl, 2-Fluorophenol, Nitrobenzene-d5, Phenol-d5 and Terphenyl-d14 failed the surrogate recovery criteria low for MW-3 (680-96611-7). Refer to the QC report for details.

4-Aminobiphenyl and Hexachlorophene failed the recovery criteria low for LCS 680-305704/10-A. 3,3'-Dichlorobenzidine failed the recovery criteria low for LCS 680-305704/7-A. 2,2'-oxybis[1-chloropropane], 2,4,5-Trichlorophenol, Butyl benzyl phthalate, Di-n-butyl phthalate and Di-n-octyl phthalate failed the recovery criteria high. 4-Aminobiphenyl and Hexachlorophene failed the recovery criteria low for LCSD 680-305704/11-A. 4-Aminobiphenyl exceeded the RPD limit. Refer to the QC report for details.

3 & 4 Methylphenol and 3,3'-Dichlorobenzidine failed the recovery criteria low for the MS of sample RAB-MW1R MSMS (680-96611-1) in batch 680-306157.

3,3'-Dichlorobenzidine and Aniline failed the recovery criteria low for the MSD of sample RAB-MW1R MSDMSD (680-96611-1) in batch 680-306157. Pyridine exceeded the RPD limit.

Samples MW-10 (680-96611-3)[10X], Field Dup1 (680-96611-4)[10X] and MW-3 (680-96611-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the SVOAs analysis.

All other quality control parameters were within the acceptance limits.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples RAB-MW1R (680-96611-1), NAT-4 (680-96611-2), Field Dup1 (680-96611-4), Equipment Blank 1 (680-96611-5), MW-4 (680-96611-8) and MW-4U (680-96611-9) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 12/06/2013 and 12/09/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 12/03/2013 and analyzed on 12/04/2013.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Sample NAT-4 (680-96611-2) was analyzed for metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 12/03/2013 and analyzed on 12/04/2013.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples RAB-MW1R (680-96611-1), NAT-4 (680-96611-2), MW-10 (680-96611-3), Field Dup1 (680-96611-4), Equipment Blank 1 (680-96611-5), MW-4 (680-96611-8) and MW-4U (680-96611-9) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 12/02/2013 and 12/03/2013 and analyzed on 12/04/2013, 12/05/2013 and 12/09/2013.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

Job ID: 680-96611-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

ALKALINITY
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 12/09/2013.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/02/2013.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

ORTHOPHOSPHATE
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 11/27/2013.

No difficulties were encountered during the orthophosphate analysis.

All quality control parameters were within the acceptance limits.

SULFIDE
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 12/02/2013.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

SULFIDE
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 12/02/2013.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

9056 ANIONS
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 12/12/2013.

Samples MW-3 (680-96611-10)[2X], MW-4 (680-96611-11)[20X], MW-4 (680-96611-11)[5X], MW-4U (680-96611-12)[20X] and MW-4U (680-96611-12)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the 9056 Anions analysis.

All other quality control parameters were within the acceptance limits.

ANIONS BY IC (NITRATE/NITRITE)
Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 12/02/2013.

Job ID: 680-96611-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Samples MW-3 (680-96611-10)[2X], MW-4 (680-96611-11)[2X] and MW-4U (680-96611-12)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following samples were analyzed outside the method defined holding time: MW-3 (680-96611-10), MW-4 (680-96611-11), MW-4U (680-96611-12).

No difficulties were encountered during the Anions by IC (Nitrate/Nitrite) analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED ORGANIC CARBON

Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/14/2013.

No difficulties were encountered during the TOC analysis.

All quality control parameters were within the acceptance limits.

UNIONIZED AMMONIA

Samples MW-3 (680-96611-10), MW-4 (680-96611-11) and MW-4U (680-96611-12) were analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 12/12/2013.

No difficulties were encountered during the unionized ammonia analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: RAB-MW1R — Lab Sample ID: 680-96611-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	21000		2500	1300	ug/L	500		8260B	Total/NA
Diethyl phthalate	0.27	J B	1.3	0.14	ug/L	1		8270D LL	Total/NA
Di-n-octyl phthalate	0.80	J B *	1.3	0.22	ug/L	1		8270D LL	Total/NA
1,4-Dioxane	1.7	J	2.6	0.40	ug/L	1		8270D LL	Total/NA
Arsenic	2.9		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	280		5.0	1.4	ug/L	1		6020A	Total/NA
Beryllium	0.15	J	0.50	0.15	ug/L	1		6020A	Total/NA
Chromium	5.9		5.0	2.5	ug/L	1		6020A	Total/NA
Cobalt	110		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	7.0		5.0	1.1	ug/L	1		6020A	Total/NA
Iron	100000		100	44	ug/L	1		6020A	Total/NA
Manganese	9800		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	22		5.0	2.0	ug/L	1		6020A	Total/NA
Selenium	1.6	J	2.5	1.1	ug/L	1		6020A	Total/NA
Zinc	18	J	20	8.4	ug/L	1		6020A	Total/NA
Sodium	260000		500	170	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-4 — Lab Sample ID: 680-96611-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	1.7	J	5.0	1.0	mg/L	1		8015C	Total/NA
Aluminum	13000		100	50	ug/L	1		6020A	Total/NA
Arsenic	12		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	140		5.0	1.4	ug/L	1		6020A	Total/NA
Beryllium	0.85		0.50	0.15	ug/L	1		6020A	Total/NA
Cadmium	0.16	J	0.50	0.13	ug/L	1		6020A	Total/NA
Chromium	43		5.0	2.5	ug/L	1		6020A	Total/NA
Iron	42000		100	44	ug/L	1		6020A	Total/NA
Lead	14		1.5	0.50	ug/L	1		6020A	Total/NA
Vanadium	39		10	3.2	ug/L	1		6020A	Total/NA
Arsenic	3.8		2.5	1.3	ug/L	1		6020A	Dissolved
Barium	41		5.0	1.3	ug/L	1		6020A	Dissolved
Iron	4700		100	33	ug/L	1		6020A	Dissolved

Client Sample ID: MW-10 — Lab Sample ID: 680-96611-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.82	J	1.0	0.14	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	0.24	J	1.0	0.10	ug/L	1		8260B	Total/NA
1,4-Dioxane	58		26	4.1	ug/L	10		8270D LL	Total/NA
Aluminum	570		100	50	ug/L	1		6020A	Total/NA
Cadmium	3.8		0.50	0.13	ug/L	1		6020A	Total/NA
Nickel	65		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: Field Dup1 — Lab Sample ID: 680-96611-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	28000		5000	2600	ug/L	1000		8260B	Total/NA
1,4-Dioxane	7.4	J	26	4.1	ug/L	10		8270D LL	Total/NA
Arsenic	2.8		2.5	1.3	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample ID: Field Dup1 (Continued) — Lab Sample ID: 680-96611-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	240		5.0	1.4	ug/L	1		6020A	Total/NA
Chromium	4.5	J	5.0	2.5	ug/L	1		6020A	Total/NA
Cobalt	110		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	6.5		5.0	1.1	ug/L	1		6020A	Total/NA
Iron	100000		100	44	ug/L	1		6020A	Total/NA
Manganese	9600		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	21		5.0	2.0	ug/L	1		6020A	Total/NA
Selenium	1.6	J	2.5	1.1	ug/L	1		6020A	Total/NA
Zinc	18	J	20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: Equipment Blank 1 — Lab Sample ID: 680-96611-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.20	J B	1.3	0.14	ug/L	1		8270D LL	Total/NA
Dimethoate	0.16	J	2.6	0.16	ug/L	1		8270D LL	Total/NA
Di-n-octyl phthalate	0.34	J B *	1.3	0.22	ug/L	1		8270D LL	Total/NA
Iron	85	J	100	44	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-96611-6

No Detections.

Client Sample ID: MW-3 — Lab Sample ID: 680-96611-7

No Detections.

Client Sample ID: MW-4 — Lab Sample ID: 680-96611-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	4200		250	130	ug/L	50		8260B	Total/NA
Aluminum	150		100	50	ug/L	1		6020A	Total/NA
Barium	720		5.0	1.4	ug/L	1		6020A	Total/NA
Lead	0.51	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-4U — Lab Sample ID: 680-96611-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	5000		250	130	ug/L	50		8260B	Total/NA
Aluminum	160		100	50	ug/L	1		6020A	Total/NA
Barium	900		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	71000		100	44	ug/L	1		6020A	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 680-96611-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	50		1.0	0.50	mg/L	2		9056A	Total/NA
Sulfate	24		1.0	0.50	mg/L	2		9056A	Total/NA
Calcium, Dissolved	49000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	13000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	6600		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	530		5.0	1.0	ug/L	1		6020	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-3 (Continued) — Lab Sample ID: 680-96611-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium, Dissolved	4400		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	76000		500	250	ug/L	1		6020	Dissolved
Ammonia	2.7		0.10	0.052	mg/L	2		350.1	Dissolved
Orthophosphate, Dissolved	0.021	J	0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	210		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	3.5		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	6.5		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	17		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	5.0		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-4 — Lab Sample ID: 680-96611-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	530		10	5.0	mg/L	20		9056A	Total/NA
Calcium, Dissolved	110000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	60000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	34000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	2300		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	4700		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	400000		500	250	ug/L	1		6020	Dissolved
Ammonia	1.9		0.050	0.026	mg/L	1		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	560		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	560		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	2.4		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	6.1		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	18		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	35		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-4U — Lab Sample ID: 680-96611-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	670		10	5.0	mg/L	20		9056A	Total/NA
Calcium, Dissolved	100000		250	130	ug/L	1		6020	Dissolved
Iron, Dissolved	74000		100	33	ug/L	1		6020	Dissolved
Magnesium, Dissolved	42000		250	43	ug/L	1		6020	Dissolved
Manganese, Dissolved	2300		5.0	1.0	ug/L	1		6020	Dissolved
Potassium, Dissolved	8700		500	170	ug/L	1		6020	Dissolved
Sodium, Dissolved	460000		1000	500	ug/L	2		6020	Dissolved
Ammonia	8.9		0.25	0.13	mg/L	5		350.1	Dissolved
Sulfide, Dissolved	1.1		1.0	1.0	mg/L	1		9034	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Sulfide	1.1		1.0	1.0	mg/L	1		9034	Total/NA
Alkalinity	580		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	580		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	11		0.030	0.030	mg/L	1		UnionizedNH3	Total/NA
pH	6.0		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	17		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4U (Continued)

Lab Sample ID: 680-96611-12

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon	39		1.0	1.0	mg/L	1		9060	Dissolved

This Detection Summary does not include radiochemical test results.

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: RAB-MW1R
Date Collected: 11/26/13 09:40
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	13000	U	13000	2500	ug/L			12/03/13 18:47	500
Acetonitrile	20000	U	20000	5000	ug/L			12/03/13 18:47	500
Acrolein	10000	U	10000	3700	ug/L			12/03/13 18:47	500
Acrylonitrile	10000	U	10000	3600	ug/L			12/03/13 18:47	500
Allyl chloride	500	U	500	100	ug/L			12/03/13 18:47	500
Benzene	500	U	500	130	ug/L			12/03/13 18:47	500
Bromodichloromethane	500	U	500	130	ug/L			12/03/13 18:47	500
Bromoform	500	U	500	250	ug/L			12/03/13 18:47	500
Bromomethane	2500	U	2500	1000	ug/L			12/03/13 18:47	500
2-Butanone	5000	U	5000	500	ug/L			12/03/13 18:47	500
Carbon disulfide	1000	U	1000	300	ug/L			12/03/13 18:47	500
Carbon tetrachloride	500	U	500	250	ug/L			12/03/13 18:47	500
Chlorobenzene	500	U	500	130	ug/L			12/03/13 18:47	500
Chloroethane	2500	U	2500	1000	ug/L			12/03/13 18:47	500
Chloroform	500	U	500	70	ug/L			12/03/13 18:47	500
Chloromethane	500	U	500	170	ug/L			12/03/13 18:47	500
Chloroprene	500	U	500	150	ug/L			12/03/13 18:47	500
cis-1,2-Dichloroethene	500	U	500	75	ug/L			12/03/13 18:47	500
cis-1,3-Dichloropropene	500	U	500	55	ug/L			12/03/13 18:47	500
Dibromochloromethane	500	U	500	50	ug/L			12/03/13 18:47	500
1,2-Dibromo-3-Chloropropane	500	U	500	220	ug/L			12/03/13 18:47	500
1,2-Dibromoethane	500	U	500	130	ug/L			12/03/13 18:47	500
Dibromomethane	500	U	500	100	ug/L			12/03/13 18:47	500
Dichlorodifluoromethane	500	U	500	130	ug/L			12/03/13 18:47	500
1,1-Dichloroethane	500	U	500	130	ug/L			12/03/13 18:47	500
1,2-Dichloroethane	500	U	500	50	ug/L			12/03/13 18:47	500
1,1-Dichloroethene	500	U	500	55	ug/L			12/03/13 18:47	500
1,2-Dichloropropane	500	U	500	65	ug/L			12/03/13 18:47	500
Diethyl ether	5000	U	5000	500	ug/L			12/03/13 18:47	500
Ethylbenzene	500	U	500	55	ug/L			12/03/13 18:47	500
Ethyl methacrylate	500	U	500	130	ug/L			12/03/13 18:47	500
2-Hexanone	5000	U	5000	500	ug/L			12/03/13 18:47	500
Iodomethane	2500	U	2500	500	ug/L			12/03/13 18:47	500
Isobutyl alcohol	20000	U	20000	5500	ug/L			12/03/13 18:47	500
Methacrylonitrile	10000	U	10000	1700	ug/L			12/03/13 18:47	500
Methylene Chloride	2500	U	2500	500	ug/L			12/03/13 18:47	500
Methyl methacrylate	500	U	500	240	ug/L			12/03/13 18:47	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	ug/L			12/03/13 18:47	500
Methyl tert-butyl ether	5000	U	5000	100	ug/L			12/03/13 18:47	500
n-Heptane	500	U	500	210	ug/L			12/03/13 18:47	500
Pentachloroethane	2500	U	2500	600	ug/L			12/03/13 18:47	500
Propionitrile	10000	U	10000	2300	ug/L			12/03/13 18:47	500
Styrene	500	U	500	55	ug/L			12/03/13 18:47	500
t-Butanol	**21000**		2500	1300	ug/L			12/03/13 18:47	500
1,1,1,2-Tetrachloroethane	500	U	500	170	ug/L			12/03/13 18:47	500
1,1,2,2-Tetrachloroethane	500	U	500	90	ug/L			12/03/13 18:47	500
Tetrachloroethene	500	U	500	75	ug/L			12/03/13 18:47	500
Toluene	500	U	500	170	ug/L			12/03/13 18:47	500
trans-1,4-Dichloro-2-butene	1000	U	1000	250	ug/L			12/03/13 18:47	500

Client Sample ID: RAB-MW1R
Date Collected: 11/26/13 09:40
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	500	U	500	100	ug/L			12/03/13 18:47	500
trans-1,3-Dichloropropene	500	U	500	110	ug/L			12/03/13 18:47	500
1,2,3-Trichlorobenzene	500	U	500	180	ug/L			12/03/13 18:47	500
1,1,1-Trichloroethane	500	U	500	250	ug/L			12/03/13 18:47	500
1,1,2-Trichloroethane	500	U	500	65	ug/L			12/03/13 18:47	500
Trichloroethylene	500	U	500	65	ug/L			12/03/13 18:47	500
Trichlorofluoromethane	500	U	500	130	ug/L			12/03/13 18:47	500
1,2,3-Trichloropropane	500	U	500	210	ug/L			12/03/13 18:47	500
Vinyl acetate	1000	U	1000	140	ug/L			12/03/13 18:47	500
Vinyl chloride	500	U	500	90	ug/L			12/03/13 18:47	500
Xylenes, Total	1000	U	1000	100	ug/L			12/03/13 18:47	500

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
S-2-[4-Glutarimidobutylamino]ethyl thios	*6000*	*T J N*	*ug/L*		*1.77*	*31701-78-7*		*12/03/13 18:47*	*500*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*12/03/13 18:47*	*500*
Dibromofluoromethane	*112*		*70 - 130*		*12/03/13 18:47*	*500*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/03/13 18:47*	*500*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Acenaphthylene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Acetophenone	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Acetylaminofluorene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
alpha,alpha-Dimethyl phenethylamine	13	U	13	4.4	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Aminobiphenyl	6.5	U *	6.5	0.40	ug/L		12/02/13 16:15	12/05/13 17:32	1
Aniline	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/05/13 17:32	1
Anthracene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Aramite, Total	2.0	U	2.0	0.14	ug/L		12/02/13 16:15	12/05/13 17:32	1
Benzo[a]anthracene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Benzo[a]pyrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Benzo[b]fluoranthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Benzo[g,h,i]perylene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Benzo[k]fluoranthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Benzyl alcohol	1.3	U	1.3	0.18	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,1'-Biphenyl	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Bis(2-chloroethoxy)methane	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Bis(2-chloroethyl)ether	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Bis(2-ethylhexyl) phthalate	2.6	U	2.6	0.83	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Bromophenyl phenyl ether	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
Butyl benzyl phthalate	1.3	U *	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Chloroaniline	2.6	U	2.6	0.47	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Chloro-3-methylphenol	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Chloronaphthalene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Chlorophenol	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Chlorophenyl phenyl ether	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Chrysene	0.26	U	0.26	0.059	ug/L		12/02/13 16:15	12/05/13 17:32	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: RAB-MW1R
Date Collected: 11/26/13 09:40
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-1
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diallate	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Dibenz(a,h)anthracene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Dibenzofuran	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,2-Dichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,3-Dichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,4-Dichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
3,3'-Dichlorobenzidine	26	U *	26	2.6	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,4-Dichlorophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,6-Dichlorophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Diethyl phthalate	**0.27**	**J B**	1.3	0.14	ug/L		12/02/13 16:15	12/05/13 17:32	1
Dimethoate	2.6	U	2.6	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
7,12-Dimethylbenz(a)anthracene	1.3	U	1.3	0.26	ug/L		12/02/13 16:15	12/05/13 17:32	1
3,3'-Dimethylbenzidine	26	U	26	6.5	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,4-Dimethylphenol	2.6	U	2.6	0.90	ug/L		12/02/13 16:15	12/05/13 17:32	1
Dimethyl phthalate	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Di-n-butyl phthalate	1.3	U *	1.3	0.51	ug/L		12/02/13 16:15	12/05/13 17:32	1
4,6-Dinitro-2-methylphenol	6.5	U	6.5	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,4-Dinitrophenol	13	U	13	1.4	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,4-Dinitrotoluene	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,6-Dinitrotoluene	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
Di-n-octyl phthalate	**0.80**	**J B ***	1.3	0.22	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,4-Dioxane	**1.7**	**J**	2.6	0.40	ug/L		12/02/13 16:15	12/05/13 17:32	1
Disulfoton	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Ethyl methanesulfonate	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Ethyl Parathion	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Famphur	1.3	U	1.3	0.21	ug/L		12/02/13 16:15	12/05/13 17:32	1
Fluoranthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Fluorene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Hexachlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Hexachlorobutadiene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Hexachlorocyclopentadiene	2.6	U	2.6	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1
Hexachloroethane	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1
Hexachlorophene	650	U *	650	33	ug/L		12/02/13 16:15	12/05/13 17:32	1
Hexachloropropene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Indeno[1,2,3-cd]pyrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Isophorone	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Isosafrole	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
m-Dinitrobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Methapyrilene	260	U	260	1.7	ug/L		12/02/13 16:15	12/05/13 17:32	1
3-Methylcholanthrene	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1
Methyl methanesulfonate	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Methylnaphthalene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Methyl parathion	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Methylphenol	2.6	U	2.6	0.96	ug/L		12/02/13 16:15	12/05/13 17:32	1
3 & 4 Methylphenol	2.6	U	2.6	0.86	ug/L		12/02/13 16:15	12/05/13 17:32	1
1-Naphthalenamine	6.5	U	6.5	1.7	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Naphthalenamine	6.5	U	6.5	1.7	ug/L		12/02/13 16:15	12/05/13 17:32	1
Naphthalene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,4-Naphthoquinone	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: RAB-MW1R
Date Collected: 11/26/13 09:40
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-1
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	1.3	U	1.3	0.21	ug/L		12/02/13 16:15	12/05/13 17:32	1
3-Nitroaniline	6.5	U	6.5	0.21	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Nitroaniline	6.5	U	6.5	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1
Nitrobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
5-Nitro-o-toluidine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Nitrophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Nitrophenol	6.5	U	6.5	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1
4-Nitroquinoline-1-oxide	2.6	U	2.6	1.4	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosodiethylamine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosodimethylamine	1.3	U	1.3	0.33	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosodi-n-butylamine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosodi-n-propylamine	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosodiphenylamine	1.3	U	1.3	0.48	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosomethylethylamine	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosomorpholine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosopiperidine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
N-Nitrosopyrrolidine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
o,o',o''-Triethylphosphorothioate	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
o-Toluidine	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,2'-oxybis[1-chloropropane]	1.3	U *	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
p-Dimethylamino azobenzene	6.5	U	6.5	0.20	ug/L		12/02/13 16:15	12/05/13 17:32	1
Pentachlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Pentachloronitrobenzene	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1
Pentachlorophenol	6.5	U	6.5	0.52	ug/L		12/02/13 16:15	12/05/13 17:32	1
Phenacetin	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Phenanthrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Phenol	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 17:32	1
Phenyl ether	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Phorate	1.3	U	1.3	0.26	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-Picoline	2.6	U	2.6	0.20	ug/L		12/02/13 16:15	12/05/13 17:32	1
p-Phenylene diamine	260	U	260	21	ug/L		12/02/13 16:15	12/05/13 17:32	1
Pronamide	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
Pyrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Pyridine	6.5	U	6.5	0.95	ug/L		12/02/13 16:15	12/05/13 17:32	1
Safrole, Total	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2-sec-Butyl-4,6-dinitrophenol	2.6	U	2.6	0.20	ug/L		12/02/13 16:15	12/05/13 17:32	1
Sulfotepp	1.3	U	1.3	0.18	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,2,4,5-Tetrachlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,3,4,6-Tetrachlorophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
Thionazin	1.3	U	1.3	0.26	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,2,4-Trichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,4,5-Trichlorophenol	1.3	U *	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 17:32	1
2,4,6-Trichlorophenol	1.3	U	1.3	0.22	ug/L		12/02/13 16:15	12/05/13 17:32	1
1,3,5-Trinitrobenzene	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 17:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Pentanone, 4-hydroxy-4-methyl-	*25*	*T J N*	*ug/L*		*3.89*	*123-42-2*	*12/02/13 16:15*	*12/05/13 17:32*	*1*
Unknown	*40*	*T J*	*ug/L*		*5.01*		*12/02/13 16:15*	*12/05/13 17:32*	*1*
Unknown	*110*	*T J*	*ug/L*		*5.49*		*12/02/13 16:15*	*12/05/13 17:32*	*1*
Unknown	*26*	*T J*	*ug/L*		*7.04*		*12/02/13 16:15*	*12/05/13 17:32*	*1*

Client Sample ID: RAB-MW1R
Date Collected: 11/26/13 09:40
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-1
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	23	T J	ug/L		8.84		12/02/13 16:15	12/05/13 17:32	1
Unknown	33	T J	ug/L		8.87		12/02/13 16:15	12/05/13 17:32	1
Unknown	31	T J	ug/L		8.97		12/02/13 16:15	12/05/13 17:32	1
Unknown	22	T J	ug/L		9.08		12/02/13 16:15	12/05/13 17:32	1
Unknown	26	T J	ug/L		9.75		12/02/13 16:15	12/05/13 17:32	1
Unknown	30	T J	ug/L		9.78		12/02/13 16:15	12/05/13 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	57		34 - 130	12/02/13 16:15	12/05/13 17:32	1
2-Fluorophenol	46		25 - 130	12/02/13 16:15	12/05/13 17:32	1
Nitrobenzene-d5	55		32 - 130	12/02/13 16:15	12/05/13 17:32	1
Phenol-d5	48		27 - 130	12/02/13 16:15	12/05/13 17:32	1
Terphenyl-d14	93		36 - 130	12/02/13 16:15	12/05/13 17:32	1
2,4,6-Tribromophenol	96		30 - 130	12/02/13 16:15	12/05/13 17:32	1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/06/13 14:00	1
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 14:00	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/03/13 11:41	12/04/13 08:11	1
Antimony	5.0	U	5.0	2.0	ug/L		12/03/13 11:41	12/04/13 08:11	1
Arsenic	**2.9**		2.5	1.3	ug/L		12/03/13 11:41	12/04/13 08:11	1
Barium	**280**		5.0	1.4	ug/L		12/03/13 11:41	12/04/13 08:11	1
Beryllium	**0.15**	**J**	0.50	0.15	ug/L		12/03/13 11:41	12/04/13 08:11	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/03/13 11:41	12/04/13 08:11	1
Chromium	**5.9**		5.0	2.5	ug/L		12/03/13 11:41	12/04/13 08:11	1
Cobalt	**110**		0.50	0.12	ug/L		12/03/13 11:41	12/04/13 08:11	1
Copper	**7.0**		5.0	1.1	ug/L		12/03/13 11:41	12/09/13 17:40	1
Iron	**100000**		100	44	ug/L		12/03/13 11:41	12/04/13 08:11	1
Lead	1.5	U	1.5	0.50	ug/L		12/03/13 11:41	12/04/13 08:11	1
Manganese	**9800**		5.0	2.0	ug/L		12/03/13 11:41	12/04/13 08:11	1
Mercury	0.80	U	0.80	0.40	ug/L		12/03/13 11:41	12/04/13 08:11	1
Nickel	**22**		5.0	2.0	ug/L		12/03/13 11:41	12/04/13 08:11	1
Selenium	**1.6**	**J**	2.5	1.1	ug/L		12/03/13 11:41	12/04/13 08:11	1
Silver	1.0	U	1.0	0.18	ug/L		12/03/13 11:41	12/04/13 08:11	1
Thallium	1.0	U	1.0	0.25	ug/L		12/03/13 11:41	12/04/13 08:11	1
Tin	5.0	U	5.0	1.4	ug/L		12/03/13 11:41	12/04/13 08:11	1
Vanadium	10	U	10	3.2	ug/L		12/03/13 11:41	12/04/13 08:11	1
Zinc	**18**	**J**	20	8.4	ug/L		12/03/13 11:41	12/04/13 08:11	1
Sodium	**260000**		500	170	ug/L		12/03/13 11:41	12/04/13 08:11	1

Client Sample ID: NAT-4
Date Collected: 11/26/13 12:40
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	100	U	100	10	ug/L			12/02/13 20:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*12/02/13 20:54*	*10*
Dibromofluoromethane	*106*		*70 - 130*		*12/02/13 20:54*	*10*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/02/13 20:54*	*10*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	**1.7**	**J**	5.0	1.0	mg/L			12/06/13 15:13	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13000**		100	50	ug/L		12/02/13 10:36	12/04/13 06:02	1
Arsenic	**12**		2.5	1.3	ug/L		12/02/13 10:36	12/04/13 06:02	1
Barium	**140**		5.0	1.4	ug/L		12/02/13 10:36	12/04/13 06:02	1
Beryllium	**0.85**		0.50	0.15	ug/L		12/02/13 10:36	12/04/13 06:02	1
Cadmium	**0.16**	**J**	0.50	0.13	ug/L		12/02/13 10:36	12/04/13 06:02	1
Chromium	**43**		5.0	2.5	ug/L		12/02/13 10:36	12/04/13 06:02	1
Iron	**42000**		100	44	ug/L		12/02/13 10:36	12/04/13 06:02	1
Lead	**14**		1.5	0.50	ug/L		12/02/13 10:36	12/04/13 06:02	1
Vanadium	**39**		10	3.2	ug/L		12/02/13 10:36	12/04/13 06:02	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	23	ug/L		12/03/13 13:26	12/04/13 11:45	1
Arsenic	**3.8**		2.5	1.3	ug/L		12/03/13 13:26	12/04/13 11:45	1
Barium	**41**		5.0	1.3	ug/L		12/03/13 13:26	12/04/13 11:45	1
Beryllium	0.50	U	0.50	0.25	ug/L		12/03/13 13:26	12/04/13 11:45	1
Cadmium	0.50	U	0.50	0.095	ug/L		12/03/13 13:26	12/04/13 11:45	1
Chromium	5.0	U	5.0	2.5	ug/L		12/03/13 13:26	12/04/13 11:45	1
Iron	**4700**		100	33	ug/L		12/03/13 13:26	12/04/13 11:45	1
Lead	1.5	U	1.5	0.20	ug/L		12/03/13 13:26	12/04/13 11:45	1
Vanadium	10	U	10	3.8	ug/L		12/03/13 13:26	12/04/13 11:45	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-10
Date Collected: 11/26/13 14:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.82	J	1.0	0.14	ug/L			12/02/13 21:26	1
1,2-Dichloroethane	0.24	J	1.0	0.10	ug/L			12/02/13 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 130*		*12/02/13 21:26*	*1*
Dibromofluoromethane	*111*		*70 - 130*		*12/02/13 21:26*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/02/13 21:26*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	58		26	4.1	ug/L		12/02/13 16:15	12/14/13 21:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D*	*30 - 130*	*12/02/13 16:15*	*12/14/13 21:22*	*10*
2-Fluorophenol (Surr)	*0*	*D*	*25 - 130*	*12/02/13 16:15*	*12/14/13 21:22*	*10*
Terphenyl-d14 (Surr)	*0*	*D*	*36 - 130*	*12/02/13 16:15*	*12/14/13 21:22*	*10*
Phenol-d5 (Surr)	*0*	*D*	*27 - 130*	*12/02/13 16:15*	*12/14/13 21:22*	*10*
Nitrobenzene-d5 (Surr)	*0*	*D*	*32 - 130*	*12/02/13 16:15*	*12/14/13 21:22*	*10*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	570		100	50	ug/L		12/02/13 10:36	12/04/13 06:29	1
Cadmium	3.8		0.50	0.13	ug/L		12/02/13 10:36	12/04/13 06:29	1
Lead	1.5	U	1.5	0.50	ug/L		12/02/13 10:36	12/04/13 06:29	1
Nickel	65		5.0	2.0	ug/L		12/02/13 10:36	12/04/13 06:29	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Field Dup1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25000	U	25000	5000	ug/L			12/03/13 20:21	1000
Acetonitrile	40000	U	40000	10000	ug/L			12/03/13 20:21	1000
Acrolein	20000	U	20000	7400	ug/L			12/03/13 20:21	1000
Acrylonitrile	20000	U	20000	7200	ug/L			12/03/13 20:21	1000
Allyl chloride	1000	U	1000	200	ug/L			12/03/13 20:21	1000
Benzene	1000	U	1000	250	ug/L			12/03/13 20:21	1000
Bromodichloromethane	1000	U	1000	250	ug/L			12/03/13 20:21	1000
Bromoform	1000	U	1000	500	ug/L			12/03/13 20:21	1000
Bromomethane	5000	U	5000	2000	ug/L			12/03/13 20:21	1000
2-Butanone	10000	U	10000	1000	ug/L			12/03/13 20:21	1000
Carbon disulfide	2000	U	2000	600	ug/L			12/03/13 20:21	1000
Carbon tetrachloride	1000	U	1000	500	ug/L			12/03/13 20:21	1000
Chlorobenzene	1000	U	1000	250	ug/L			12/03/13 20:21	1000
Chloroethane	5000	U	5000	2000	ug/L			12/03/13 20:21	1000
Chloroform	1000	U	1000	140	ug/L			12/03/13 20:21	1000
Chloromethane	1000	U	1000	330	ug/L			12/03/13 20:21	1000
Chloroprene	1000	U	1000	300	ug/L			12/03/13 20:21	1000
cis-1,2-Dichloroethene	1000	U	1000	150	ug/L			12/03/13 20:21	1000
cis-1,3-Dichloropropene	1000	U	1000	110	ug/L			12/03/13 20:21	1000
Dibromochloromethane	1000	U	1000	100	ug/L			12/03/13 20:21	1000
1,2-Dibromo-3-Chloropropane	1000	U	1000	440	ug/L			12/03/13 20:21	1000
1,2-Dibromoethane	1000	U	1000	250	ug/L			12/03/13 20:21	1000
Dibromomethane	1000	U	1000	200	ug/L			12/03/13 20:21	1000
Dichlorodifluoromethane	1000	U	1000	250	ug/L			12/03/13 20:21	1000
1,1-Dichloroethane	1000	U	1000	250	ug/L			12/03/13 20:21	1000
1,2-Dichloroethane	1000	U	1000	100	ug/L			12/03/13 20:21	1000
1,1-Dichloroethene	1000	U	1000	110	ug/L			12/03/13 20:21	1000
1,2-Dichloropropane	1000	U	1000	130	ug/L			12/03/13 20:21	1000
Diethyl ether	10000	U	10000	1000	ug/L			12/03/13 20:21	1000
Ethylbenzene	1000	U	1000	110	ug/L			12/03/13 20:21	1000
Ethyl methacrylate	1000	U	1000	250	ug/L			12/03/13 20:21	1000
2-Hexanone	10000	U	10000	1000	ug/L			12/03/13 20:21	1000
Iodomethane	5000	U	5000	1000	ug/L			12/03/13 20:21	1000
Isobutyl alcohol	40000	U	40000	11000	ug/L			12/03/13 20:21	1000
Methacrylonitrile	20000	U	20000	3300	ug/L			12/03/13 20:21	1000
Methylene Chloride	5000	U	5000	1000	ug/L			12/03/13 20:21	1000
Methyl methacrylate	1000	U	1000	480	ug/L			12/03/13 20:21	1000
4-Methyl-2-pentanone (MIBK)	10000	U	10000	1000	ug/L			12/03/13 20:21	1000
Methyl tert-butyl ether	10000	U	10000	200	ug/L			12/03/13 20:21	1000
n-Heptane	1000	U	1000	420	ug/L			12/03/13 20:21	1000
Pentachloroethane	5000	U	5000	1200	ug/L			12/03/13 20:21	1000
Propionitrile	20000	U	20000	4600	ug/L			12/03/13 20:21	1000
Styrene	1000	U	1000	110	ug/L			12/03/13 20:21	1000
t-Butanol	**28000**		5000	2600	ug/L			12/03/13 20:21	1000
1,1,1,2-Tetrachloroethane	1000	U	1000	330	ug/L			12/03/13 20:21	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	180	ug/L			12/03/13 20:21	1000
Tetrachloroethene	1000	U	1000	150	ug/L			12/03/13 20:21	1000
Toluene	1000	U	1000	330	ug/L			12/03/13 20:21	1000
trans-1,4-Dichloro-2-butene	2000	U	2000	500	ug/L			12/03/13 20:21	1000

Client Sample ID: Field Dup1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1000	U	1000	200	ug/L			12/03/13 20:21	1000
trans-1,3-Dichloropropene	1000	U	1000	210	ug/L			12/03/13 20:21	1000
1,2,3-Trichlorobenzene	1000	U	1000	350	ug/L			12/03/13 20:21	1000
1,1,1-Trichloroethane	1000	U	1000	500	ug/L			12/03/13 20:21	1000
1,1,2-Trichloroethane	1000	U	1000	130	ug/L			12/03/13 20:21	1000
Trichloroethylene	1000	U	1000	130	ug/L			12/03/13 20:21	1000
Trichlorofluoromethane	1000	U	1000	250	ug/L			12/03/13 20:21	1000
1,2,3-Trichloropropane	1000	U	1000	410	ug/L			12/03/13 20:21	1000
Vinyl acetate	2000	U	2000	280	ug/L			12/03/13 20:21	1000
Vinyl chloride	1000	U	1000	180	ug/L			12/03/13 20:21	1000
Xylenes, Total	2000	U	2000	200	ug/L			12/03/13 20:21	1000

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/03/13 20:21*	*1000*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*12/03/13 20:21*	*1000*
Dibromofluoromethane	*105*		*70 - 130*		*12/03/13 20:21*	*1000*
Toluene-d8 (Surr)	*97*		*70 - 130*		*12/03/13 20:21*	*1000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Acenaphthylene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Acetophenone	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Acetylaminofluorene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
alpha,alpha-Dimethyl phenethylamine	130	U	130	45	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Aminobiphenyl	66	U *	66	4.1	ug/L		12/02/13 16:15	12/14/13 21:47	10
Aniline	26	U	26	13	ug/L		12/02/13 16:15	12/14/13 21:47	10
Anthracene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Aramite, Total	20	U	20	1.4	ug/L		12/02/13 16:15	12/14/13 21:47	10
Benzo[a]anthracene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Benzo[a]pyrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Benzo[b]fluoranthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Benzo[g,h,i]perylene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Benzo[k]fluoranthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Benzyl alcohol	13	U	13	1.8	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,1'-Biphenyl	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Bis(2-chloroethoxy)methane	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Bis(2-chloroethyl)ether	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Bis(2-ethylhexyl) phthalate	26	U	26	8.4	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Bromophenyl phenyl ether	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Butyl benzyl phthalate	13	U *	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Chloroaniline	26	U	26	4.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Chloro-3-methylphenol	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Chloronaphthalene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Chlorophenol	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Chlorophenyl phenyl ether	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Chrysene	2.6	U	2.6	0.59	ug/L		12/02/13 16:15	12/14/13 21:47	10
Diallate	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Field Dup1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Dibenzofuran	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,2-Dichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,3-Dichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,4-Dichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
3,3'-Dichlorobenzidine	260	U *	260	26	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,4-Dichlorophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,6-Dichlorophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Diethyl phthalate	13	U	13	1.4	ug/L		12/02/13 16:15	12/14/13 21:47	10
Dimethoate	26	U	26	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
7,12-Dimethylbenz(a)anthracene	13	U	13	2.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
3,3'-Dimethylbenzidine	260	U	260	66	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,4-Dimethylphenol	26	U	26	9.1	ug/L		12/02/13 16:15	12/14/13 21:47	10
Dimethyl phthalate	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Di-n-butyl phthalate	13	U *	13	5.1	ug/L		12/02/13 16:15	12/14/13 21:47	10
4,6-Dinitro-2-methylphenol	66	U	66	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,4-Dinitrophenol	130	U	130	14	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,4-Dinitrotoluene	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,6-Dinitrotoluene	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
Di-n-octyl phthalate	13	U *	13	2.2	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,4-Dioxane	**7.4**	**J**	26	4.1	ug/L		12/02/13 16:15	12/14/13 21:47	10
Disulfoton	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Ethyl methanesulfonate	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Ethyl Parathion	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Famphur	13	U	13	2.1	ug/L		12/02/13 16:15	12/14/13 21:47	10
Fluoranthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Fluorene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Hexachlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Hexachlorobutadiene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Hexachlorocyclopentadiene	26	U	26	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Hexachloroethane	13	U	13	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Hexachlorophene	6600	U *	6600	330	ug/L		12/02/13 16:15	12/14/13 21:47	10
Hexachloropropene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Indeno[1,2,3-cd]pyrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Isophorone	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Isosafrole	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
m-Dinitrobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Methapyrilene	2600	U	2600	17	ug/L		12/02/13 16:15	12/14/13 21:47	10
3-Methylcholanthrene	13	U	13	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Methyl methanesulfonate	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Methylnaphthalene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Methyl parathion	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Methylphenol	26	U	26	9.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
3 & 4 Methylphenol	26	U	26	8.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
1-Naphthalenamine	66	U	66	17	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Naphthalenamine	66	U	66	17	ug/L		12/02/13 16:15	12/14/13 21:47	10
Naphthalene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,4-Naphthoquinone	13	U	13	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Nitroaniline	13	U	13	2.1	ug/L		12/02/13 16:15	12/14/13 21:47	10

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Field Dup1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	66	U	66	2.1	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Nitroaniline	66	U	66	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Nitrobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
5-Nitro-o-toluidine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Nitrophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Nitrophenol	66	U	66	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
4-Nitroquinoline-1-oxide	26	U	26	14	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosodiethylamine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosodimethylamine	13	U	13	3.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosodi-n-butylamine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosodi-n-propylamine	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosodiphenylamine	13	U	13	4.9	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosomethylethylamine	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosomorpholine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosopiperidine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
N-Nitrosopyrrolidine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
o,o',o''-Triethylphosphorothioate	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
o-Toluidine	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,2'-oxybis[1-chloropropane]	13	U *	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
p-Dimethylamino azobenzene	66	U	66	2.0	ug/L		12/02/13 16:15	12/14/13 21:47	10
Pentachlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Pentachloronitrobenzene	13	U	13	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Pentachlorophenol	66	U	66	5.2	ug/L		12/02/13 16:15	12/14/13 21:47	10
Phenacetin	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Phenanthrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Phenol	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 21:47	10
Phenyl ether	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Phorate	13	U	13	2.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-Picoline	26	U	26	2.0	ug/L		12/02/13 16:15	12/14/13 21:47	10
p-Phenylene diamine	2600	U	2600	210	ug/L		12/02/13 16:15	12/14/13 21:47	10
Pronamide	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Pyrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Pyridine	66	U	66	9.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
Safrole, Total	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2-sec-Butyl-4,6-dinitrophenol	26	U	26	2.0	ug/L		12/02/13 16:15	12/14/13 21:47	10
Sulfotepp	13	U	13	1.8	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,2,4,5-Tetrachlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,3,4,6-Tetrachlorophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
Thionazin	13	U	13	2.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,2,4-Trichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,4,5-Trichlorophenol	13	U *	13	1.6	ug/L		12/02/13 16:15	12/14/13 21:47	10
2,4,6-Trichlorophenol	13	U	13	2.2	ug/L		12/02/13 16:15	12/14/13 21:47	10
1,3,5-Trinitrobenzene	13	U	13	6.6	ug/L		12/02/13 16:15	12/14/13 21:47	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*59*	*T J*	*ug/L*		*4.63*		*12/02/13 16:15*	*12/14/13 21:47*	*10*
Unknown	*150*	*T J*	*ug/L*		*4.76*		*12/02/13 16:15*	*12/14/13 21:47*	*10*
Unknown	*53*	*T J*	*ug/L*		*4.89*		*12/02/13 16:15*	*12/14/13 21:47*	*10*
Unknown	*350*	*T J*	*ug/L*		*5.23*		*12/02/13 16:15*	*12/14/13 21:47*	*10*
Unknown	*44*	*T J*	*ug/L*		*6.78*		*12/02/13 16:15*	*12/14/13 21:47*	*10*

Client Sample ID: Field Dup1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	48	T J	ug/L		6.79		12/02/13 16:15	12/14/13 21:47	10
Unknown	54	T J	ug/L		8.57		12/02/13 16:15	12/14/13 21:47	10
Unknown	83	T J	ug/L		8.60		12/02/13 16:15	12/14/13 21:47	10
Unknown	29	T J	ug/L		8.62		12/02/13 16:15	12/14/13 21:47	10
Unknown	86	T J	ug/L		8.69		12/02/13 16:15	12/14/13 21:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	34 - 130	12/02/13 16:15	12/14/13 21:47	10
2-Fluorophenol	0	D	25 - 130	12/02/13 16:15	12/14/13 21:47	10
Nitrobenzene-d5	0	D	32 - 130	12/02/13 16:15	12/14/13 21:47	10
Phenol-d5	0	D	27 - 130	12/02/13 16:15	12/14/13 21:47	10
Terphenyl-d14	0	D	36 - 130	12/02/13 16:15	12/14/13 21:47	10
2,4,6-Tribromophenol	0	D	30 - 130	12/02/13 16:15	12/14/13 21:47	10

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/06/13 20:04	1
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 20:04	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/03/13 11:41	12/04/13 08:38	1
Antimony	5.0	U	5.0	2.0	ug/L		12/03/13 11:41	12/04/13 08:38	1
Arsenic	**2.8**		2.5	1.3	ug/L		12/03/13 11:41	12/04/13 08:38	1
Barium	**240**		5.0	1.4	ug/L		12/03/13 11:41	12/04/13 08:38	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/03/13 11:41	12/04/13 08:38	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/03/13 11:41	12/04/13 08:38	1
Chromium	**4.5**	**J**	5.0	2.5	ug/L		12/03/13 11:41	12/04/13 08:38	1
Cobalt	**110**		0.50	0.12	ug/L		12/03/13 11:41	12/04/13 08:38	1
Copper	**6.5**		5.0	1.1	ug/L		12/03/13 11:41	12/09/13 18:14	1
Iron	**100000**		100	44	ug/L		12/03/13 11:41	12/04/13 08:38	1
Lead	1.5	U	1.5	0.50	ug/L		12/03/13 11:41	12/04/13 08:38	1
Manganese	**9600**		5.0	2.0	ug/L		12/03/13 11:41	12/04/13 08:38	1
Mercury	0.80	U	0.80	0.40	ug/L		12/03/13 11:41	12/04/13 08:38	1
Nickel	**21**		5.0	2.0	ug/L		12/03/13 11:41	12/04/13 08:38	1
Selenium	**1.6**	**J**	2.5	1.1	ug/L		12/03/13 11:41	12/04/13 08:38	1
Silver	1.0	U	1.0	0.18	ug/L		12/03/13 11:41	12/04/13 08:38	1
Thallium	1.0	U	1.0	0.25	ug/L		12/03/13 11:41	12/04/13 08:38	1
Tin	5.0	U	5.0	1.4	ug/L		12/03/13 11:41	12/04/13 08:38	1
Vanadium	10	U	10	3.2	ug/L		12/03/13 11:41	12/04/13 08:38	1
Zinc	**18**	**J**	20	8.4	ug/L		12/03/13 11:41	12/04/13 08:38	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Equipment Blank 1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/02/13 19:40	1
Acetonitrile	40	U	40	10	ug/L			12/02/13 19:40	1
Acrolein	20	U	20	7.4	ug/L			12/02/13 19:40	1
Acrylonitrile	20	U	20	7.2	ug/L			12/02/13 19:40	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/02/13 19:40	1
Benzene	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/02/13 19:40	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/02/13 19:40	1
2-Butanone	10	U	10	1.0	ug/L			12/02/13 19:40	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/02/13 19:40	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/02/13 19:40	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/02/13 19:40	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 19:40	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/02/13 19:40	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/02/13 19:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 19:40	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.11	ug/L			12/02/13 19:40	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/02/13 19:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/02/13 19:40	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/02/13 19:40	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
1,2-Dichloroethane	1.0	U *	1.0	0.10	ug/L			12/02/13 19:40	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/02/13 19:40	1
1,2-Dichloropropane	1.0	U *	1.0	0.13	ug/L			12/02/13 19:40	1
Diethyl ether	10	U	10	1.0	ug/L			12/02/13 19:40	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/02/13 19:40	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
2-Hexanone	10	U	10	1.0	ug/L			12/02/13 19:40	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/02/13 19:40	1
Isobutyl alcohol	40	U	40	11	ug/L			12/02/13 19:40	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/02/13 19:40	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			12/02/13 19:40	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/02/13 19:40	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/02/13 19:40	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/02/13 19:40	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/02/13 19:40	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/02/13 19:40	1
Propionitrile	20	U	20	4.6	ug/L			12/02/13 19:40	1
Styrene	1.0	U	1.0	0.11	ug/L			12/02/13 19:40	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/02/13 19:40	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/02/13 19:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/02/13 19:40	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 19:40	1
Toluene	1.0	U	1.0	0.33	ug/L			12/02/13 19:40	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/02/13 19:40	1

Client Sample ID: Equipment Blank 1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/02/13 19:40	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.21	ug/L			12/02/13 19:40	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/02/13 19:40	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/02/13 19:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/02/13 19:40	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/02/13 19:40	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 19:40	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/02/13 19:40	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/02/13 19:40	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/02/13 19:40	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/02/13 19:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/13 19:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*12/02/13 19:40*	*1*
Dibromofluoromethane	*88*		*70 - 130*		*12/02/13 19:40*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*12/02/13 19:40*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Acenaphthylene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Acetophenone	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Acetylaminofluorene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
alpha,alpha-Dimethyl phenethylamine	13	U	13	4.5	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Aminobiphenyl	6.5	U *	6.5	0.41	ug/L		12/02/13 16:15	12/05/13 18:48	1
Aniline	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/05/13 18:48	1
Anthracene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Aramite, Total	2.0	U	2.0	0.14	ug/L		12/02/13 16:15	12/05/13 18:48	1
Benzo[a]anthracene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Benzo[a]pyrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Benzo[b]fluoranthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Benzo[g,h,i]perylene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Benzo[k]fluoranthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Benzyl alcohol	1.3	U	1.3	0.18	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,1'-Biphenyl	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Bis(2-chloroethoxy)methane	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Bis(2-chloroethyl)ether	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Bis(2-ethylhexyl) phthalate	2.6	U	2.6	0.84	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Bromophenyl phenyl ether	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
Butyl benzyl phthalate	1.3	U *	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Chloroaniline	2.6	U	2.6	0.47	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Chloro-3-methylphenol	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Chloronaphthalene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Chlorophenol	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Chlorophenyl phenyl ether	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Chrysene	0.26	U	0.26	0.059	ug/L		12/02/13 16:15	12/05/13 18:48	1
Diallate	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Equipment Blank 1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Dibenzofuran	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,2-Dichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,3-Dichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,4-Dichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
3,3'-Dichlorobenzidine	26	U *	26	2.6	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,4-Dichlorophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,6-Dichlorophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Diethyl phthalate	**0.20**	**J B**	1.3	0.14	ug/L		12/02/13 16:15	12/05/13 18:48	1
Dimethoate	**0.16**	**J**	2.6	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
7,12-Dimethylbenz(a)anthracene	1.3	U	1.3	0.26	ug/L		12/02/13 16:15	12/05/13 18:48	1
3,3'-Dimethylbenzidine	26	U	26	6.5	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,4-Dimethylphenol	2.6	U	2.6	0.90	ug/L		12/02/13 16:15	12/05/13 18:48	1
Dimethyl phthalate	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Di-n-butyl phthalate	1.3	U *	1.3	0.51	ug/L		12/02/13 16:15	12/05/13 18:48	1
4,6-Dinitro-2-methylphenol	6.5	U	6.5	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,4-Dinitrophenol	13	U	13	1.4	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,4-Dinitrotoluene	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,6-Dinitrotoluene	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
Di-n-octyl phthalate	**0.34**	**J B ***	1.3	0.22	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,4-Dioxane	2.6	U	2.6	0.41	ug/L		12/02/13 16:15	12/05/13 18:48	1
Disulfoton	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Ethyl methanesulfonate	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Ethyl Parathion	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Famphur	1.3	U	1.3	0.21	ug/L		12/02/13 16:15	12/05/13 18:48	1
Fluoranthene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Fluorene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Hexachlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Hexachlorobutadiene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Hexachlorocyclopentadiene	2.6	U	2.6	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
Hexachloroethane	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
Hexachlorophene	650	U *	650	33	ug/L		12/02/13 16:15	12/05/13 18:48	1
Hexachloropropene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Indeno[1,2,3-cd]pyrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Isophorone	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Isosafrole	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
m-Dinitrobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Methapyrilene	260	U	260	1.7	ug/L		12/02/13 16:15	12/05/13 18:48	1
3-Methylcholanthrene	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
Methyl methanesulfonate	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Methylnaphthalene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Methyl parathion	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Methylphenol	2.6	U	2.6	0.97	ug/L		12/02/13 16:15	12/05/13 18:48	1
3 & 4 Methylphenol	2.6	U	2.6	0.86	ug/L		12/02/13 16:15	12/05/13 18:48	1
1-Naphthalenamine	6.5	U	6.5	1.7	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Naphthalenamine	6.5	U	6.5	1.7	ug/L		12/02/13 16:15	12/05/13 18:48	1
Naphthalene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,4-Naphthoquinone	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Nitroaniline	1.3	U	1.3	0.21	ug/L		12/02/13 16:15	12/05/13 18:48	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Equipment Blank 1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	6.5	U	6.5	0.21	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Nitroaniline	6.5	U	6.5	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
Nitrobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
5-Nitro-o-toluidine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Nitrophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Nitrophenol	6.5	U	6.5	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
4-Nitroquinoline-1-oxide	2.6	U	2.6	1.4	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosodiethylamine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosodimethylamine	1.3	U	1.3	0.33	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosodi-n-butylamine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosodi-n-propylamine	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosodiphenylamine	1.3	U	1.3	0.48	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosomethylethylamine	2.6	U	2.6	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosomorpholine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosopiperidine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
N-Nitrosopyrrolidine	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
o,o',o''-Triethylphosphorothioate	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
o-Toluidine	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,2'-oxybis[1-chloropropane]	1.3	U *	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
p-Dimethylamino azobenzene	6.5	U	6.5	0.20	ug/L		12/02/13 16:15	12/05/13 18:48	1
Pentachlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Pentachloronitrobenzene	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1
Pentachlorophenol	6.5	U	6.5	0.52	ug/L		12/02/13 16:15	12/05/13 18:48	1
Phenacetin	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Phenanthrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Phenol	1.3	U	1.3	0.17	ug/L		12/02/13 16:15	12/05/13 18:48	1
Phenyl ether	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Phorate	1.3	U	1.3	0.26	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-Picoline	2.6	U	2.6	0.20	ug/L		12/02/13 16:15	12/05/13 18:48	1
p-Phenylene diamine	260	U	260	21	ug/L		12/02/13 16:15	12/05/13 18:48	1
Pronamide	1.3	U	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
Pyrene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Pyridine	6.5	U	6.5	0.96	ug/L		12/02/13 16:15	12/05/13 18:48	1
Safrole, Total	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2-sec-Butyl-4,6-dinitrophenol	2.6	U	2.6	0.20	ug/L		12/02/13 16:15	12/05/13 18:48	1
Sulfotepp	1.3	U	1.3	0.18	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,2,4,5-Tetrachlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,3,4,6-Tetrachlorophenol	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
Thionazin	1.3	U	1.3	0.26	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,2,4-Trichlorobenzene	1.3	U	1.3	0.13	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,4,5-Trichlorophenol	1.3	U *	1.3	0.16	ug/L		12/02/13 16:15	12/05/13 18:48	1
2,4,6-Trichlorophenol	1.3	U	1.3	0.22	ug/L		12/02/13 16:15	12/05/13 18:48	1
1,3,5-Trinitrobenzene	1.3	U	1.3	0.65	ug/L		12/02/13 16:15	12/05/13 18:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*4.8*	*T J*	*ug/L*		*3.66*		*12/02/13 16:15*	*12/05/13 18:48*	*1*
Unknown	*95*	*T J*	*ug/L*		*3.90*		*12/02/13 16:15*	*12/05/13 18:48*	*1*
1-Propene, 1,2,3-trichloro-, (Z)-	*9.8*	*T J N*	*ug/L*		*4.85*	*13116-57-9*	*12/02/13 16:15*	*12/05/13 18:48*	*1*
Cyclopentasiloxane, decamethyl-	*3.4*	*T J N*	*ug/L*		*6.20*	*541-02-6*	*12/02/13 16:15*	*12/05/13 18:48*	*1*
Unknown	*3.4*	*T J*	*ug/L*		*8.12*		*12/02/13 16:15*	*12/05/13 18:48*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Equipment Blank 1
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
o-Terphenyl	2.6	T J N	ug/L		10.52	84-15-1	12/02/13 16:15	12/05/13 18:48	1
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	4.3	T J N	ug/L		10.60	82304-66-3	12/02/13 16:15	12/05/13 18:48	1
n-Hexadecanoic acid	11	T J N	ug/L		10.69	57-10-3	12/02/13 16:15	12/05/13 18:48	1
6-Octadecenoic acid, (Z)-	11	T J N	ug/L		11.55	593-39-5	12/02/13 16:15	12/05/13 18:48	1
Octadecanoic acid	6.3	T J N	ug/L		11.63	57-11-4	12/02/13 16:15	12/05/13 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		34 - 130	12/02/13 16:15	12/05/13 18:48	1
2-Fluorophenol	81		25 - 130	12/02/13 16:15	12/05/13 18:48	1
Nitrobenzene-d5	91		32 - 130	12/02/13 16:15	12/05/13 18:48	1
Phenol-d5	81		27 - 130	12/02/13 16:15	12/05/13 18:48	1
Terphenyl-d14	111		36 - 130	12/02/13 16:15	12/05/13 18:48	1
2,4,6-Tribromophenol	90		30 - 130	12/02/13 16:15	12/05/13 18:48	1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/09/13 13:36	1
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 13:36	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/03/13 15:21	12/04/13 19:06	1
Antimony	5.0	U	5.0	2.0	ug/L		12/03/13 15:21	12/04/13 19:06	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/03/13 15:21	12/04/13 19:06	1
Barium	5.0	U	5.0	1.4	ug/L		12/03/13 15:21	12/04/13 19:06	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/03/13 15:21	12/04/13 19:06	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/03/13 15:21	12/04/13 19:06	1
Chromium	5.0	U	5.0	2.5	ug/L		12/03/13 15:21	12/04/13 19:06	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/03/13 15:21	12/04/13 19:06	1
Copper	5.0	U	5.0	1.1	ug/L		12/03/13 15:21	12/04/13 19:06	1
Iron	**85**	**J**	100	44	ug/L		12/03/13 15:21	12/04/13 19:06	1
Lead	1.5	U	1.5	0.50	ug/L		12/03/13 15:21	12/04/13 19:06	1
Manganese	5.0	U	5.0	2.0	ug/L		12/03/13 15:21	12/05/13 19:13	1
Mercury	0.80	U	0.80	0.40	ug/L		12/03/13 15:21	12/04/13 19:06	1
Nickel	5.0	U	5.0	2.0	ug/L		12/03/13 15:21	12/04/13 19:06	1
Selenium	2.5	U	2.5	1.1	ug/L		12/03/13 15:21	12/04/13 19:06	1
Silver	1.0	U	1.0	0.18	ug/L		12/03/13 15:21	12/04/13 19:06	1
Thallium	1.0	U	1.0	0.25	ug/L		12/03/13 15:21	12/04/13 19:06	1
Tin	5.0	U	5.0	1.4	ug/L		12/03/13 15:21	12/04/13 19:06	1
Vanadium	10	U	10	3.2	ug/L		12/03/13 15:21	12/04/13 19:06	1
Zinc	20	U	20	8.4	ug/L		12/03/13 15:21	12/04/13 19:06	1

Client Sample ID: Trip Blank
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/02/13 20:09	1
Acetonitrile	40	U	40	10	ug/L			12/02/13 20:09	1
Acrolein	20	U	20	7.4	ug/L			12/02/13 20:09	1
Acrylonitrile	20	U	20	7.2	ug/L			12/02/13 20:09	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/02/13 20:09	1
Benzene	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/02/13 20:09	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/02/13 20:09	1
2-Butanone	10	U	10	1.0	ug/L			12/02/13 20:09	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/02/13 20:09	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/02/13 20:09	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/02/13 20:09	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 20:09	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/02/13 20:09	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/02/13 20:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 20:09	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.11	ug/L			12/02/13 20:09	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/02/13 20:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/02/13 20:09	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/02/13 20:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
1,2-Dichloroethane	1.0	U *	1.0	0.10	ug/L			12/02/13 20:09	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/02/13 20:09	1
1,2-Dichloropropane	1.0	U *	1.0	0.13	ug/L			12/02/13 20:09	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/02/13 20:09	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
2-Hexanone	10	U	10	1.0	ug/L			12/02/13 20:09	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/02/13 20:09	1
Isobutyl alcohol	40	U	40	11	ug/L			12/02/13 20:09	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/02/13 20:09	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			12/02/13 20:09	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/02/13 20:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/02/13 20:09	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/02/13 20:09	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/02/13 20:09	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/02/13 20:09	1
Propionitrile	20	U	20	4.6	ug/L			12/02/13 20:09	1
Styrene	1.0	U	1.0	0.11	ug/L			12/02/13 20:09	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/02/13 20:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/02/13 20:09	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 20:09	1
Toluene	1.0	U	1.0	0.33	ug/L			12/02/13 20:09	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/02/13 20:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/02/13 20:09	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.21	ug/L			12/02/13 20:09	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: Trip Blank
Date Collected: 11/26/13 00:00
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/02/13 20:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/02/13 20:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/02/13 20:09	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/02/13 20:09	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 20:09	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/02/13 20:09	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/02/13 20:09	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/02/13 20:09	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/02/13 20:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
N,N'-Bis-3-oxapentamethyleneformamidinum	*75*	*T J N*	*ug/L*		*1.10*	*4030-53-9*		*12/02/13 20:09*	*1*
Silanol, trimethyl-	*14*	*T J N*	*ug/L*		*3.36*	*1066-40-6*		*12/02/13 20:09*	*1*
1,4-Dichlorobenzene-D4	*51*	*T J N*	*ug/L*		*8.79*	*3855-82-1*		*12/02/13 20:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*12/02/13 20:09*	*1*
Dibromofluoromethane	*87*		*70 - 130*		*12/02/13 20:09*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*12/02/13 20:09*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-3
Date Collected: 11/26/13 11:15
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Acenaphthylene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Acetophenone	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Acetylaminofluorene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
alpha,alpha-Dimethyl phenethylamine	130	U	130	44	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Aminobiphenyl	65	U *	65	4.0	ug/L		12/02/13 16:15	12/14/13 22:12	10
Aniline	26	U	26	13	ug/L		12/02/13 16:15	12/14/13 22:12	10
Anthracene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Aramite, Total	20	U	20	1.4	ug/L		12/02/13 16:15	12/14/13 22:12	10
Benzo[a]anthracene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Benzo[a]pyrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Benzo[b]fluoranthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Benzo[g,h,i]perylene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Benzo[k]fluoranthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Benzyl alcohol	13	U	13	1.8	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,1'-Biphenyl	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Bis(2-chloroethoxy)methane	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Bis(2-chloroethyl)ether	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Bis(2-ethylhexyl) phthalate	26	U	26	8.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Bromophenyl phenyl ether	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
Butyl benzyl phthalate	13	U *	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Chloroaniline	26	U	26	4.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Chloro-3-methylphenol	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Chloronaphthalene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Chlorophenol	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Chlorophenyl phenyl ether	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Chrysene	2.6	U	2.6	0.59	ug/L		12/02/13 16:15	12/14/13 22:12	10
Diallate	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Dibenz(a,h)anthracene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Dibenzofuran	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,2-Dichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,3-Dichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,4-Dichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
3,3'-Dichlorobenzidine	260	U *	260	26	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,4-Dichlorophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,6-Dichlorophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Diethyl phthalate	13	U	13	1.4	ug/L		12/02/13 16:15	12/14/13 22:12	10
Dimethoate	26	U	26	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
7,12-Dimethylbenz(a)anthracene	13	U	13	2.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
3,3'-Dimethylbenzidine	260	U	260	65	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,4-Dimethylphenol	26	U	26	9.0	ug/L		12/02/13 16:15	12/14/13 22:12	10
Dimethyl phthalate	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Di-n-butyl phthalate	13	U *	13	5.1	ug/L		12/02/13 16:15	12/14/13 22:12	10
4,6-Dinitro-2-methylphenol	65	U	65	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,4-Dinitrophenol	130	U	130	14	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,4-Dinitrotoluene	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,6-Dinitrotoluene	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
Di-n-octyl phthalate	13	U *	13	2.2	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,4-Dioxane	26	U	26	4.0	ug/L		12/02/13 16:15	12/14/13 22:12	10

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-3
Date Collected: 11/26/13 11:15
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Ethyl methanesulfonate	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Ethyl Parathion	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Famphur	13	U	13	2.1	ug/L		12/02/13 16:15	12/14/13 22:12	10
Fluoranthene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Fluorene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Hexachlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Hexachlorobutadiene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Hexachlorocyclopentadiene	26	U	26	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
Hexachloroethane	13	U	13	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
Hexachlorophene	6500	U *	6500	330	ug/L		12/02/13 16:15	12/14/13 22:12	10
Hexachloropropene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Indeno[1,2,3-cd]pyrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Isophorone	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Isosafrole	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
m-Dinitrobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Methapyrilene	2600	U	2600	17	ug/L		12/02/13 16:15	12/14/13 22:12	10
3-Methylcholanthrene	13	U	13	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
Methyl methanesulfonate	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Methylnaphthalene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Methyl parathion	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Methylphenol	26	U	26	9.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
3 & 4 Methylphenol	26	U	26	8.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
1-Naphthalenamine	65	U	65	17	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Naphthalenamine	65	U	65	17	ug/L		12/02/13 16:15	12/14/13 22:12	10
Naphthalene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,4-Naphthoquinone	13	U	13	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Nitroaniline	13	U	13	2.1	ug/L		12/02/13 16:15	12/14/13 22:12	10
3-Nitroaniline	65	U	65	2.1	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Nitroaniline	65	U	65	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
Nitrobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
5-Nitro-o-toluidine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Nitrophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Nitrophenol	65	U	65	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
4-Nitroquinoline-1-oxide	26	U	26	14	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosodiethylamine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosodimethylamine	13	U	13	3.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosodi-n-butylamine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosodi-n-propylamine	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosodiphenylamine	13	U	13	4.8	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosomethylethylamine	26	U	26	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosomorpholine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosopiperidine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
N-Nitrosopyrrolidine	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
o,o',o''-Triethylphosphorothioate	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
o-Toluidine	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,2'-oxybis[1-chloropropane]	13	U *	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
p-Dimethylamino azobenzene	65	U	65	2.0	ug/L		12/02/13 16:15	12/14/13 22:12	10
Pentachlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-3
Date Collected: 11/26/13 11:15
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	13	U	13	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
Pentachlorophenol	65	U	65	5.2	ug/L		12/02/13 16:15	12/14/13 22:12	10
Phenacetin	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Phenanthrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Phenol	13	U	13	1.7	ug/L		12/02/13 16:15	12/14/13 22:12	10
Phenyl ether	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Phorate	13	U	13	2.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-Picoline	26	U	26	2.0	ug/L		12/02/13 16:15	12/14/13 22:12	10
p-Phenylene diamine	2600	U	2600	210	ug/L		12/02/13 16:15	12/14/13 22:12	10
Pronamide	13	U	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
Pyrene	2.6	U	2.6	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Pyridine	65	U	65	9.5	ug/L		12/02/13 16:15	12/14/13 22:12	10
Safrole, Total	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2-sec-Butyl-4,6-dinitrophenol	26	U	26	2.0	ug/L		12/02/13 16:15	12/14/13 22:12	10
Sulfotepp	13	U	13	1.8	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,2,4,5-Tetrachlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,3,4,6-Tetrachlorophenol	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
Thionazin	13	U	13	2.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,2,4-Trichlorobenzene	13	U	13	1.3	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,4,5-Trichlorophenol	13	U *	13	1.6	ug/L		12/02/13 16:15	12/14/13 22:12	10
2,4,6-Trichlorophenol	13	U	13	2.2	ug/L		12/02/13 16:15	12/14/13 22:12	10
1,3,5-Trinitrobenzene	13	U	13	6.5	ug/L		12/02/13 16:15	12/14/13 22:12	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Propene, 1,2,3-trichloro-, (Z)-	*9.3*	*T J N*	*ug/L*		*4.61*	*13116-57-9*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Unknown	*8.5*	*T J*	*ug/L*		*4.83*		*12/02/13 16:15*	*12/14/13 22:12*	*10*
Unknown	*150*	*T J*	*ug/L*		*5.56*		*12/02/13 16:15*	*12/14/13 22:12*	*10*
Unknown	*8.1*	*T J*	*ug/L*		*5.64*		*12/02/13 16:15*	*12/14/13 22:12*	*10*
Unknown	*61*	*T J*	*ug/L*		*7.17*		*12/02/13 16:15*	*12/14/13 22:12*	*10*
1,1'-Biphenyl, 4-fluoro-	*11*	*T J N*	*ug/L*		*7.35*	*324-74-3*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Tetraethylene glycol diethyl ether	*31*	*T J N*	*ug/L*		*8.70*	*4353-28-0*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Hexadecanoic acid, butyl ester	*31*	*T J N*	*ug/L*		*11.48*	*111-06-8*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Unknown	*13*	*T J*	*ug/L*		*11.64*		*12/02/13 16:15*	*12/14/13 22:12*	*10*
Octadecanoic acid, butyl ester	*20*	*T J N*	*ug/L*		*12.33*	*123-95-5*	*12/02/13 16:15*	*12/14/13 22:12*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*D*	*34 - 130*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
2-Fluorophenol	*0*	*D*	*25 - 130*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Nitrobenzene-d5	*0*	*D*	*32 - 130*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Phenol-d5	*0*	*D*	*27 - 130*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
Terphenyl-d14	*0*	*D*	*36 - 130*	*12/02/13 16:15*	*12/14/13 22:12*	*10*
2,4,6-Tribromophenol	*0*	*D*	*30 - 130*	*12/02/13 16:15*	*12/14/13 22:12*	*10*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-4
Date Collected: 11/26/13 12:50
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	4200		250	130	ug/L			12/02/13 20:36	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*12/02/13 20:36*	*50*
Dibromofluoromethane	*102*		*70 - 130*		*12/02/13 20:36*	*50*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/02/13 20:36*	*50*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 15:37	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	150		100	50	ug/L		12/03/13 11:41	12/04/13 08:43	1
Barium	720		5.0	1.4	ug/L		12/03/13 11:41	12/04/13 08:43	1
Lead	0.51	J	1.5	0.50	ug/L		12/03/13 11:41	12/04/13 08:43	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-4U
Date Collected: 11/26/13 14:30
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5000		250	130	ug/L			12/02/13 21:08	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*12/02/13 21:08*	*50*
Dibromofluoromethane	*101*		*70 - 130*		*12/02/13 21:08*	*50*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/02/13 21:08*	*50*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 16:02	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	160		100	50	ug/L		12/03/13 11:41	12/04/13 09:42	1
Barium	900		5.0	1.4	ug/L		12/03/13 11:41	12/04/13 09:42	1
Iron	71000		100	44	ug/L		12/03/13 11:41	12/04/13 09:42	1
Lead	1.5	U	1.5	0.50	ug/L		12/03/13 11:41	12/04/13 09:42	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-3
Date Collected: 11/26/13 11:15
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-10
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U H	0.10	0.050	mg/L			12/02/13 19:02	2
Nitrite as N	0.10	U H	0.10	0.050	mg/L			12/02/13 19:02	2
Chloride	**50**		1.0	0.50	mg/L			12/12/13 13:25	2
Sulfate	**24**		1.0	0.50	mg/L			12/12/13 13:25	2

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**49000**		250	130	ug/L		12/03/13 13:26	12/04/13 12:22	1
Iron, Dissolved	**13000**		100	33	ug/L		12/03/13 13:26	12/04/13 12:22	1
Magnesium, Dissolved	**6600**		250	43	ug/L		12/03/13 13:26	12/04/13 12:22	1
Manganese, Dissolved	**530**		5.0	1.0	ug/L		12/03/13 13:26	12/04/13 12:22	1
Potassium, Dissolved	**4400**		500	170	ug/L		12/03/13 13:26	12/04/13 12:22	1
Sodium, Dissolved	**76000**		500	250	ug/L		12/03/13 13:26	12/04/13 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/02/13 13:01	1
Alkalinity	**210**		5.0	5.0	mg/L			12/09/13 15:55	1
Bicarbonate Alkalinity as CaCO3	**210**		5.0	5.0	mg/L			12/09/13 15:55	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 15:55	1
Ammonium ion as NH4	**3.5**		0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.5**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**17**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**2.7**		0.10	0.052	mg/L			12/02/13 17:23	2
Orthophosphate, Dissolved	**0.021**	**J**	0.050	0.016	mg/L			11/27/13 16:16	1
Sulfide, Dissolved	1.0	U	1.0	1.0	mg/L			12/02/13 13:01	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**5.0**		1.0	1.0	mg/L			12/14/13 00:07	1

Client Sample ID: MW-4
Date Collected: 11/26/13 12:50
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-11
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U H	0.10	0.050	mg/L			12/02/13 19:17	2
Nitrite as N	0.10	U H	0.10	0.050	mg/L			12/02/13 19:17	2
Chloride	**530**		10	5.0	mg/L			12/12/13 16:28	20
Sulfate	2.5	U	2.5	1.3	mg/L			12/12/13 13:37	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**110000**		250	130	ug/L		12/03/13 13:26	12/04/13 12:30	1
Iron, Dissolved	**60000**		100	33	ug/L		12/03/13 13:26	12/04/13 12:30	1
Magnesium, Dissolved	**34000**		250	43	ug/L		12/03/13 13:26	12/04/13 12:30	1
Manganese, Dissolved	**2300**		5.0	1.0	ug/L		12/03/13 13:26	12/04/13 12:30	1
Potassium, Dissolved	**4700**		500	170	ug/L		12/03/13 13:26	12/04/13 12:30	1
Sodium, Dissolved	**400000**		500	250	ug/L		12/03/13 13:26	12/04/13 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/02/13 13:01	1
Alkalinity	**560**		5.0	5.0	mg/L			12/09/13 16:05	1
Bicarbonate Alkalinity as CaCO3	**560**		5.0	5.0	mg/L			12/09/13 16:05	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 16:05	1
Ammonium ion as NH4	**2.4**		0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.1**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**18**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**1.9**		0.050	0.026	mg/L			12/02/13 17:08	1
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			11/27/13 16:16	1
Sulfide, Dissolved	1.0	U	1.0	1.0	mg/L			12/02/13 13:01	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**35**		1.0	1.0	mg/L			12/14/13 00:59	1

Client Sample ID: MW-4U
Date Collected: 11/26/13 14:30
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-12
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U H	0.10	0.050	mg/L			12/02/13 19:32	2
Nitrite as N	0.10	U H	0.10	0.050	mg/L			12/02/13 19:32	2
Chloride	**670**		10	5.0	mg/L			12/12/13 16:41	20
Sulfate	2.5	U	2.5	1.3	mg/L			12/12/13 13:50	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**100000**		250	130	ug/L		12/03/13 13:26	12/04/13 12:37	1
Iron, Dissolved	**74000**		100	33	ug/L		12/03/13 13:26	12/04/13 12:37	1
Magnesium, Dissolved	**42000**		250	43	ug/L		12/03/13 13:26	12/04/13 12:37	1
Manganese, Dissolved	**2300**		5.0	1.0	ug/L		12/03/13 13:26	12/04/13 12:37	1
Potassium, Dissolved	**8700**		500	170	ug/L		12/03/13 13:26	12/04/13 12:37	1
Sodium, Dissolved	**460000**		1000	500	ug/L		12/03/13 13:26	12/04/13 13:29	2

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**1.1**		1.0	1.0	mg/L			12/02/13 13:01	1
Alkalinity	**580**		5.0	5.0	mg/L			12/09/13 16:14	1
Bicarbonate Alkalinity as CaCO3	**580**		5.0	5.0	mg/L			12/09/13 16:14	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 16:14	1
Ammonium ion as NH4	**11**		0.030	0.030	mg/L			12/12/13 13:26	1
pH	**6.0**		1.0	1.0	SU			12/12/13 13:26	1
Temperature	**17**		1.0	1.0	Degrees C			12/12/13 13:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**8.9**		0.25	0.13	mg/L			12/02/13 17:52	5
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			11/27/13 16:16	1
Sulfide, Dissolved	**1.1**		1.0	1.0	mg/L			12/02/13 13:01	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**39**		1.0	1.0	mg/L			12/14/13 01:46	1

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-96611-1	RAB-MW1R	99	112	99
680-96611-1 MS	RAB-MW1R MS	106	105	110
680-96611-1 MSD	RAB-MW1R MSD	106	104	111
680-96611-2	NAT-4	99	106	98
680-96611-3	MW-10	104	111	99
680-96611-4	Field Dup1	99	105	97
680-96611-5	Equipment Blank 1	97	88	103
680-96611-6	Trip Blank	97	87	106
680-96611-8	MW-4	108	102	102
680-96611-9	MW-4U	108	101	100
LCS 680-305600/14	Lab Control Sample	96	84	108
LCS 680-305662/4	Lab Control Sample	102	104	102
LCS 680-305663/4	Lab Control Sample	102	102	98
LCS 680-305772/4	Lab Control Sample	99	102	103
LCSD 680-305600/15	Lab Control Sample Dup	97	81	104
LCSD 680-305662/5	Lab Control Sample Dup	101	109	101
LCSD 680-305663/5	Lab Control Sample Dup	103	102	98
LCSD 680-305772/5	Lab Control Sample Dup	100	104	103
MB 680-305600/7	Method Blank	88	84	100
MB 680-305662/8	Method Blank	104	107	98
MB 680-305663/8	Method Blank	100	110	96
MB 680-305772/8	Method Blank	100	116	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		FBP	2FP	2FP	NBZ	NBZ	PHL	PHL	TPH
Lab Sample ID	Client Sample ID	(34-130)	(25-130)	(25-130)	(32-130)	(32-130)	(27-130)	(27-130)	(36-130)
680-96611-1	RAB-MW1R	57	46	46	55	55	48	48	93
680-96611-1 MS	RAB-MW1R MS	78	63	63	73	73	68	68	63
680-96611-1 MSD	RAB-MW1R MSD	79	69	69	80	80	69	69	72
680-96611-3	MW-10		0 D	0 D	0 D	0 D	0 D	0 D	0 D
680-96611-4	Field Dup1	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0 D
680-96611-5	Equipment Blank 1	90	81	81	91	91	81	81	111
680-96611-7	MW-3	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0 D
LCS 680-305704/10-A	Lab Control Sample	90	96	96	87	87	91	91	111
LCS 680-305704/7-A	Lab Control Sample	89	88	88	86	86	81	81	104
LCSD 680-305704/11-A	Lab Control Sample Dup	87	90	90	85	85	88	88	99
MB 680-305704/6-A	Method Blank	98	88	88	96	96	86	86	115

		Percent Surrogate Recovery (Acceptance Limits)		
		TPH	TBP	TBP
Lab Sample ID	Client Sample ID	(36-130)	(30-130)	(30-130)
680-96611-1	RAB-MW1R	93	96	96

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	TPH (36-130)	TBP (30-130)	TBP (30-130)						
680-96611-1 MS	RAB-MW1R MS	63	110	110						
680-96611-1 MSD	RAB-MW1R MSD	72	105	105						
680-96611-3	MW-10	0 D	0 D	0 D						
680-96611-4	Field Dup1	0 D	0 D	0 D						
680-96611-5	Equipment Blank 1	111	90	90						
680-96611-7	MW-3	0 D	0 D	0 D						
LCS 680-305704/10-A	Lab Control Sample	111	111	111						
LCS 680-305704/7-A	Lab Control Sample	104	107	107						
LCSD 680-305704/11-A	Lab Control Sample Dup	99	106	106						
MB 680-305704/6-A	Method Blank	115	89	89						

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-305600/7
Matrix: Water
Analysis Batch: 305600

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/02/13 12:19	1
Acetonitrile	40	U	40	10	ug/L			12/02/13 12:19	1
Acrolein	20	U	20	7.4	ug/L			12/02/13 12:19	1
Acrylonitrile	20	U	20	7.2	ug/L			12/02/13 12:19	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/02/13 12:19	1
Benzene	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/02/13 12:19	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/02/13 12:19	1
2-Butanone	10	U	10	1.0	ug/L			12/02/13 12:19	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/02/13 12:19	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/02/13 12:19	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/02/13 12:19	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 12:19	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/02/13 12:19	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/02/13 12:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 12:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			12/02/13 12:19	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/02/13 12:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/02/13 12:19	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/02/13 12:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/02/13 12:19	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/02/13 12:19	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/02/13 12:19	1
Diethyl ether	10	U	10	1.0	ug/L			12/02/13 12:19	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/02/13 12:19	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
2-Hexanone	10	U	10	1.0	ug/L			12/02/13 12:19	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/02/13 12:19	1
Isobutyl alcohol	40	U	40	11	ug/L			12/02/13 12:19	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/02/13 12:19	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/02/13 12:19	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/02/13 12:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/02/13 12:19	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/02/13 12:19	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/02/13 12:19	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/02/13 12:19	1
Propionitrile	20	U	20	4.6	ug/L			12/02/13 12:19	1
Styrene	1.0	U	1.0	0.11	ug/L			12/02/13 12:19	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/02/13 12:19	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/02/13 12:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/02/13 12:19	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/02/13 12:19	1
Toluene	1.0	U	1.0	0.33	ug/L			12/02/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-305600/7
Matrix: Water
Analysis Batch: 305600

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/02/13 12:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/02/13 12:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			12/02/13 12:19	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/02/13 12:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/02/13 12:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/02/13 12:19	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/02/13 12:19	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/02/13 12:19	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/02/13 12:19	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/02/13 12:19	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/02/13 12:19	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/02/13 12:19	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/02/13 12:19*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*70 - 130*		*12/02/13 12:19*	*1*
Dibromofluoromethane	*84*		*70 - 130*		*12/02/13 12:19*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/02/13 12:19*	*1*

Lab Sample ID: LCS 680-305600/14
Matrix: Water
Analysis Batch: 305600

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	74.3		ug/L		74	39 - 162
Benzene	50.0	55.6		ug/L		111	74 - 123
Bromodichloromethane	50.0	55.9		ug/L		112	72 - 129
Bromoform	50.0	42.6		ug/L		85	60 - 134
Bromomethane	50.0	56.1		ug/L		112	10 - 171
2-Butanone	100	91.6		ug/L		92	55 - 142
Carbon disulfide	50.0	41.5		ug/L		83	63 - 142
Carbon tetrachloride	50.0	54.4		ug/L		109	70 - 131
Chlorobenzene	50.0	45.7		ug/L		91	79 - 120
Chloroethane	50.0	49.6		ug/L		99	47 - 148
Chloroform	50.0	47.6		ug/L		95	76 - 128
Chloromethane	50.0	45.7		ug/L		91	47 - 151
cis-1,2-Dichloroethene	50.0	43.6		ug/L		87	78 - 127
cis-1,3-Dichloropropene	50.0	65.0	*	ug/L		130	73 - 128
Dibromochloromethane	50.0	45.9		ug/L		92	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	42.2		ug/L		84	57 - 126
1,2-Dibromoethane	50.0	52.7		ug/L		105	75 - 127
Dibromomethane	50.0	54.3		ug/L		109	75 - 122
Dichlorodifluoromethane	50.0	46.2		ug/L		92	41 - 165
1,1-Dichloroethane	50.0	48.7		ug/L		97	69 - 132
1,2-Dichloroethane	50.0	60.4	*	ug/L		121	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-305600/14
Matrix: Water
Analysis Batch: 305600

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	42.2		ug/L		84	73 - 134
1,2-Dichloropropane	50.0	64.2	*	ug/L		128	71 - 126
Diethyl ether	50.0	45.0		ug/L		90	40 - 160
Ethylbenzene	50.0	48.2		ug/L		96	78 - 125
2-Hexanone	100	103		ug/L		103	52 - 149
Methylene Chloride	50.0	39.1	*	ug/L		78	79 - 124
4-Methyl-2-pentanone (MIBK)	100	108		ug/L		108	51 - 143
Methyl tert-butyl ether	100	92.7		ug/L		93	76 - 126
Styrene	50.0	46.8		ug/L		94	75 - 129
t-Butanol	50.0	50.3		ug/L		101	49 - 148
1,1,1,2-Tetrachloroethane	50.0	44.4		ug/L		89	68 - 132
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/L		89	71 - 127
Tetrachloroethene	50.0	47.3		ug/L		95	77 - 128
Toluene	50.0	52.1		ug/L		104	77 - 125
trans-1,2-Dichloroethene	50.0	41.2		ug/L		82	78 - 130
trans-1,3-Dichloropropene	50.0	65.0	*	ug/L		130	72 - 127
1,2,3-Trichlorobenzene	50.0	47.7		ug/L		95	63 - 136
1,1,1-Trichloroethane	50.0	54.7		ug/L		109	76 - 126
1,1,2-Trichloroethane	50.0	52.9		ug/L		106	69 - 127
Trichloroethylene	50.0	49.3		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	55.1		ug/L		110	66 - 144
1,2,3-Trichloropropane	50.0	50.8		ug/L		102	74 - 126
Vinyl acetate	100	99.3		ug/L		99	10 - 200
Vinyl chloride	50.0	47.7		ug/L		95	58 - 141
Xylenes, Total	150	144		ug/L		96	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*70 - 130*
Dibromofluoromethane	*84*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 680-305600/15
Matrix: Water
Analysis Batch: 305600

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
Acetone	100	80.2		ug/L		80	39 - 162	8	50
Benzene	50.0	54.4		ug/L		109	74 - 123	2	30
Bromodichloromethane	50.0	54.9		ug/L		110	72 - 129	2	30
Bromoform	50.0	42.9		ug/L		86	60 - 134	1	30
Bromomethane	50.0	56.1		ug/L		112	10 - 171	0	50
2-Butanone	100	85.6		ug/L		86	55 - 142	7	30
Carbon disulfide	50.0	40.3		ug/L		81	63 - 142	3	30
Carbon tetrachloride	50.0	52.8		ug/L		106	70 - 131	3	30
Chlorobenzene	50.0	45.6		ug/L		91	79 - 120	0	30
Chloroethane	50.0	51.2		ug/L		102	47 - 148	3	40
Chloroform	50.0	46.4		ug/L		93	76 - 128	3	30
Chloromethane	50.0	44.7		ug/L		89	47 - 151	2	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-305600/15
Matrix: Water
Analysis Batch: 305600

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
cis-1,2-Dichloroethene			50.0	43.9		ug/L		88	78 - 127	1	30
cis-1,3-Dichloropropene			50.0	62.9		ug/L		126	73 - 128	3	30
Dibromochloromethane			50.0	45.2		ug/L		90	63 - 134	1	50
1,2-Dibromo-3-Chloropropane			50.0	42.4		ug/L		85	57 - 126	0	50
1,2-Dibromoethane			50.0	49.2		ug/L		98	75 - 127	7	30
Dibromomethane			50.0	53.7		ug/L		107	75 - 122	1	30
Dichlorodifluoromethane			50.0	43.0		ug/L		86	41 - 165	7	50
1,1-Dichloroethane			50.0	49.2		ug/L		98	69 - 132	1	30
1,2-Dichloroethane			50.0	60.6	*	ug/L		121	75 - 120	0	30
1,1-Dichloroethene			50.0	39.9		ug/L		80	73 - 134	6	30
1,2-Dichloropropane			50.0	63.1		ug/L		126	71 - 126	2	30
Diethyl ether			50.0	42.5		ug/L		85	40 - 160	6	50
Ethylbenzene			50.0	47.2		ug/L		94	78 - 125	2	30
2-Hexanone			100	99.6		ug/L		100	52 - 149	3	30
Methylene Chloride			50.0	40.9		ug/L		82	79 - 124	5	30
4-Methyl-2-pentanone (MIBK)			100	105		ug/L		105	51 - 143	2	30
Methyl tert-butyl ether			100	91.1		ug/L		91	76 - 126	2	30
Styrene			50.0	47.0		ug/L		94	75 - 129	0	30
t-Butanol			50.0	48.6		ug/L		97	49 - 148	3	50
1,1,1,2-Tetrachloroethane			50.0	43.9		ug/L		88	68 - 132	1	30
1,1,2,2-Tetrachloroethane			50.0	44.4		ug/L		89	71 - 127	0	30
Tetrachloroethene			50.0	47.8		ug/L		96	77 - 128	1	30
Toluene			50.0	50.8		ug/L		102	77 - 125	3	30
trans-1,2-Dichloroethene			50.0	41.6		ug/L		83	78 - 130	1	30
trans-1,3-Dichloropropene			50.0	63.4		ug/L		127	72 - 127	3	50
1,2,3-Trichlorobenzene			50.0	47.5		ug/L		95	63 - 136	0	30
1,1,1-Trichloroethane			50.0	55.7		ug/L		111	76 - 126	2	30
1,1,2-Trichloroethane			50.0	51.7		ug/L		103	69 - 127	2	30
Trichloroethylene			50.0	48.7		ug/L		97	80 - 120	1	30
Trichlorofluoromethane			50.0	54.3		ug/L		109	66 - 144	2	30
1,2,3-Trichloropropane			50.0	52.4		ug/L		105	74 - 126	3	30
Vinyl acetate			100	94.7		ug/L		95	10 - 200	5	30
Vinyl chloride			50.0	44.4		ug/L		89	58 - 141	7	30
Xylenes, Total			150	142		ug/L		95	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*70 - 130*
Dibromofluoromethane	*81*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 680-305662/8
Matrix: Water
Analysis Batch: 305662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 14:22	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/02/13 14:22	1
Diethyl ether	10	U	10	1.0	ug/L			12/02/13 14:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-305662/8
Matrix: Water
Analysis Batch: 305662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U	5.0	2.6	ug/L			12/02/13 14:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 130*		*12/02/13 14:22*	*1*
Dibromofluoromethane	*107*		*70 - 130*		*12/02/13 14:22*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/02/13 14:22*	*1*

Lab Sample ID: LCS 680-305662/4
Matrix: Water
Analysis Batch: 305662

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	50.6		ug/L		101	76 - 128		
1,2-Dichloroethane			50.0	46.7		ug/L		93	75 - 120		
Diethyl ether			50.0	38.3		ug/L		77	40 - 160		
t-Butanol			50.0	31.2		ug/L		62	49 - 148		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-305662/5
Matrix: Water
Analysis Batch: 305662

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
Chloroform			50.0	51.5		ug/L		103	76 - 128	2	30
1,2-Dichloroethane			50.0	39.8		ug/L		80	75 - 120	16	30
Diethyl ether			50.0	36.5		ug/L		73	40 - 160	5	50
t-Butanol			50.0	24.3		ug/L		49	49 - 148	25	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*109*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 680-305663/8
Matrix: Water
Analysis Batch: 305663

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			12/02/13 14:37	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/02/13 14:37	1
Diethyl ether	10	U	10	1.0	ug/L			12/02/13 14:37	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/02/13 14:37	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-305663/8
Matrix: Water
Analysis Batch: 305663

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130		12/02/13 14:37	1
Dibromofluoromethane	110		70 - 130		12/02/13 14:37	1
Toluene-d8 (Surr)	96		70 - 130		12/02/13 14:37	1

Lab Sample ID: LCS 680-305663/4
Matrix: Water
Analysis Batch: 305663

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	51.8		ug/L		104	76 - 128		
1,2-Dichloroethane			50.0	48.0		ug/L		96	75 - 120		
Diethyl ether			50.0	45.5		ug/L		91	40 - 160		
t-Butanol			50.0	40.1		ug/L		80	49 - 148		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	102		70 - 130
Dibromofluoromethane	102		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCSD 680-305663/5
Matrix: Water
Analysis Batch: 305663

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
Chloroform			50.0	52.2		ug/L		104	76 - 128	1	30
1,2-Dichloroethane			50.0	50.0		ug/L		100	75 - 120	4	30
Diethyl ether			50.0	48.6		ug/L		97	40 - 160	7	50
t-Butanol			50.0	44.0		ug/L		88	49 - 148	9	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	103		70 - 130
Dibromofluoromethane	102		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: MB 680-305772/8
Matrix: Water
Analysis Batch: 305772

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/03/13 14:14	1
Acetonitrile	40	U	40	10	ug/L			12/03/13 14:14	1
Acrolein	20	U	20	7.4	ug/L			12/03/13 14:14	1
Acrylonitrile	20	U	20	7.2	ug/L			12/03/13 14:14	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/03/13 14:14	1
Benzene	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/03/13 14:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-305772/8
Matrix: Water
Analysis Batch: 305772

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	5.0	U	5.0	2.0	ug/L			12/03/13 14:14	1
2-Butanone	10	U	10	1.0	ug/L			12/03/13 14:14	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/03/13 14:14	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/03/13 14:14	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/03/13 14:14	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/03/13 14:14	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/03/13 14:14	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/03/13 14:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/03/13 14:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			12/03/13 14:14	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/03/13 14:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/03/13 14:14	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/03/13 14:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/03/13 14:14	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/03/13 14:14	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/03/13 14:14	1
Diethyl ether	10	U	10	1.0	ug/L			12/03/13 14:14	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/03/13 14:14	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1
2-Hexanone	10	U	10	1.0	ug/L			12/03/13 14:14	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/03/13 14:14	1
Isobutyl alcohol	40	U	40	11	ug/L			12/03/13 14:14	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/03/13 14:14	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/03/13 14:14	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/03/13 14:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/03/13 14:14	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/03/13 14:14	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/03/13 14:14	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/03/13 14:14	1
Propionitrile	20	U	20	4.6	ug/L			12/03/13 14:14	1
Styrene	1.0	U	1.0	0.11	ug/L			12/03/13 14:14	1
t-Butanol	5.0	U	5.0	2.6	ug/L			12/03/13 14:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/03/13 14:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/03/13 14:14	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/03/13 14:14	1
Toluene	1.0	U	1.0	0.33	ug/L			12/03/13 14:14	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/03/13 14:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/03/13 14:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			12/03/13 14:14	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/03/13 14:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/03/13 14:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/03/13 14:14	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/03/13 14:14	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/03/13 14:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-305772/8
Matrix: Water
Analysis Batch: 305772

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/03/13 14:14	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/03/13 14:14	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/03/13 14:14	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/03/13 14:14	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*12/03/13 14:14*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*12/03/13 14:14*	*1*
Dibromofluoromethane	*116*		*70 - 130*		*12/03/13 14:14*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/03/13 14:14*	*1*

Lab Sample ID: LCS 680-305772/4
Matrix: Water
Analysis Batch: 305772

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	104		ug/L		104	39 - 162
Benzene	50.0	51.8		ug/L		104	74 - 123
Bromodichloromethane	50.0	50.6		ug/L		101	72 - 129
Bromoform	50.0	39.6		ug/L		79	60 - 134
Bromomethane	50.0	45.8		ug/L		92	10 - 171
2-Butanone	100	99.0		ug/L		99	55 - 142
Carbon disulfide	50.0	50.0		ug/L		100	63 - 142
Carbon tetrachloride	50.0	48.6		ug/L		97	70 - 131
Chlorobenzene	50.0	49.5		ug/L		99	79 - 120
Chloroethane	50.0	49.3		ug/L		99	47 - 148
Chloroform	50.0	51.9		ug/L		104	76 - 128
Chloromethane	50.0	29.5		ug/L		59	47 - 151
cis-1,2-Dichloroethene	50.0	51.7		ug/L		103	78 - 127
cis-1,3-Dichloropropene	50.0	53.1		ug/L		106	73 - 128
Dibromochloromethane	50.0	46.9		ug/L		94	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/L		96	57 - 126
1,2-Dibromoethane	50.0	53.5		ug/L		107	75 - 127
Dibromomethane	50.0	51.4		ug/L		103	75 - 122
Dichlorodifluoromethane	50.0	47.6		ug/L		95	41 - 165
1,1-Dichloroethane	50.0	52.4		ug/L		105	69 - 132
1,2-Dichloroethane	50.0	51.1		ug/L		102	75 - 120
1,1-Dichloroethene	50.0	50.0		ug/L		100	73 - 134
1,2-Dichloropropane	50.0	52.1		ug/L		104	71 - 126
Diethyl ether	50.0	51.2		ug/L		102	40 - 160
Ethylbenzene	50.0	50.5		ug/L		101	78 - 125
2-Hexanone	100	106		ug/L		106	52 - 149
Methylene Chloride	50.0	52.5		ug/L		105	79 - 124
4-Methyl-2-pentanone (MIBK)	100	107		ug/L		107	51 - 143
Methyl tert-butyl ether	100	105		ug/L		105	76 - 126

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-305772/4
Matrix: Water
Analysis Batch: 305772

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	50.3		ug/L		101	75 - 129
t-Butanol	50.0	46.2		ug/L		92	49 - 148
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	68 - 132
1,1,2,2-Tetrachloroethane	50.0	50.2		ug/L		100	71 - 127
Tetrachloroethene	50.0	48.8		ug/L		98	77 - 128
Toluene	50.0	52.2		ug/L		104	77 - 125
trans-1,2-Dichloroethene	50.0	51.2		ug/L		102	78 - 130
trans-1,3-Dichloropropene	50.0	53.8		ug/L		108	72 - 127
1,2,3-Trichlorobenzene	50.0	47.5		ug/L		95	63 - 136
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	76 - 126
1,1,2-Trichloroethane	50.0	52.4		ug/L		105	69 - 127
Trichloroethylene	50.0	50.8		ug/L		102	80 - 120
Trichlorofluoromethane	50.0	45.8		ug/L		92	66 - 144
1,2,3-Trichloropropane	50.0	50.6		ug/L		101	74 - 126
Vinyl acetate	100	119		ug/L		119	10 - 200
Vinyl chloride	50.0	47.3		ug/L		95	58 - 141
Xylenes, Total	150	148		ug/L		99	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 680-305772/5
Matrix: Water
Analysis Batch: 305772

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
Acetone	100	103		ug/L		103	39 - 162	1	50
Benzene	50.0	51.1		ug/L		102	74 - 123	1	30
Bromodichloromethane	50.0	50.6		ug/L		101	72 - 129	0	30
Bromoform	50.0	39.6		ug/L		79	60 - 134	0	30
Bromomethane	50.0	49.5		ug/L		99	10 - 171	8	50
2-Butanone	100	99.1		ug/L		99	55 - 142	0	30
Carbon disulfide	50.0	52.1		ug/L		104	63 - 142	4	30
Carbon tetrachloride	50.0	48.7		ug/L		97	70 - 131	0	30
Chlorobenzene	50.0	50.3		ug/L		101	79 - 120	2	30
Chloroethane	50.0	52.5		ug/L		105	47 - 148	6	40
Chloroform	50.0	53.4		ug/L		107	76 - 128	3	30
Chloromethane	50.0	36.8		ug/L		74	47 - 151	22	30
cis-1,2-Dichloroethene	50.0	53.7		ug/L		107	78 - 127	4	30
cis-1,3-Dichloropropene	50.0	52.3		ug/L		105	73 - 128	2	30
Dibromochloromethane	50.0	47.2		ug/L		94	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/L		96	57 - 126	0	50
1,2-Dibromoethane	50.0	51.4		ug/L		103	75 - 127	4	30
Dibromomethane	50.0	49.9		ug/L		100	75 - 122	3	30
Dichlorodifluoromethane	50.0	49.9		ug/L		100	41 - 165	5	50
1,1-Dichloroethane	50.0	53.9		ug/L		108	69 - 132	3	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-305772/5
Matrix: Water
Analysis Batch: 305772

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
1,2-Dichloroethane			50.0	50.5		ug/L		101	75 - 120	1	30
1,1-Dichloroethene			50.0	50.3		ug/L		101	73 - 134	1	30
1,2-Dichloropropane			50.0	50.9		ug/L		102	71 - 126	2	30
Diethyl ether			50.0	49.0		ug/L		98	40 - 160	4	50
Ethylbenzene			50.0	51.3		ug/L		103	78 - 125	2	30
2-Hexanone			100	107		ug/L		107	52 - 149	1	30
Methylene Chloride			50.0	53.6		ug/L		107	79 - 124	2	30
4-Methyl-2-pentanone (MIBK)			100	107		ug/L		107	51 - 143	1	30
Methyl tert-butyl ether			100	105		ug/L		105	76 - 126	0	30
Styrene			50.0	51.9		ug/L		104	75 - 129	3	30
t-Butanol			50.0	44.3		ug/L		89	49 - 148	4	50
1,1,1,2-Tetrachloroethane			50.0	48.5		ug/L		97	68 - 132	0	30
1,1,2,2-Tetrachloroethane			50.0	50.3		ug/L		101	71 - 127	0	30
Tetrachloroethene			50.0	48.7		ug/L		97	77 - 128	0	30
Toluene			50.0	52.6		ug/L		105	77 - 125	1	30
trans-1,2-Dichloroethene			50.0	53.4		ug/L		107	78 - 130	4	30
trans-1,3-Dichloropropene			50.0	52.5		ug/L		105	72 - 127	3	50
1,2,3-Trichlorobenzene			50.0	48.7		ug/L		97	63 - 136	3	30
1,1,1-Trichloroethane			50.0	51.3		ug/L		103	76 - 126	2	30
1,1,2-Trichloroethane			50.0	50.5		ug/L		101	69 - 127	4	30
Trichloroethylene			50.0	50.3		ug/L		101	80 - 120	1	30
Trichlorofluoromethane			50.0	48.2		ug/L		96	66 - 144	5	30
1,2,3-Trichloropropane			50.0	50.8		ug/L		102	74 - 126	0	30
Vinyl acetate			100	126		ug/L		126	10 - 200	5	30
Vinyl chloride			50.0	48.8		ug/L		98	58 - 141	3	30
Xylenes, Total			150	152		ug/L		101	80 - 124	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 305772

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	13000	U	50000	56200		ug/L		112	39 - 162
Benzene	500	U	25000	27100		ug/L		108	74 - 123
Bromodichloromethane	500	U	25000	26000		ug/L		104	72 - 129
Bromoform	500	U	25000	19500		ug/L		78	60 - 134
Bromomethane	2500	U	25000	20900		ug/L		84	10 - 171
2-Butanone	5000	U	50000	50700		ug/L		101	55 - 142
Carbon disulfide	1000	U	25000	24800		ug/L		99	63 - 142
Carbon tetrachloride	500	U	25000	24700		ug/L		99	70 - 131
Chlorobenzene	500	U	25000	26900		ug/L		107	79 - 120
Chloroethane	2500	U	25000	26100		ug/L		104	47 - 148
Chloroform	500	U	25000	26200		ug/L		105	76 - 128

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 305772

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	500	U	25000	13900		ug/L		56	47 - 151
cis-1,2-Dichloroethene	500	U	25000	26100		ug/L		104	78 - 127
cis-1,3-Dichloropropene	500	U	25000	26800		ug/L		107	73 - 128
Dibromochloromethane	500	U	25000	24400		ug/L		98	63 - 134
1,2-Dibromo-3-Chloropropane	500	U	25000	23000		ug/L		92	57 - 126
1,2-Dibromoethane	500	U	25000	28000		ug/L		112	75 - 127
Dibromomethane	500	U	25000	27000		ug/L		108	75 - 122
Dichlorodifluoromethane	500	U	25000	24200		ug/L		97	41 - 165
1,1-Dichloroethane	500	U	25000	26200		ug/L		105	69 - 132
1,2-Dichloroethane	500	U	25000	26500		ug/L		106	75 - 120
1,1-Dichloroethene	500	U	25000	25600		ug/L		102	73 - 134
1,2-Dichloropropane	500	U	25000	26600		ug/L		106	71 - 126
Diethyl ether	5000	U	25000	25500		ug/L		102	40 - 160
Ethylbenzene	500	U	25000	26500		ug/L		106	78 - 125
2-Hexanone	5000	U	50000	56400		ug/L		113	52 - 149
Methylene Chloride	2500	U	25000	26700		ug/L		107	79 - 124
4-Methyl-2-pentanone (MIBK)	5000	U	50000	55600		ug/L		111	51 - 143
Methyl tert-butyl ether	5000	U	50000	50300		ug/L		101	76 - 126
Styrene	500	U	25000	27600		ug/L		111	75 - 129
t-Butanol	21000		25000	43300		ug/L		89	49 - 148
1,1,1,2-Tetrachloroethane	500	U	25000	25600		ug/L		102	68 - 132
1,1,2,2-Tetrachloroethane	500	U	25000	26500		ug/L		106	71 - 127
Tetrachloroethene	500	U	25000	26100		ug/L		105	77 - 128
Toluene	500	U	25000	27700		ug/L		111	77 - 125
trans-1,2-Dichloroethene	500	U	25000	25700		ug/L		103	78 - 130
trans-1,3-Dichloropropene	500	U	25000	27400		ug/L		109	72 - 127
1,2,3-Trichlorobenzene	500	U	25000	24800		ug/L		99	63 - 136
1,1,1-Trichloroethane	500	U	25000	26200		ug/L		105	76 - 126
1,1,2-Trichloroethane	500	U	25000	27300		ug/L		109	69 - 127
Trichloroethylene	500	U	25000	26800		ug/L		107	80 - 120
Trichlorofluoromethane	500	U	25000	24800		ug/L		99	66 - 144
1,2,3-Trichloropropane	500	U	25000	26200		ug/L		105	74 - 126
Vinyl acetate	1000	U	50000	58600		ug/L		117	10 - 200
Vinyl chloride	500	U	25000	24800		ug/L		99	58 - 141
Xylenes, Total	1000	U	75000	79800		ug/L		106	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 305772

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	13000	U	50000	57300		ug/L		115	39 - 162	2	50
Benzene	500	U	25000	27400		ug/L		110	74 - 123	1	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 305772

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromodichloromethane	500	U	25000	26600		ug/L		106	72 - 129	3	30
Bromoform	500	U	25000	20000		ug/L		80	60 - 134	2	30
Bromomethane	2500	U	25000	22500		ug/L		90	10 - 171	7	50
2-Butanone	5000	U	50000	53300		ug/L		107	55 - 142	5	30
Carbon disulfide	1000	U	25000	24600		ug/L		98	63 - 142	1	30
Carbon tetrachloride	500	U	25000	24400		ug/L		98	70 - 131	1	30
Chlorobenzene	500	U	25000	26800		ug/L		107	79 - 120	0	30
Chloroethane	2500	U	25000	25300		ug/L		101	47 - 148	3	40
Chloroform	500	U	25000	25800		ug/L		103	76 - 128	1	30
Chloromethane	500	U	25000	18600		ug/L		75	47 - 151	29	30
cis-1,2-Dichloroethene	500	U	25000	26000		ug/L		104	78 - 127	1	30
cis-1,3-Dichloropropene	500	U	25000	27500		ug/L		110	73 - 128	2	30
Dibromochloromethane	500	U	25000	24600		ug/L		98	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	500	U	25000	24900		ug/L		99	57 - 126	8	50
1,2-Dibromoethane	500	U	25000	29300		ug/L		117	75 - 127	4	30
Dibromomethane	500	U	25000	28300		ug/L		113	75 - 122	5	30
Dichlorodifluoromethane	500	U	25000	24300		ug/L		97	41 - 165	0	50
1,1-Dichloroethane	500	U	25000	25600		ug/L		102	69 - 132	3	30
1,2-Dichloroethane	500	U	25000	28300		ug/L		113	75 - 120	7	30
1,1-Dichloroethene	500	U	25000	24600		ug/L		98	73 - 134	4	30
1,2-Dichloropropane	500	U	25000	28000		ug/L		112	71 - 126	5	30
Diethyl ether	5000	U	25000	25000		ug/L		100	40 - 160	2	50
Ethylbenzene	500	U	25000	26500		ug/L		106	78 - 125	0	30
2-Hexanone	5000	U	50000	57100		ug/L		114	52 - 149	1	30
Methylene Chloride	2500	U	25000	26100		ug/L		104	79 - 124	2	30
4-Methyl-2-pentanone (MIBK)	5000	U	50000	59000		ug/L		118	51 - 143	6	30
Methyl tert-butyl ether	5000	U	50000	52100		ug/L		104	76 - 126	3	30
Styrene	500	U	25000	27400		ug/L		110	75 - 129	1	30
t-Butanol	21000		25000	41500		ug/L		82	49 - 148	4	50
1,1,1,2-Tetrachloroethane	500	U	25000	26100		ug/L		104	68 - 132	2	30
1,1,2,2-Tetrachloroethane	500	U	25000	27200		ug/L		109	71 - 127	2	30
Tetrachloroethene	500	U	25000	26100		ug/L		104	77 - 128	0	30
Toluene	500	U	25000	27700		ug/L		111	77 - 125	0	30
trans-1,2-Dichloroethene	500	U	25000	25200		ug/L		101	78 - 130	2	30
trans-1,3-Dichloropropene	500	U	25000	28900		ug/L		116	72 - 127	6	50
1,2,3-Trichlorobenzene	500	U	25000	26000		ug/L		104	63 - 136	5	30
1,1,1-Trichloroethane	500	U	25000	26100		ug/L		105	76 - 126	0	30
1,1,2-Trichloroethane	500	U	25000	28300		ug/L		113	69 - 127	4	30
Trichloroethylene	500	U	25000	27300		ug/L		109	80 - 120	2	30
Trichlorofluoromethane	500	U	25000	24400		ug/L		98	66 - 144	2	30
1,2,3-Trichloropropane	500	U	25000	27400		ug/L		110	74 - 126	4	30
Vinyl acetate	1000	U	50000	60000		ug/L		120	10 - 200	2	30
Vinyl chloride	500	U	25000	24200		ug/L		97	58 - 141	2	30
Xylenes, Total	1000	U	75000	79100		ug/L		105	80 - 124	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 305772

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*111*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-305704/6-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Acetophenone	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		12/02/13 16:15	12/05/13 15:02	1
Aniline	2.0	U	2.0	0.97	ug/L		12/02/13 16:15	12/05/13 15:02	1
Anthracene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		12/02/13 16:15	12/05/13 15:02	1
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.64	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Chrysene	0.20	U	0.20	0.045	ug/L		12/02/13 16:15	12/05/13 15:02	1
Diallate	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Diethyl phthalate	0.110	J	1.0	0.11	ug/L		12/02/13 16:15	12/05/13 15:02	1
Dimethoate	2.0	U	2.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		12/02/13 16:15	12/05/13 15:02	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-305704/6-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		12/02/13 16:15	12/05/13 15:02	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		12/02/13 16:15	12/05/13 15:02	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
Di-n-octyl phthalate	0.441	J	1.0	0.17	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		12/02/13 16:15	12/05/13 15:02	1
Disulfoton	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Famphur	1.0	U	1.0	0.16	ug/L		12/02/13 16:15	12/05/13 15:02	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Fluorene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
Hexachlorophene	500	U	500	25	ug/L		12/02/13 16:15	12/05/13 15:02	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Isophorone	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Isosafrole	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Methapyrilene	200	U	200	1.3	ug/L		12/02/13 16:15	12/05/13 15:02	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		12/02/13 16:15	12/05/13 15:02	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		12/02/13 16:15	12/05/13 15:02	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		12/02/13 16:15	12/05/13 15:02	1
Naphthalene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		12/02/13 16:15	12/05/13 15:02	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-305704/6-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		12/02/13 16:15	12/05/13 15:02	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		12/02/13 16:15	12/05/13 15:02	1
Phenacetin	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Phenol	1.0	U	1.0	0.13	ug/L		12/02/13 16:15	12/05/13 15:02	1
Phenyl ether	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Phorate	1.0	U	1.0	0.20	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-Picoline	2.0	U	2.0	0.15	ug/L		12/02/13 16:15	12/05/13 15:02	1
p-Phenylene diamine	200	U	200	16	ug/L		12/02/13 16:15	12/05/13 15:02	1
Pronamide	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
Pyrene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Pyridine	5.0	U	5.0	0.73	ug/L		12/02/13 16:15	12/05/13 15:02	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		12/02/13 16:15	12/05/13 15:02	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
Thionazin	1.0	U	1.0	0.20	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		12/02/13 16:15	12/05/13 15:02	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		12/02/13 16:15	12/05/13 15:02	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		12/02/13 16:15	12/05/13 15:02	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*12/02/13 16:15*	*12/05/13 15:02*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*34 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
2-Fluorophenol	*88*		*25 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
2-Fluorophenol (Surr)	*88*		*25 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
Nitrobenzene-d5	*96*		*32 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
Nitrobenzene-d5 (Surr)	*96*		*32 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
Phenol-d5	*86*		*27 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
Phenol-d5 (Surr)	*86*		*27 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
Terphenyl-d14	*115*		*36 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
Terphenyl-d14 (Surr)	*115*		*36 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-305704/6-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305704

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	*89*		*30 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*
2,4,6-Tribromophenol (Surr)	*89*		*30 - 130*	*12/02/13 16:15*	*12/05/13 15:02*	*1*

Lab Sample ID: LCS 680-305704/10-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Acetylaminofluorene	10.0	9.85		ug/L		98	10 - 130
alpha,alpha-Dimethyl phenethylamine	10.0	9.78	J	ug/L		98	10 - 130
4-Aminobiphenyl	10.0	5.0	U *	ug/L		0	10 - 130
Aramite, Total	10.0	10.2		ug/L		102	10 - 130
Diallate	10.0	8.24		ug/L		82	10 - 130
2,6-Dichlorophenol	10.0	8.51		ug/L		85	10 - 130
Dimethoate	10.0	7.33		ug/L		73	10 - 130
7,12-Dimethylbenz(a)anthracene	10.0	9.35		ug/L		94	10 - 130
3,3'-Dimethylbenzidine	25.0	17.0	J	ug/L		68	10 - 130
Disulfoton	10.0	7.44		ug/L		74	10 - 130
Ethyl methanesulfonate	10.0	7.18		ug/L		72	10 - 130
Ethyl Parathion	10.0	9.24		ug/L		92	10 - 130
Famphur	10.0	2.95		ug/L		30	10 - 130
Hexachlorophene	50.0	500	U *	ug/L		0	10 - 130
Hexachloropropene	10.0	4.34		ug/L		43	10 - 130
Isosafrole	10.0	7.70		ug/L		77	10 - 130
m-Dinitrobenzene	10.0	9.46		ug/L		95	10 - 130
Methapyrilene	50.0	33.0	J E	ug/L		66	10 - 130
3-Methylcholanthrene	10.0	7.29		ug/L		73	10 - 130
Methyl methanesulfonate	10.0	5.04		ug/L		50	10 - 130
Methyl parathion	10.0	7.97		ug/L		80	10 - 130
1-Naphthalenamine	10.0	4.43	J	ug/L		44	10 - 130
2-Naphthalenamine	10.0	3.43	J	ug/L		34	10 - 130
1,4-Naphthoquinone	10.0	4.38		ug/L		44	10 - 130
5-Nitro-o-toluidine	10.0	7.81		ug/L		78	10 - 130
4-Nitroquinoline-1-oxide	10.0	8.88		ug/L		89	10 - 130
N-Nitrosodiethylamine	10.0	8.53		ug/L		85	10 - 130
N-Nitrosodi-n-butylamine	10.0	8.17		ug/L		82	10 - 130
N-Nitrosomethylethylamine	10.0	8.50		ug/L		85	10 - 130
N-Nitrosomorpholine	10.0	8.89		ug/L		89	10 - 130
N-Nitrosopiperidine	10.0	8.11		ug/L		81	10 - 130
N-Nitrosopyrrolidine	10.0	8.14		ug/L		81	10 - 130
o,o',o''-Triethylphosphorothioate	10.0	7.35		ug/L		74	10 - 130
o-Toluidine	10.0	6.21		ug/L		62	10 - 130
p-Dimethylamino azobenzene	10.0	8.94		ug/L		89	10 - 130
Pentachlorobenzene	10.0	7.87		ug/L		79	10 - 130
Pentachloronitrobenzene	10.0	9.66		ug/L		97	10 - 130
Phenacetin	10.0	9.39		ug/L		94	10 - 130
Phorate	10.0	8.32		ug/L		83	10 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-305704/10-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Picoline	10.0	7.31		ug/L		73	10 - 130
p-Phenylene diamine	50.0	200	U	ug/L		27	10 - 130
Pronamide	10.0	9.08		ug/L		91	10 - 130
Safrole, Total	10.0	7.75		ug/L		77	10 - 130
2-sec-Butyl-4,6-dinitrophenol	10.0	10.7		ug/L		107	10 - 130
Sulfotepp	10.0	7.97		ug/L		80	10 - 130
1,2,4,5-Tetrachlorobenzene	10.0	7.89		ug/L		79	10 - 130
2,3,4,6-Tetrachlorophenol	10.0	11.6		ug/L		116	10 - 130
Thionazin	10.0	9.05		ug/L		90	10 - 130
1,3,5-Trinitrobenzene	10.0	8.34		ug/L		83	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*34 - 130*
2-Fluorophenol	*96*		*25 - 130*
Nitrobenzene-d5	*87*		*32 - 130*
Phenol-d5	*91*		*27 - 130*
Terphenyl-d14	*111*		*36 - 130*
2,4,6-Tribromophenol	*111*		*30 - 130*

Lab Sample ID: LCS 680-305704/7-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	11.4		ug/L		114	42 - 130
Acenaphthylene	10.0	11.8		ug/L		118	45 - 130
Acetophenone	10.0	10.7		ug/L		107	45 - 130
Aniline	10.0	6.85		ug/L		68	10 - 130
Anthracene	10.0	11.8		ug/L		118	58 - 130
Benzo[a]anthracene	10.0	12.3		ug/L		123	42 - 143
Benzo[a]pyrene	10.0	11.4		ug/L		114	45 - 151
Benzo[b]fluoranthene	10.0	12.3		ug/L		123	41 - 140
Benzo[g,h,i]perylene	10.0	11.7		ug/L		117	27 - 134
Benzo[k]fluoranthene	10.0	10.8		ug/L		108	45 - 140
Benzyl alcohol	10.0	11.5		ug/L		115	34 - 130
1,1'-Biphenyl	10.0	10.9		ug/L		109	50 - 130
Bis(2-chloroethoxy)methane	10.0	12.0		ug/L		120	47 - 130
Bis(2-chloroethyl)ether	10.0	11.4		ug/L		114	36 - 130
Bis(2-ethylhexyl) phthalate	10.0	12.1		ug/L		121	10 - 158
4-Bromophenyl phenyl ether	10.0	12.8		ug/L		128	44 - 130
Butyl benzyl phthalate	10.0	13.8	*	ug/L		138	60 - 130
4-Chloroaniline	10.0	6.52		ug/L		65	17 - 130
4-Chloro-3-methylphenol	10.0	12.4		ug/L		124	54 - 130
2-Chloronaphthalene	10.0	11.2		ug/L		112	48 - 130
2-Chlorophenol	10.0	11.4		ug/L		114	45 - 130
4-Chlorophenyl phenyl ether	10.0	11.5		ug/L		115	52 - 130
Chrysene	10.0	12.2		ug/L		122	40 - 142
Dibenz(a,h)anthracene	10.0	11.9		ug/L		119	38 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-305704/7-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	10.0	12.1		ug/L		121	56 - 130
1,2-Dichlorobenzene	10.0	8.60		ug/L		86	36 - 130
1,3-Dichlorobenzene	10.0	8.51		ug/L		85	31 - 130
1,4-Dichlorobenzene	10.0	8.36		ug/L		84	34 - 130
3,3'-Dichlorobenzidine	10.0	20	U *	ug/L		1	10 - 158
2,4-Dichlorophenol	10.0	12.6		ug/L		126	58 - 130
Diethyl phthalate	10.0	12.7		ug/L		127	60 - 130
2,4-Dimethylphenol	10.0	12.1		ug/L		121	41 - 130
Dimethyl phthalate	10.0	12.5		ug/L		125	58 - 130
Di-n-butyl phthalate	10.0	13.4	*	ug/L		134	59 - 130
4,6-Dinitro-2-methylphenol	10.0	14.7		ug/L		147	10 - 182
2,4-Dinitrophenol	10.0	15.0		ug/L		150	10 - 200
2,4-Dinitrotoluene	10.0	11.9		ug/L		119	57 - 130
2,6-Dinitrotoluene	10.0	12.0		ug/L		120	53 - 130
Di-n-octyl phthalate	10.0	13.3	*	ug/L		133	19 - 130
1,4-Dioxane	10.0	6.52		ug/L		65	10 - 130
Fluoranthene	10.0	12.4		ug/L		124	46 - 136
Fluorene	10.0	11.6		ug/L		116	48 - 130
Hexachlorobenzene	10.0	12.5		ug/L		125	49 - 130
Hexachlorobutadiene	10.0	9.09		ug/L		91	36 - 130
Hexachlorocyclopentadiene	10.0	4.33		ug/L		43	16 - 130
Hexachloroethane	10.0	7.82		ug/L		78	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	11.6		ug/L		116	12 - 130
Isophorone	10.0	10.7		ug/L		107	45 - 130
2-Methylnaphthalene	10.0	10.2		ug/L		102	51 - 130
2-Methylphenol	10.0	11.4		ug/L		114	49 - 130
3 & 4 Methylphenol	10.0	12.0		ug/L		120	55 - 130
Naphthalene	10.0	9.73		ug/L		97	35 - 130
2-Nitroaniline	10.0	12.0		ug/L		120	48 - 130
3-Nitroaniline	10.0	7.99		ug/L		80	18 - 147
4-Nitroaniline	10.0	12.9		ug/L		129	31 - 147
Nitrobenzene	10.0	11.2		ug/L		112	45 - 130
2-Nitrophenol	10.0	11.8		ug/L		118	49 - 130
4-Nitrophenol	10.0	12.8		ug/L		128	36 - 132
N-Nitrosodimethylamine	10.0	11.5		ug/L		115	29 - 130
N-Nitrosodi-n-propylamine	10.0	11.7		ug/L		117	42 - 130
N-Nitrosodiphenylamine	10.0	11.8		ug/L		118	38 - 130
2,2'-oxybis[1-chloropropane]	10.0	13.2	*	ug/L		132	39 - 130
Pentachlorophenol	10.0	14.9		ug/L		149	12 - 156
Phenanthrene	10.0	12.3		ug/L		123	45 - 134
Phenol	10.0	10.8		ug/L		108	44 - 130
Pyrene	10.0	13.0		ug/L		130	47 - 143
Pyridine	10.0	7.34		ug/L		73	10 - 130
1,2,4-Trichlorobenzene	10.0	8.94		ug/L		89	39 - 130
2,4,5-Trichlorophenol	10.0	13.2	*	ug/L		132	61 - 130
2,4,6-Trichlorophenol	10.0	13.0		ug/L		130	61 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-305704/7-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305704

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*34 - 130*
2-Fluorophenol	*88*		*25 - 130*
2-Fluorophenol (Surr)	*88*		*25 - 130*
Nitrobenzene-d5	*86*		*32 - 130*
Nitrobenzene-d5 (Surr)	*86*		*32 - 130*
Phenol-d5	*81*		*27 - 130*
Phenol-d5 (Surr)	*81*		*27 - 130*
Terphenyl-d14	*104*		*36 - 130*
Terphenyl-d14 (Surr)	*104*		*36 - 130*
2,4,6-Tribromophenol	*107*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*107*		*30 - 130*

Lab Sample ID: LCSD 680-305704/11-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305704

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Acetylaminofluorene			10.0	9.64		ug/L		96	10 - 130	2	50
alpha,alpha-Dimethyl phenethylamine			10.0	7.91	J	ug/L		79	10 - 130	21	50
4-Aminobiphenyl			10.0	0.570	J *	ug/L		6	10 - 130	200	50
Aramite, Total			10.0	9.81		ug/L		98	10 - 130	4	50
Diallate			10.0	9.07		ug/L		91	10 - 130	10	50
2,6-Dichlorophenol			10.0	8.39		ug/L		84	10 - 130	1	50
Dimethoate			10.0	8.23		ug/L		82	10 - 130	12	50
7,12-Dimethylbenz(a)anthracene			10.0	9.65		ug/L		96	10 - 130	3	50
3,3'-Dimethylbenzidine			25.0	17.7	J	ug/L		71	10 - 130	4	50
Disulfoton			10.0	7.89		ug/L		79	10 - 130	6	50
Ethyl methanesulfonate			10.0	7.04		ug/L		70	10 - 130	2	50
Ethyl Parathion			10.0	9.99		ug/L		100	10 - 130	8	50
Famphur			10.0	2.96		ug/L		30	10 - 130	0	50
Hexachlorophene			50.0	500	U *	ug/L		0	10 - 130	NC	50
Hexachloropropene			10.0	4.35		ug/L		43	10 - 130	0	50
Isosafrole			10.0	7.66		ug/L		77	10 - 130	1	50
m-Dinitrobenzene			10.0	9.62		ug/L		96	10 - 130	2	50
Methapyrilene			50.0	35.7	J E	ug/L		71	10 - 130	8	50
3-Methylcholanthrene			10.0	7.88		ug/L		79	10 - 130	8	50
Methyl methanesulfonate			10.0	5.14		ug/L		51	10 - 130	2	50
Methyl parathion			10.0	8.22		ug/L		82	10 - 130	3	50
1-Naphthalenamine			10.0	4.06	J	ug/L		41	10 - 130	9	50
2-Naphthalenamine			10.0	2.93	J	ug/L		29	10 - 130	16	50
1,4-Naphthoquinone			10.0	4.60		ug/L		46	10 - 130	5	50
5-Nitro-o-toluidine			10.0	8.01		ug/L		80	10 - 130	3	50
4-Nitroquinoline-1-oxide			10.0	9.24		ug/L		92	10 - 130	4	50
N-Nitrosodiethylamine			10.0	8.77		ug/L		88	10 - 130	3	50
N-Nitrosodi-n-butylamine			10.0	8.01		ug/L		80	10 - 130	2	50
N-Nitrosomethylethylamine			10.0	8.53		ug/L		85	10 - 130	0	50
N-Nitrosomorpholine			10.0	8.55		ug/L		86	10 - 130	4	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 680-305704/11-A
Matrix: Water
Analysis Batch: 306157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305704

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosopiperidine			10.0	8.44		ug/L		84	10 - 130	4	50
N-Nitrosopyrrolidine			10.0	8.20		ug/L		82	10 - 130	1	50
o,o',o''-Triethylphosphorothioate			10.0	7.77		ug/L		78	10 - 130	6	50
o-Toluidine			10.0	6.36		ug/L		64	10 - 130	2	50
p-Dimethylamino azobenzene			10.0	8.93		ug/L		89	10 - 130	0	50
Pentachlorobenzene			10.0	7.92		ug/L		79	10 - 130	1	50
Pentachloronitrobenzene			10.0	9.69		ug/L		97	10 - 130	0	50
Phenacetin			10.0	9.48		ug/L		95	10 - 130	1	50
Phorate			10.0	9.23		ug/L		92	10 - 130	10	50
2-Picoline			10.0	7.49		ug/L		75	10 - 130	2	50
p-Phenylene diamine			50.0	17.0	J	ug/L		34	10 - 130	22	50
Pronamide			10.0	9.24		ug/L		92	10 - 130	2	50
Safrole, Total			10.0	7.50		ug/L		75	10 - 130	3	50
2-sec-Butyl-4,6-dinitrophenol			10.0	9.92		ug/L		99	10 - 130	7	50
Sulfotepp			10.0	8.81		ug/L		88	10 - 130	10	50
1,2,4,5-Tetrachlorobenzene			10.0	8.06		ug/L		81	10 - 130	2	50
2,3,4,6-Tetrachlorophenol			10.0	11.5		ug/L		115	10 - 130	1	50
Thionazin			10.0	10.1		ug/L		101	10 - 130	11	50
1,3,5-Trinitrobenzene			10.0	8.02		ug/L		80	10 - 130	4	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*34 - 130*
2-Fluorophenol	*90*		*25 - 130*
2-Fluorophenol (Surr)	*90*		*25 - 130*
Nitrobenzene-d5	*85*		*32 - 130*
Nitrobenzene-d5 (Surr)	*85*		*32 - 130*
Phenol-d5	*88*		*27 - 130*
Phenol-d5 (Surr)	*88*		*27 - 130*
Terphenyl-d14	*99*		*36 - 130*
Terphenyl-d14 (Surr)	*99*		*36 - 130*
2,4,6-Tribromophenol	*106*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*106*		*30 - 130*

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306157

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.26	U	12.9	12.7		ug/L		98	42 - 130
Acenaphthylene	0.26	U	12.9	13.7		ug/L		106	45 - 130
Acetophenone	1.3	U	12.9	12.3		ug/L		95	45 - 130
Aniline	2.6	U	12.9	6.42		ug/L		50	10 - 130
Anthracene	0.26	U	12.9	13.2		ug/L		102	58 - 130
Benzo[a]anthracene	0.26	U	12.9	11.7		ug/L		90	42 - 143
Benzo[a]pyrene	0.26	U	12.9	9.27		ug/L		72	45 - 151
Benzo[b]fluoranthene	0.26	U	12.9	11.3		ug/L		87	41 - 140
Benzo[g,h,i]perylene	0.26	U	12.9	8.60		ug/L		66	27 - 134
Benzo[k]fluoranthene	0.26	U	12.9	12.0		ug/L		93	45 - 140

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306157

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzyl alcohol	1.3	U	12.9	14.3		ug/L		111	34 - 130
1,1'-Biphenyl	1.3	U	12.9	12.4		ug/L		96	50 - 130
Bis(2-chloroethoxy)methane	1.3	U	12.9	14.1		ug/L		109	47 - 130
Bis(2-chloroethyl)ether	1.3	U	12.9	13.4		ug/L		103	36 - 130
Bis(2-ethylhexyl) phthalate	2.6	U	12.9	10.1		ug/L		78	10 - 158
4-Bromophenyl phenyl ether	1.3	U	12.9	14.1		ug/L		109	44 - 130
Butyl benzyl phthalate	1.3	U *	12.9	15.2		ug/L		118	60 - 130
4-Chloroaniline	2.6	U	12.9	3.13		ug/L		24	17 - 130
4-Chloro-3-methylphenol	1.3	U	12.9	15.6		ug/L		120	54 - 130
2-Chloronaphthalene	1.3	U	12.9	12.9		ug/L		100	48 - 130
2-Chlorophenol	1.3	U	12.9	11.7		ug/L		91	45 - 130
4-Chlorophenyl phenyl ether	1.3	U	12.9	14.2		ug/L		110	52 - 130
Chrysene	0.26	U	12.9	11.1		ug/L		86	40 - 142
Dibenz(a,h)anthracene	0.26	U	12.9	8.96		ug/L		69	38 - 130
Dibenzofuran	1.3	U	12.9	14.1		ug/L		109	56 - 130
1,2-Dichlorobenzene	1.3	U	12.9	10.6		ug/L		82	36 - 130
1,3-Dichlorobenzene	1.3	U	12.9	10.2		ug/L		79	31 - 130
1,4-Dichlorobenzene	1.3	U	12.9	9.97		ug/L		77	34 - 130
3,3'-Dichlorobenzidine	26	U *	12.9	26	U F	ug/L		0	10 - 158
2,4-Dichlorophenol	1.3	U	12.9	14.2		ug/L		110	58 - 130
Diethyl phthalate	0.27	J B	12.9	15.0		ug/L		114	60 - 130
2,4-Dimethylphenol	2.6	U	12.9	14.5		ug/L		112	41 - 130
Dimethyl phthalate	1.3	U	12.9	14.8		ug/L		114	58 - 130
Di-n-butyl phthalate	1.3	U *	12.9	13.9		ug/L		107	59 - 130
4,6-Dinitro-2-methylphenol	6.5	U	12.9	19.5		ug/L		151	10 - 182
2,4-Dinitrophenol	13	U	12.9	22.0		ug/L		170	10 - 200
2,4-Dinitrotoluene	1.3	U	12.9	15.1		ug/L		117	57 - 130
2,6-Dinitrotoluene	1.3	U	12.9	14.8		ug/L		114	53 - 130
Di-n-octyl phthalate	0.80	J B *	12.9	12.9		ug/L		94	19 - 130
1,4-Dioxane	1.7	J	12.9	11.4		ug/L		75	10 - 130
Fluoranthene	0.26	U	12.9	13.4		ug/L		103	46 - 136
Fluorene	0.26	U	12.9	14.1		ug/L		109	48 - 130
Hexachlorobenzene	1.3	U	12.9	10.8		ug/L		84	49 - 130
Hexachlorobutadiene	1.3	U	12.9	10.4		ug/L		80	36 - 130
Hexachlorocyclopentadiene	2.6	U	12.9	7.16		ug/L		55	16 - 130
Hexachloroethane	1.3	U	12.9	8.94		ug/L		69	32 - 130
Indeno[1,2,3-cd]pyrene	0.26	U	12.9	7.11		ug/L		55	12 - 130
Isophorone	1.3	U	12.9	12.6		ug/L		98	45 - 130
2-Methylnaphthalene	0.26	U	12.9	11.8		ug/L		91	51 - 130
2-Methylphenol	2.6	U	12.9	12.6		ug/L		98	49 - 130
3 & 4 Methylphenol	2.6	U	12.9	2.6	U F	ug/L		0	55 - 130
Naphthalene	0.26	U	12.9	11.4		ug/L		88	35 - 130
2-Nitroaniline	1.3	U	12.9	15.3		ug/L		118	48 - 130
3-Nitroaniline	6.5	U	12.9	7.02		ug/L		54	18 - 147
4-Nitroaniline	6.5	U	12.9	8.49		ug/L		66	31 - 147
Nitrobenzene	1.3	U	12.9	12.2		ug/L		94	45 - 130
2-Nitrophenol	1.3	U	12.9	13.1		ug/L		101	49 - 130
4-Nitrophenol	6.5	U	12.9	16.7		ug/L		129	36 - 132

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306157

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodimethylamine	1.3	U	12.9	11.7		ug/L		90	29 - 130
N-Nitrosodi-n-propylamine	1.3	U	12.9	13.4		ug/L		104	42 - 130
N-Nitrosodiphenylamine	1.3	U	12.9	14.7		ug/L		113	38 - 130
2,2'-oxybis[1-chloropropane]	1.3	U *	12.9	16.5		ug/L		128	39 - 130
Pentachlorophenol	6.5	U	12.9	19.2		ug/L		148	12 - 156
Phenanthrene	0.26	U	12.9	14.4		ug/L		111	45 - 134
Phenol	1.3	U	12.9	11.4		ug/L		88	44 - 130
Pyrene	0.26	U	12.9	15.1		ug/L		116	47 - 143
Pyridine	6.5	U	12.9	11.9		ug/L		92	10 - 130
1,2,4-Trichlorobenzene	1.3	U	12.9	10.9		ug/L		84	39 - 130
2,4,5-Trichlorophenol	1.3	U *	12.9	15.8		ug/L		122	61 - 130
2,4,6-Trichlorophenol	1.3	U	12.9	14.7		ug/L		114	61 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*34 - 130*
2-Fluorophenol	*63*		*25 - 130*
Nitrobenzene-d5	*73*		*32 - 130*
Phenol-d5	*68*		*27 - 130*
Terphenyl-d14	*63*		*36 - 130*
2,4,6-Tribromophenol	*110*		*30 - 130*

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 306157

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.26	U	12.8	10.3		ug/L		81	42 - 130	20	50
Acenaphthylene	0.26	U	12.8	11.1		ug/L		87	45 - 130	21	50
Acetophenone	1.3	U	12.8	10.3		ug/L		80	45 - 130	17	50
Aniline	2.6	U	12.8	2.6	U F	ug/L		0	10 - 130	NC	50
Anthracene	0.26	U	12.8	10.5		ug/L		82	58 - 130	23	50
Benzo[a]anthracene	0.26	U	12.8	11.2		ug/L		88	42 - 143	4	50
Benzo[a]pyrene	0.26	U	12.8	9.44		ug/L		74	45 - 151	2	50
Benzo[b]fluoranthene	0.26	U	12.8	11.1		ug/L		86	41 - 140	2	50
Benzo[g,h,i]perylene	0.26	U	12.8	9.43		ug/L		74	27 - 134	9	50
Benzo[k]fluoranthene	0.26	U	12.8	11.3		ug/L		88	45 - 140	6	50
Benzyl alcohol	1.3	U	12.8	10.6		ug/L		82	34 - 130	30	50
1,1'-Biphenyl	1.3	U	12.8	10.4		ug/L		81	50 - 130	18	50
Bis(2-chloroethoxy)methane	1.3	U	12.8	11.6		ug/L		90	47 - 130	20	50
Bis(2-chloroethyl)ether	1.3	U	12.8	9.52		ug/L		74	36 - 130	34	50
Bis(2-ethylhexyl) phthalate	2.6	U	12.8	10.6		ug/L		83	10 - 158	5	50
4-Bromophenyl phenyl ether	1.3	U	12.8	11.3		ug/L		88	44 - 130	22	50
Butyl benzyl phthalate	1.3	U *	12.8	13.0		ug/L		101	60 - 130	16	50
4-Chloroaniline	2.6	U	12.8	2.86		ug/L		22	17 - 130	9	50
4-Chloro-3-methylphenol	1.3	U	12.8	11.8		ug/L		92	54 - 130	28	50
2-Chloronaphthalene	1.3	U	12.8	10.5		ug/L		82	48 - 130	20	50
2-Chlorophenol	1.3	U	12.8	9.69		ug/L		76	45 - 130	19	50
4-Chlorophenyl phenyl ether	1.3	U	12.8	11.3		ug/L		88	52 - 130	23	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 306157

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA
Prep Batch: 305704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	0.26	U	12.8	10.8		ug/L		85	40 - 142	2	50
Dibenz(a,h)anthracene	0.26	U	12.8	9.57		ug/L		75	38 - 130	7	50
Dibenzofuran	1.3	U	12.8	11.0		ug/L		86	56 - 130	25	50
1,2-Dichlorobenzene	1.3	U	12.8	8.56		ug/L		67	36 - 130	21	50
1,3-Dichlorobenzene	1.3	U	12.8	8.47		ug/L		66	31 - 130	19	50
1,4-Dichlorobenzene	1.3	U	12.8	8.18		ug/L		64	34 - 130	20	50
3,3'-Dichlorobenzidine	26	U *	12.8	26	U F	ug/L		0	10 - 158	NC	50
2,4-Dichlorophenol	1.3	U	12.8	11.6		ug/L		90	58 - 130	21	50
Diethyl phthalate	0.27	J B	12.8	11.9		ug/L		90	60 - 130	23	50
2,4-Dimethylphenol	2.6	U	12.8	11.6		ug/L		90	41 - 130	23	50
Dimethyl phthalate	1.3	U	12.8	11.8		ug/L		92	58 - 130	22	50
Di-n-butyl phthalate	1.3	U *	12.8	12.3		ug/L		96	59 - 130	12	50
4,6-Dinitro-2-methylphenol	6.5	U	12.8	15.3		ug/L		120	10 - 182	24	50
2,4-Dinitrophenol	13	U	12.8	15.7		ug/L		123	10 - 200	33	50
2,4-Dinitrotoluene	1.3	U	12.8	11.5		ug/L		90	57 - 130	27	50
2,6-Dinitrotoluene	1.3	U	12.8	11.9		ug/L		93	53 - 130	21	50
Di-n-octyl phthalate	0.80	J B *	12.8	11.8		ug/L		86	19 - 130	9	50
1,4-Dioxane	1.7	J	12.8	9.02		ug/L		57	10 - 130	24	50
Fluoranthene	0.26	U	12.8	11.3		ug/L		88	46 - 136	17	50
Fluorene	0.26	U	12.8	10.8		ug/L		84	48 - 130	27	50
Hexachlorobenzene	1.3	U	12.8	10.7		ug/L		84	49 - 130	1	50
Hexachlorobutadiene	1.3	U	12.8	9.57		ug/L		75	36 - 130	8	50
Hexachlorocyclopentadiene	2.6	U	12.8	6.06		ug/L		47	16 - 130	17	50
Hexachloroethane	1.3	U	12.8	7.89		ug/L		62	32 - 130	13	50
Indeno[1,2,3-cd]pyrene	0.26	U	12.8	9.39		ug/L		73	12 - 130	28	50
Isophorone	1.3	U	12.8	10.2		ug/L		80	45 - 130	21	50
2-Methylnaphthalene	0.26	U	12.8	9.56		ug/L		75	51 - 130	21	50
2-Methylphenol	2.6	U	12.8	10.1		ug/L		79	49 - 130	22	50
3 & 4 Methylphenol	2.6	U	12.8	10.6		ug/L		82	55 - 130	NC	50
Naphthalene	0.26	U	12.8	9.78		ug/L		76	35 - 130	16	50
2-Nitroaniline	1.3	U	12.8	11.7		ug/L		91	48 - 130	27	50
3-Nitroaniline	6.5	U	12.8	5.80	J	ug/L		45	18 - 147	19	50
4-Nitroaniline	6.5	U	12.8	7.72		ug/L		60	31 - 147	10	50
Nitrobenzene	1.3	U	12.8	10.8		ug/L		84	45 - 130	12	50
2-Nitrophenol	1.3	U	12.8	12.6		ug/L		99	49 - 130	4	50
4-Nitrophenol	6.5	U	12.8	13.3		ug/L		104	36 - 132	22	50
N-Nitrosodimethylamine	1.3	U	12.8	8.90		ug/L		69	29 - 130	27	50
N-Nitrosodi-n-propylamine	1.3	U	12.8	10.2		ug/L		80	42 - 130	27	50
N-Nitrosodiphenylamine	1.3	U	12.8	12.4		ug/L		97	38 - 130	17	50
2,2'-oxybis[1-chloropropane]	1.3	U *	12.8	13.7		ug/L		106	39 - 130	19	50
Pentachlorophenol	6.5	U	12.8	15.7		ug/L		122	12 - 156	20	50
Phenanthrene	0.26	U	12.8	10.9		ug/L		85	45 - 134	28	50
Phenol	1.3	U	12.8	9.23		ug/L		72	44 - 130	21	50
Pyrene	0.26	U	12.8	11.3		ug/L		88	47 - 143	29	50
Pyridine	6.5	U	12.8	6.40	F	ug/L		50	10 - 130	60	50
1,2,4-Trichlorobenzene	1.3	U	12.8	9.56		ug/L		75	39 - 130	13	50
2,4,5-Trichlorophenol	1.3	U *	12.8	12.7		ug/L		99	61 - 130	22	50
2,4,6-Trichlorophenol	1.3	U	12.8	12.5		ug/L		97	61 - 130	17	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 306157

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA
Prep Batch: 305704

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*34 - 130*
2-Fluorophenol	*69*		*25 - 130*
Nitrobenzene-d5	*80*		*32 - 130*
Phenol-d5	*69*		*27 - 130*
Terphenyl-d14	*72*		*36 - 130*
2,4,6-Tribromophenol	*105*		*30 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-306407/8
Matrix: Water
Analysis Batch: 306407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/06/13 12:30	1
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 12:30	1

Lab Sample ID: LCS 680-306407/4
Matrix: Water
Analysis Batch: 306407

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethanol			20.0	18.2		mg/L		91	38 - 156		
Methanol			20.0	22.0		mg/L		110	43 - 143		

Lab Sample ID: LCSD 680-306407/5
Matrix: Water
Analysis Batch: 306407

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
Ethanol			20.0	18.2		mg/L		91	38 - 156	0	50
Methanol			20.0	22.2		mg/L		111	43 - 143	1	50

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306407

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethanol	5.0	U	20.0	18.8		mg/L		94	38 - 156		
Methanol	5.0	U	20.0	18.8		mg/L		94	43 - 143		

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 306407

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethanol	5.0	U	20.0	18.8		mg/L		94	38 - 156	0	50
Methanol	5.0	U	20.0	18.9		mg/L		94	43 - 143	0	50

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: MB 680-306699/6
Matrix: Water
Analysis Batch: 306699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			12/09/13 12:46	1
Methanol	5.0	U	5.0	1.0	mg/L			12/09/13 12:46	1

Lab Sample ID: LCS 680-306699/4
Matrix: Water
Analysis Batch: 306699

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethanol	20.0	17.8		mg/L		89	38 - 156
Methanol	20.0	19.7		mg/L		99	43 - 143

Lab Sample ID: LCSD 680-306699/5
Matrix: Water
Analysis Batch: 306699

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
Ethanol	20.0	17.9		mg/L		89	38 - 156	0	50
Methanol	20.0	19.8		mg/L		99	43 - 143	1	50

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-305687/13
Matrix: Water
Analysis Batch: 305687

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			12/02/13 16:58	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			12/02/13 16:58	1

Lab Sample ID: LCS 680-305687/14
Matrix: Water
Analysis Batch: 305687

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.02		mg/L		102	90 - 110
Nitrite as N	0.997	1.01		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-305687/15
Matrix: Water
Analysis Batch: 305687

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
Nitrate as N	0.999	1.02		mg/L		102	90 - 110	0	30
Nitrite as N	0.997	1.01		mg/L		101	90 - 110	0	30

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 680-307268/5
Matrix: Water
Analysis Batch: 307268

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			12/12/13 12:35	1
Sulfate	0.50	U	0.50	0.25	mg/L			12/12/13 12:35	1

Lab Sample ID: LCS 680-307268/6
Matrix: Water
Analysis Batch: 307268

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.0		mg/L		100	90 - 110
Sulfate	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LCSD 680-307268/7
Matrix: Water
Analysis Batch: 307268

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
Chloride	10.0	10.0		mg/L		100	90 - 110	0	30
Sulfate	10.0	10.4		mg/L		104	90 - 110	0	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-305657/1-A
Matrix: Water
Analysis Batch: 306053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/02/13 10:36	12/04/13 03:53	1
Antimony	5.0	U	5.0	2.0	ug/L		12/02/13 10:36	12/04/13 03:53	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/02/13 10:36	12/04/13 03:53	1
Barium	5.0	U	5.0	1.4	ug/L		12/02/13 10:36	12/04/13 03:53	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/02/13 10:36	12/04/13 03:53	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/02/13 10:36	12/04/13 03:53	1
Chromium	5.0	U	5.0	2.5	ug/L		12/02/13 10:36	12/04/13 03:53	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/02/13 10:36	12/04/13 03:53	1
Copper	5.0	U	5.0	1.1	ug/L		12/02/13 10:36	12/04/13 03:53	1
Iron	100	U	100	44	ug/L		12/02/13 10:36	12/04/13 03:53	1
Lead	1.5	U	1.5	0.50	ug/L		12/02/13 10:36	12/04/13 03:53	1
Manganese	5.0	U	5.0	2.0	ug/L		12/02/13 10:36	12/04/13 03:53	1
Mercury	0.80	U	0.80	0.40	ug/L		12/02/13 10:36	12/04/13 03:53	1
Nickel	5.0	U	5.0	2.0	ug/L		12/02/13 10:36	12/04/13 03:53	1
Selenium	2.5	U	2.5	1.1	ug/L		12/02/13 10:36	12/04/13 03:53	1
Silver	1.0	U	1.0	0.18	ug/L		12/02/13 10:36	12/04/13 03:53	1
Thallium	1.0	U	1.0	0.25	ug/L		12/02/13 10:36	12/04/13 03:53	1
Tin	5.0	U	5.0	1.4	ug/L		12/02/13 10:36	12/04/13 03:53	1
Vanadium	10	U	10	3.2	ug/L		12/02/13 10:36	12/04/13 03:53	1
Zinc	20	U	20	8.4	ug/L		12/02/13 10:36	12/04/13 03:53	1
Sodium	500	U	500	170	ug/L		12/02/13 10:36	12/04/13 03:53	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-305657/2-A
Matrix: Water
Analysis Batch: 306053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5430		ug/L		109	75 - 125
Antimony	50.0	55.4		ug/L		111	75 - 125
Arsenic	100	106		ug/L		106	75 - 125
Barium	100	104		ug/L		104	75 - 125
Beryllium	50.0	54.0		ug/L		108	75 - 125
Cadmium	50.0	52.5		ug/L		105	75 - 125
Chromium	100	105		ug/L		105	75 - 125
Cobalt	50.0	51.3		ug/L		103	75 - 125
Copper	100	104		ug/L		104	75 - 125
Iron	5000	5260		ug/L		105	75 - 125
Lead	50.0	53.6		ug/L		107	75 - 125
Manganese	500	529		ug/L		106	75 - 125
Mercury	5.00	4.94		ug/L		99	75 - 125
Nickel	100	103		ug/L		103	75 - 125
Selenium	100	106		ug/L		106	75 - 125
Silver	50.0	55.6		ug/L		111	75 - 125
Thallium	40.0	41.9		ug/L		105	75 - 125
Tin	200	216		ug/L		108	75 - 125
Vanadium	100	101		ug/L		101	75 - 125
Zinc	100	107		ug/L		107	75 - 125
Sodium	5000	5530		ug/L		111	75 - 125

Lab Sample ID: 680-96611-2 MS
Matrix: Water
Analysis Batch: 306053

Client Sample ID: NAT-4
Prep Type: Total/NA
Prep Batch: 305657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	13000		5000	18800		ug/L		119	75 - 125
Antimony	5.0		50.0	50.8		ug/L		102	75 - 125
Arsenic	12		100	120		ug/L		108	75 - 125
Barium	140		100	250		ug/L		106	75 - 125
Beryllium	0.85		50.0	54.1		ug/L		107	75 - 125
Cadmium	0.16	J	50.0	52.2		ug/L		104	75 - 125
Chromium	43		100	145		ug/L		102	75 - 125
Cobalt	5.2		50.0	57.0		ug/L		104	75 - 125
Copper	24		100	129		ug/L		105	75 - 125
Iron	42000		5000	48600	4	ug/L		124	75 - 125
Lead	14		50.0	68.7		ug/L		110	75 - 125
Manganese	340		500	876		ug/L		108	75 - 125
Mercury	0.80		5.00	5.01		ug/L		100	75 - 125
Nickel	21		100	120		ug/L		99	75 - 125
Selenium	1.7		100	103		ug/L		102	75 - 125
Silver	1.0		50.0	54.6		ug/L		109	75 - 125
Thallium	1.0		40.0	42.2		ug/L		105	75 - 125
Tin	5.0		200	224		ug/L		112	75 - 125
Vanadium	39		100	141		ug/L		101	75 - 125
Zinc	30		100	132		ug/L		102	75 - 125
Sodium	97000		5000	101000	4	ug/L		86	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96611-2 MSD
Matrix: Water
Analysis Batch: 306053

Client Sample ID: NAT-4
Prep Type: Total/NA
Prep Batch: 305657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	13000		5000	22300	F1	ug/L		189	75 - 125	17	20
Antimony	5.0		50.0	58.4		ug/L		117	75 - 125	14	20
Arsenic	12		100	125		ug/L		113	75 - 125	4	20
Barium	140		100	275	F1	ug/L		131	75 - 125	9	20
Beryllium	0.85		50.0	60.5		ug/L		119	75 - 125	11	20
Cadmium	0.16	J	50.0	56.9		ug/L		113	75 - 125	9	20
Chromium	43		100	163		ug/L		121	75 - 125	12	20
Cobalt	5.2		50.0	61.9		ug/L		114	75 - 125	8	20
Copper	24		100	139		ug/L		115	75 - 125	8	20
Iron	42000		5000	53100	4	ug/L		214	75 - 125	9	20
Lead	14		50.0	72.8		ug/L		119	75 - 125	6	20
Manganese	340		500	942		ug/L		121	75 - 125	7	20
Mercury	0.80		5.00	5.38		ug/L		108	75 - 125	7	20
Nickel	21		100	134		ug/L		113	75 - 125	11	20
Selenium	1.7		100	112		ug/L		110	75 - 125	8	20
Silver	1.0		50.0	57.8		ug/L		116	75 - 125	6	20
Thallium	1.0		40.0	45.1		ug/L		113	75 - 125	7	20
Tin	5.0		200	240		ug/L		120	75 - 125	7	20
Vanadium	39		100	156		ug/L		117	75 - 125	10	20
Zinc	30		100	141		ug/L		111	75 - 125	6	20
Sodium	97000		5000	109000	4	ug/L		240	75 - 125	7	20

Lab Sample ID: MB 680-305848/1-A
Matrix: Water
Analysis Batch: 306053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/03/13 11:41	12/04/13 06:51	1
Antimony	5.0	U	5.0	2.0	ug/L		12/03/13 11:41	12/04/13 06:51	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/03/13 11:41	12/04/13 06:51	1
Barium	5.0	U	5.0	1.4	ug/L		12/03/13 11:41	12/04/13 06:51	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/03/13 11:41	12/04/13 06:51	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/03/13 11:41	12/04/13 06:51	1
Chromium	5.0	U	5.0	2.5	ug/L		12/03/13 11:41	12/04/13 06:51	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/03/13 11:41	12/04/13 06:51	1
Iron	100	U	100	44	ug/L		12/03/13 11:41	12/04/13 06:51	1
Lead	1.5	U	1.5	0.50	ug/L		12/03/13 11:41	12/04/13 06:51	1
Manganese	5.0	U	5.0	2.0	ug/L		12/03/13 11:41	12/04/13 06:51	1
Mercury	0.80	U	0.80	0.40	ug/L		12/03/13 11:41	12/04/13 06:51	1
Nickel	5.0	U	5.0	2.0	ug/L		12/03/13 11:41	12/04/13 06:51	1
Selenium	2.5	U	2.5	1.1	ug/L		12/03/13 11:41	12/04/13 06:51	1
Silver	1.0	U	1.0	0.18	ug/L		12/03/13 11:41	12/04/13 06:51	1
Thallium	1.0	U	1.0	0.25	ug/L		12/03/13 11:41	12/04/13 06:51	1
Tin	5.0	U	5.0	1.4	ug/L		12/03/13 11:41	12/04/13 06:51	1
Vanadium	10	U	10	3.2	ug/L		12/03/13 11:41	12/04/13 06:51	1
Zinc	20	U	20	8.4	ug/L		12/03/13 11:41	12/04/13 06:51	1
Sodium	500	U	500	170	ug/L		12/03/13 11:41	12/04/13 06:51	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-305848/1-A
Matrix: Water
Analysis Batch: 306872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	5.0	U	5.0	1.1	ug/L		12/03/13 11:41	12/09/13 17:27	1

Lab Sample ID: LCS 680-305848/2-A
Matrix: Water
Analysis Batch: 306053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5590		ug/L		112	75 - 125
Antimony	50.0	57.2		ug/L		114	75 - 125
Arsenic	100	112		ug/L		112	75 - 125
Barium	100	109		ug/L		109	75 - 125
Beryllium	50.0	55.7		ug/L		111	75 - 125
Cadmium	50.0	53.3		ug/L		107	75 - 125
Chromium	100	107		ug/L		107	75 - 125
Cobalt	50.0	53.5		ug/L		107	75 - 125
Iron	5000	5260		ug/L		105	75 - 125
Lead	50.0	56.2		ug/L		112	75 - 125
Manganese	500	545		ug/L		109	75 - 125
Mercury	5.00	5.11		ug/L		102	75 - 125
Nickel	100	106		ug/L		106	75 - 125
Selenium	100	109		ug/L		109	75 - 125
Silver	50.0	56.7		ug/L		113	75 - 125
Thallium	40.0	42.6		ug/L		107	75 - 125
Tin	200	224		ug/L		112	75 - 125
Vanadium	100	105		ug/L		105	75 - 125
Zinc	100	107		ug/L		107	75 - 125
Sodium	5000	5780		ug/L		116	75 - 125

Lab Sample ID: LCS 680-305848/2-A
Matrix: Water
Analysis Batch: 306872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	100	108		ug/L		108	75 - 125

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306053

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	100	U	5000	5980		ug/L		120	75 - 125
Antimony	5.0	U	50.0	61.2		ug/L		122	75 - 125
Arsenic	2.9		100	119		ug/L		116	75 - 125
Barium	280		100	364		ug/L		86	75 - 125
Beryllium	0.15	J	50.0	58.6		ug/L		117	75 - 125
Cadmium	0.50	U	50.0	56.0		ug/L		112	75 - 125
Chromium	5.9		100	113		ug/L		108	75 - 125
Cobalt	110		50.0	166		ug/L		107	75 - 125
Iron	100000		5000	110000	4	ug/L		102	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306053

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.5	U	50.0	57.8		ug/L		116	75 - 125
Manganese	9800		500	10400	4	ug/L		111	75 - 125
Mercury	0.80	U	5.00	5.53		ug/L		111	75 - 125
Nickel	22		100	126		ug/L		104	75 - 125
Selenium	1.6	J	100	112		ug/L		110	75 - 125
Silver	1.0	U	50.0	58.5		ug/L		117	75 - 125
Thallium	1.0	U	40.0	45.3		ug/L		113	75 - 125
Tin	5.0	U	200	240		ug/L		120	75 - 125
Vanadium	10	U	100	108		ug/L		108	75 - 125
Zinc	18	J	100	126		ug/L		108	75 - 125
Sodium	260000		5000	263000	4	ug/L		133	75 - 125

Lab Sample ID: 680-96611-1 MS
Matrix: Water
Analysis Batch: 306872

Client Sample ID: RAB-MW1R MS
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	7.0		100	107		ug/L		100	75 - 125

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 306053

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	100	U	5000	6510	F1	ug/L		130	75 - 125	8	20
Antimony	5.0	U	50.0	65.7	F1	ug/L		131	75 - 125	7	20
Arsenic	2.9		100	126		ug/L		123	75 - 125	6	20
Barium	280		100	406	F1	ug/L		128	75 - 125	11	20
Beryllium	0.15	J	50.0	64.1	F1	ug/L		128	75 - 125	9	20
Cadmium	0.50	U	50.0	60.1		ug/L		120	75 - 125	7	20
Chromium	5.9		100	124		ug/L		118	75 - 125	9	20
Cobalt	110		50.0	179	F1	ug/L		134	75 - 125	8	20
Iron	100000		5000	117000	4	ug/L		241	75 - 125	6	20
Lead	1.5	U	50.0	61.9		ug/L		124	75 - 125	7	20
Manganese	9800		500	11200	4	ug/L		264	75 - 125	7	20
Mercury	0.80	U	5.00	5.82		ug/L		116	75 - 125	5	20
Nickel	22		100	141		ug/L		119	75 - 125	12	20
Selenium	1.6	J	100	113		ug/L		111	75 - 125	1	20
Silver	1.0	U	50.0	60.7		ug/L		121	75 - 125	4	20
Thallium	1.0	U	40.0	47.8		ug/L		120	75 - 125	6	20
Tin	5.0	U	200	257	F1	ug/L		128	75 - 125	7	20
Vanadium	10	U	100	117		ug/L		117	75 - 125	9	20
Zinc	18	J	100	138		ug/L		120	75 - 125	9	20
Sodium	260000		5000	275000	4	ug/L		370	75 - 125	4	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96611-1 MSD
Matrix: Water
Analysis Batch: 306872

Client Sample ID: RAB-MW1R MSD
Prep Type: Total/NA
Prep Batch: 305848

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	7.0		100	109		ug/L		102	75 - 125	2	20

Lab Sample ID: MB 680-305912/1-A
Matrix: Water
Analysis Batch: 306306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/03/13 15:21	12/04/13 18:51	1
Antimony	5.0	U	5.0	2.0	ug/L		12/03/13 15:21	12/04/13 18:51	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/03/13 15:21	12/04/13 18:51	1
Barium	5.0	U	5.0	1.4	ug/L		12/03/13 15:21	12/04/13 18:51	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/03/13 15:21	12/04/13 18:51	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/03/13 15:21	12/04/13 18:51	1
Chromium	5.0	U	5.0	2.5	ug/L		12/03/13 15:21	12/04/13 18:51	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/03/13 15:21	12/04/13 18:51	1
Copper	5.0	U	5.0	1.1	ug/L		12/03/13 15:21	12/04/13 18:51	1
Iron	100	U	100	44	ug/L		12/03/13 15:21	12/04/13 18:51	1
Lead	1.5	U	1.5	0.50	ug/L		12/03/13 15:21	12/04/13 18:51	1
Mercury	0.80	U	0.80	0.40	ug/L		12/03/13 15:21	12/04/13 18:51	1
Nickel	5.0	U	5.0	2.0	ug/L		12/03/13 15:21	12/04/13 18:51	1
Selenium	2.5	U	2.5	1.1	ug/L		12/03/13 15:21	12/04/13 18:51	1
Silver	1.0	U	1.0	0.18	ug/L		12/03/13 15:21	12/04/13 18:51	1
Thallium	1.0	U	1.0	0.25	ug/L		12/03/13 15:21	12/04/13 18:51	1
Tin	5.0	U	5.0	1.4	ug/L		12/03/13 15:21	12/04/13 18:51	1
Vanadium	10	U	10	3.2	ug/L		12/03/13 15:21	12/04/13 18:51	1
Zinc	20	U	20	8.4	ug/L		12/03/13 15:21	12/04/13 18:51	1

Lab Sample ID: MB 680-305912/1-A
Matrix: Water
Analysis Batch: 306464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	5.0	U	5.0	2.0	ug/L		12/03/13 15:21	12/05/13 19:02	1

Lab Sample ID: LCS 680-305912/2-A
Matrix: Water
Analysis Batch: 306306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5330		ug/L		107	75 - 125
Antimony	50.0	54.3		ug/L		109	75 - 125
Arsenic	100	108		ug/L		108	75 - 125
Barium	100	106		ug/L		106	75 - 125
Beryllium	50.0	49.5		ug/L		99	75 - 125
Cadmium	50.0	51.0		ug/L		102	75 - 125
Chromium	100	106		ug/L		106	75 - 125
Cobalt	50.0	50.8		ug/L		102	75 - 125
Copper	100	108		ug/L		108	75 - 125
Iron	5000	5540		ug/L		111	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-305912/2-A
Matrix: Water
Analysis Batch: 306306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	53.4		ug/L		107	75 - 125
Mercury	5.00	5.32		ug/L		106	75 - 125
Nickel	100	106		ug/L		106	75 - 125
Selenium	100	106		ug/L		106	75 - 125
Silver	50.0	53.2		ug/L		106	75 - 125
Thallium	40.0	41.0		ug/L		102	75 - 125
Tin	200	215		ug/L		108	75 - 125
Vanadium	100	105		ug/L		105	75 - 125
Zinc	100	104		ug/L		104	75 - 125

Lab Sample ID: LCS 680-305912/2-A
Matrix: Water
Analysis Batch: 306464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	500	547		ug/L		109	75 - 125

Lab Sample ID: MB 680-305877/1-A
Matrix: Water
Analysis Batch: 306087

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 305877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	23	ug/L		12/03/13 13:26	12/04/13 11:31	1
Antimony	5.0	U	5.0	2.3	ug/L		12/03/13 13:26	12/04/13 11:31	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/03/13 13:26	12/04/13 11:31	1
Barium	5.0	U	5.0	1.3	ug/L		12/03/13 13:26	12/04/13 11:31	1
Beryllium	0.50	U	0.50	0.25	ug/L		12/03/13 13:26	12/04/13 11:31	1
Cadmium	0.50	U	0.50	0.095	ug/L		12/03/13 13:26	12/04/13 11:31	1
Chromium	5.0	U	5.0	2.5	ug/L		12/03/13 13:26	12/04/13 11:31	1
Cobalt	0.50	U	0.50	0.15	ug/L		12/03/13 13:26	12/04/13 11:31	1
Copper	5.0	U	5.0	1.1	ug/L		12/03/13 13:26	12/04/13 11:31	1
Iron	100	U	100	33	ug/L		12/03/13 13:26	12/04/13 11:31	1
Iron, Dissolved	100	U	100	33	ug/L		12/03/13 13:26	12/04/13 11:31	1
Lead	1.5	U	1.5	0.20	ug/L		12/03/13 13:26	12/04/13 11:31	1
Manganese	5.0	U	5.0	1.0	ug/L		12/03/13 13:26	12/04/13 11:31	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		12/03/13 13:26	12/04/13 11:31	1
Mercury	0.80	U	0.80	0.40	ug/L		12/03/13 13:26	12/04/13 11:31	1
Nickel	5.0	U	5.0	2.0	ug/L		12/03/13 13:26	12/04/13 11:31	1
Selenium	2.5	U	2.5	1.0	ug/L		12/03/13 13:26	12/04/13 11:31	1
Vanadium	10	U	10	3.8	ug/L		12/03/13 13:26	12/04/13 11:31	1
Sodium, Dissolved	500	U	500	250	ug/L		12/03/13 13:26	12/04/13 11:31	1

Lab Sample ID: LCS 680-305877/2-A
Matrix: Water
Analysis Batch: 306087

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 305877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5170		ug/L		103	75 - 125
Antimony	50.0	53.8		ug/L		108	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-305877/2-A
Matrix: Water
Analysis Batch: 306087

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 305877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	106		ug/L		106	75 - 125
Barium	100	105		ug/L		105	75 - 125
Beryllium	50.0	50.7		ug/L		101	75 - 125
Cadmium	50.0	50.9		ug/L		102	75 - 125
Chromium	100	102		ug/L		102	75 - 125
Cobalt	50.0	49.6		ug/L		99	75 - 125
Copper	100	105		ug/L		105	75 - 125
Iron	5000	5310		ug/L		106	75 - 125
Iron, Dissolved	5000	5310		ug/L		106	75 - 125
Lead	50.0	53.9		ug/L		108	75 - 125
Manganese	500	529		ug/L		106	75 - 125
Manganese, Dissolved	500	529		ug/L		106	75 - 125
Mercury	5.00	5.26		ug/L		105	75 - 125
Nickel	100	104		ug/L		104	75 - 125
Selenium	100	105		ug/L		105	75 - 125
Vanadium	100	101		ug/L		101	75 - 125
Sodium, Dissolved	5000	5020		ug/L		100	75 - 125

Lab Sample ID: 680-96611-2 MS
Matrix: Water
Analysis Batch: 306087

Client Sample ID: NAT-4
Prep Type: Dissolved
Prep Batch: 305877

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	50	U	5000	4970		ug/L		99	75 - 125
Antimony	5.0		50.0	53.2		ug/L		106	75 - 125
Arsenic	3.8		100	108		ug/L		104	75 - 125
Barium	41		100	144		ug/L		103	75 - 125
Beryllium	0.50	U	50.0	48.2		ug/L		96	75 - 125
Cadmium	0.50	U	50.0	50.5		ug/L		101	75 - 125
Chromium	5.0	U	100	100		ug/L		100	75 - 125
Cobalt	0.34		50.0	47.2		ug/L		94	75 - 125
Copper	5.0		100	105		ug/L		105	75 - 125
Iron	4700		5000	9780		ug/L		102	75 - 125
Iron, Dissolved	4700		5000	9780		ug/L		102	75 - 125
Lead	1.5	U	50.0	52.1		ug/L		104	75 - 125
Manganese	280		500	769		ug/L		97	75 - 125
Manganese, Dissolved	280		500	769		ug/L		97	75 - 125
Mercury	0.80		5.00	5.26		ug/L		105	75 - 125
Nickel	2.5		100	103		ug/L		101	75 - 125
Selenium	2.5		100	102		ug/L		102	75 - 125
Vanadium	10	U	100	102		ug/L		102	75 - 125
Sodium, Dissolved	84000		5000	90100	4	ug/L		123	75 - 125

Lab Sample ID: 680-96611-2 MSD
Matrix: Water
Analysis Batch: 306087

Client Sample ID: NAT-4
Prep Type: Dissolved
Prep Batch: 305877

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	50	U	5000	5090		ug/L		102	75 - 125	2	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96611-2 MSD — **Client Sample ID: NAT-4**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 306087 — **Prep Batch: 305877**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	5.0		50.0	54.7		ug/L		109	75 - 125	3	20
Arsenic	3.8		100	108		ug/L		104	75 - 125	0	20
Barium	41		100	146		ug/L		105	75 - 125	2	20
Beryllium	0.50	U	50.0	49.5		ug/L		99	75 - 125	3	20
Cadmium	0.50	U	50.0	51.7		ug/L		103	75 - 125	2	20
Chromium	5.0	U	100	99.4		ug/L		99	75 - 125	1	20
Cobalt	0.34		50.0	49.1		ug/L		98	75 - 125	4	20
Copper	5.0		100	104		ug/L		104	75 - 125	0	20
Iron	4700		5000	9880		ug/L		104	75 - 125	1	20
Iron, Dissolved	4700		5000	9880		ug/L		104	75 - 125	1	20
Lead	1.5	U	50.0	54.0		ug/L		108	75 - 125	4	20
Manganese	280		500	793		ug/L		102	75 - 125	3	20
Manganese, Dissolved	280		500	793		ug/L		102	75 - 125	3	20
Mercury	0.80		5.00	5.52		ug/L		110	75 - 125	5	20
Nickel	2.5		100	104		ug/L		101	75 - 125	0	20
Selenium	2.5		100	104		ug/L		104	75 - 125	2	20
Vanadium	10	U	100	101		ug/L		101	75 - 125	1	20
Sodium, Dissolved	84000		5000	90400	4	ug/L		129	75 - 125	0	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-305811/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305811

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			12/02/13 17:13	1

Lab Sample ID: LCS 680-305811/1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 305811

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.03		mg/L		102	90 - 110

Lab Sample ID: 680-96611-10 MS — **Client Sample ID: MW-3**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 305811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.7		1.00	3.46	F	mg/L		76	90 - 110

Lab Sample ID: 680-96611-10 MSD — **Client Sample ID: MW-3**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 305811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	2.7		1.00	3.48	F	mg/L		77	90 - 110	0	30

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-305444/9
Matrix: Water
Analysis Batch: 305444

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			11/27/13 16:16	1

Lab Sample ID: LCS 680-305444/8
Matrix: Water
Analysis Batch: 305444

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.20		mg/L		100	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-305693/1
Matrix: Water
Analysis Batch: 305693

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			12/02/13 13:01	1
Sulfide, Dissolved	1.0	U	1.0	1.0	mg/L			12/02/13 13:01	1

Lab Sample ID: LCS 680-305693/2
Matrix: Water
Analysis Batch: 305693

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.1		mg/L		101	75 - 125
Sulfide, Dissolved	10.0	10.1		mg/L		101	75 - 125

Lab Sample ID: LCSD 680-305693/3
Matrix: Water
Analysis Batch: 305693

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
Sulfide	10.0	9.89		mg/L		99	75 - 125	2	30
Sulfide, Dissolved	10.0	9.89		mg/L		99	75 - 125	2	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-307748/23
Matrix: Water
Analysis Batch: 307748

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			12/13/13 23:47	1

Method: 9060 - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCS 680-307748/22
Matrix: Water
Analysis Batch: 307748

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon			20.0	16.9		mg/L		85	80 - 120		

Lab Sample ID: 680-96611-11 MS
Matrix: Water
Analysis Batch: 307748

Client Sample ID: MW-4
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon	35		20.0	54.5		mg/L		99	80 - 120		

Lab Sample ID: 680-96611-11 MSD
Matrix: Water
Analysis Batch: 307748

Client Sample ID: MW-4
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon	35		20.0	54.0		mg/L		97	80 - 120	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-306823/3
Matrix: Water
Analysis Batch: 306823

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			12/09/13 15:13	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 15:13	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			12/09/13 15:13	1

Lab Sample ID: LCS 680-306823/4
Matrix: Water
Analysis Batch: 306823

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	207		mg/L		83	80 - 120		

Lab Sample ID: LCSD 680-306823/30
Matrix: Water
Analysis Batch: 306823

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
Alkalinity			250	210		mg/L		84	80 - 120	1	30

Lab Sample ID: 680-96611-12 DU
Matrix: Water
Analysis Batch: 306823

Client Sample ID: MW-4U
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	580			596		mg/L				3	30
Bicarbonate Alkalinity as CaCO3	580			595		mg/L				3	30
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	30

GC/MS VOA

Analysis Batch: 305600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-5	Equipment Blank 1	Total/NA	Water	8260B	
680-96611-6	Trip Blank	Total/NA	Water	8260B	
LCS 680-305600/14	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-305600/15	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-305600/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 305662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-8	MW-4	Total/NA	Water	8260B	
680-96611-9	MW-4U	Total/NA	Water	8260B	
LCS 680-305662/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-305662/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-305662/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 305663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-2	NAT-4	Total/NA	Water	8260B	
680-96611-3	MW-10	Total/NA	Water	8260B	
LCS 680-305663/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-305663/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-305663/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 305772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	8260B	
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	8260B	
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	8260B	
680-96611-4	Field Dup1	Total/NA	Water	8260B	
LCS 680-305772/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-305772/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-305772/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 305704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	3520C	
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	3520C	
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	3520C	
680-96611-3	MW-10	Total/NA	Water	3520C	
680-96611-4	Field Dup1	Total/NA	Water	3520C	
680-96611-5	Equipment Blank 1	Total/NA	Water	3520C	
680-96611-7	MW-3	Total/NA	Water	3520C	
LCS 680-305704/10-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 680-305704/7-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-305704/11-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 680-305704/6-A	Method Blank	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Analysis Batch: 306157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	8270D LL	305704
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	8270D LL	305704
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	8270D LL	305704
680-96611-5	Equipment Blank 1	Total/NA	Water	8270D LL	305704
LCS 680-305704/10-A	Lab Control Sample	Total/NA	Water	8270D LL	305704
LCS 680-305704/7-A	Lab Control Sample	Total/NA	Water	8270D LL	305704
LCSD 680-305704/11-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	305704
MB 680-305704/6-A	Method Blank	Total/NA	Water	8270D LL	305704

Analysis Batch: 307606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-3	MW-10	Total/NA	Water	8270D LL	305704
680-96611-4	Field Dup1	Total/NA	Water	8270D LL	305704
680-96611-7	MW-3	Total/NA	Water	8270D LL	305704

GC VOA

Analysis Batch: 306407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	8015C	
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	8015C	
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	8015C	
680-96611-2	NAT-4	Total/NA	Water	8015C	
680-96611-4	Field Dup1	Total/NA	Water	8015C	
680-96611-8	MW-4	Total/NA	Water	8015C	
680-96611-9	MW-4U	Total/NA	Water	8015C	
LCS 680-306407/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306407/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306407/8	Method Blank	Total/NA	Water	8015C	

Analysis Batch: 306699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-5	Equipment Blank 1	Total/NA	Water	8015C	
LCS 680-306699/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306699/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306699/6	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 305687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Total/NA	Water	9056A	
680-96611-11	MW-4	Total/NA	Water	9056A	
680-96611-12	MW-4U	Total/NA	Water	9056A	
LCS 680-305687/14	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-305687/15	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-305687/13	Method Blank	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 307268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Total/NA	Water	9056A	
680-96611-11	MW-4	Total/NA	Water	9056A	
680-96611-11	MW-4	Total/NA	Water	9056A	
680-96611-12	MW-4U	Total/NA	Water	9056A	
680-96611-12	MW-4U	Total/NA	Water	9056A	
LCS 680-307268/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-307268/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-307268/5	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 305657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-2	NAT-4	Total/NA	Water	3010A	
680-96611-2 MS	NAT-4	Total/NA	Water	3010A	
680-96611-2 MSD	NAT-4	Total/NA	Water	3010A	
680-96611-3	MW-10	Total/NA	Water	3010A	
LCS 680-305657/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-305657/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 305848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	3010A	
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	3010A	
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	3010A	
680-96611-4	Field Dup1	Total/NA	Water	3010A	
680-96611-8	MW-4	Total/NA	Water	3010A	
680-96611-9	MW-4U	Total/NA	Water	3010A	
LCS 680-305848/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-305848/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 305877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-2	NAT-4	Dissolved	Water	3005A	
680-96611-2 MS	NAT-4	Dissolved	Water	3005A	
680-96611-2 MSD	NAT-4	Dissolved	Water	3005A	
680-96611-10	MW-3	Dissolved	Water	3005A	
680-96611-11	MW-4	Dissolved	Water	3005A	
680-96611-12	MW-4U	Dissolved	Water	3005A	
LCS 680-305877/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-305877/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 305912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-5	Equipment Blank 1	Total/NA	Water	3010A	
LCS 680-305912/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-305912/1-A	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Analysis Batch: 306053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	6020A	305848
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	6020A	305848
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	6020A	305848
680-96611-2	NAT-4	Total/NA	Water	6020A	305657
680-96611-2 MS	NAT-4	Total/NA	Water	6020A	305657
680-96611-2 MSD	NAT-4	Total/NA	Water	6020A	305657
680-96611-3	MW-10	Total/NA	Water	6020A	305657
680-96611-4	Field Dup1	Total/NA	Water	6020A	305848
680-96611-8	MW-4	Total/NA	Water	6020A	305848
680-96611-9	MW-4U	Total/NA	Water	6020A	305848
LCS 680-305657/2-A	Lab Control Sample	Total/NA	Water	6020A	305657
LCS 680-305848/2-A	Lab Control Sample	Total/NA	Water	6020A	305848
MB 680-305657/1-A	Method Blank	Total/NA	Water	6020A	305657
MB 680-305848/1-A	Method Blank	Total/NA	Water	6020A	305848

Analysis Batch: 306087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-2	NAT-4	Dissolved	Water	6020A	305877
680-96611-2 MS	NAT-4	Dissolved	Water	6020A	305877
680-96611-2 MSD	NAT-4	Dissolved	Water	6020A	305877
680-96611-10	MW-3	Dissolved	Water	6020	305877
680-96611-11	MW-4	Dissolved	Water	6020	305877
680-96611-12	MW-4U	Dissolved	Water	6020	305877
680-96611-12	MW-4U	Dissolved	Water	6020	305877
LCS 680-305877/2-A	Lab Control Sample	Total Recoverable	Water	6020A	305877
MB 680-305877/1-A	Method Blank	Total Recoverable	Water	6020A	305877

Analysis Batch: 306306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-5	Equipment Blank 1	Total/NA	Water	6020A	305912
LCS 680-305912/2-A	Lab Control Sample	Total/NA	Water	6020A	305912
MB 680-305912/1-A	Method Blank	Total/NA	Water	6020A	305912

Analysis Batch: 306464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-5	Equipment Blank 1	Total/NA	Water	6020A	305912
LCS 680-305912/2-A	Lab Control Sample	Total/NA	Water	6020A	305912
MB 680-305912/1-A	Method Blank	Total/NA	Water	6020A	305912

Analysis Batch: 306872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-1	RAB-MW1R	Total/NA	Water	6020A	305848
680-96611-1 MS	RAB-MW1R MS	Total/NA	Water	6020A	305848
680-96611-1 MSD	RAB-MW1R MSD	Total/NA	Water	6020A	305848
680-96611-4	Field Dup1	Total/NA	Water	6020A	305848
LCS 680-305848/2-A	Lab Control Sample	Total/NA	Water	6020A	305848
MB 680-305848/1-A	Method Blank	Total/NA	Water	6020A	305848

General Chemistry

Analysis Batch: 305444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Dissolved	Water	365.1	
680-96611-11	MW-4	Dissolved	Water	365.1	
680-96611-12	MW-4U	Dissolved	Water	365.1	
LCS 680-305444/8	Lab Control Sample	Total/NA	Water	365.1	
MB 680-305444/9	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 305693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Dissolved	Water	9034	
680-96611-10	MW-3	Total/NA	Water	9034	
680-96611-11	MW-4	Dissolved	Water	9034	
680-96611-11	MW-4	Total/NA	Water	9034	
680-96611-12	MW-4U	Dissolved	Water	9034	
680-96611-12	MW-4U	Total/NA	Water	9034	
LCS 680-305693/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-305693/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-305693/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 305811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Dissolved	Water	350.1	
680-96611-10 MS	MW-3	Dissolved	Water	350.1	
680-96611-10 MSD	MW-3	Dissolved	Water	350.1	
680-96611-11	MW-4	Dissolved	Water	350.1	
680-96611-12	MW-4U	Dissolved	Water	350.1	
LCS 680-305811/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-305811/5	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 306823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Total/NA	Water	SM 2320B	
680-96611-11	MW-4	Total/NA	Water	SM 2320B	
680-96611-12	MW-4U	Total/NA	Water	SM 2320B	
680-96611-12 DU	MW-4U	Total/NA	Water	SM 2320B	
LCS 680-306823/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-306823/30	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-306823/3	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 307265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Total/NA	Water	UnionizedNH3	
680-96611-11	MW-4	Total/NA	Water	UnionizedNH3	
680-96611-12	MW-4U	Total/NA	Water	UnionizedNH3	

Analysis Batch: 307748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96611-10	MW-3	Dissolved	Water	9060	
680-96611-11	MW-4	Dissolved	Water	9060	
680-96611-11 MS	MW-4	Dissolved	Water	9060	
680-96611-11 MSD	MW-4	Dissolved	Water	9060	
680-96611-12	MW-4U	Dissolved	Water	9060	

General Chemistry (Continued)

Analysis Batch: 307748 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-307748/22	Lab Control Sample	Dissolved	Water	9060	
MB 680-307748/23	Method Blank	Dissolved	Water	9060	

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: RAB-MW1R

Lab Sample ID: 680-96611-1

Date Collected: 11/26/13 09:40

Matrix: Water

Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	305772	12/03/13 18:47	JD1	TAL SAV
Total/NA	Prep	3520C			305704	12/02/13 16:15	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	306157	12/05/13 17:32	JPM	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 14:00	AJMC	TAL SAV
Total/NA	Prep	3010A			305848	12/03/13 11:41	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306053	12/04/13 08:11	CME	TAL SAV
Total/NA	Prep	3010A			305848	12/03/13 11:41	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306872	12/09/13 17:40	BWR	TAL SAV

Client Sample ID: NAT-4

Lab Sample ID: 680-96611-2

Date Collected: 11/26/13 12:40

Matrix: Water

Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	305663	12/02/13 20:54	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 15:13	AJMC	TAL SAV
Total/NA	Prep	3010A			305657	12/02/13 10:36	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306053	12/04/13 06:02	CME	TAL SAV
Dissolved	Prep	3005A			305877	12/03/13 13:26	BJB	TAL SAV
Dissolved	Analysis	6020A		1	306087	12/04/13 11:45	BWR	TAL SAV

Client Sample ID: MW-10

Lab Sample ID: 680-96611-3

Date Collected: 11/26/13 14:00

Matrix: Water

Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	305663	12/02/13 21:26	JD1	TAL SAV
Total/NA	Prep	3520C			305704	12/02/13 16:15	RBS	TAL SAV
Total/NA	Analysis	8270D LL		10	307606	12/14/13 21:22	JPM	TAL SAV
Total/NA	Prep	3010A			305657	12/02/13 10:36	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306053	12/04/13 06:29	CME	TAL SAV

Client Sample ID: Field Dup1

Lab Sample ID: 680-96611-4

Date Collected: 11/26/13 00:00

Matrix: Water

Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	305772	12/03/13 20:21	JD1	TAL SAV
Total/NA	Prep	3520C			305704	12/02/13 16:15	RBS	TAL SAV
Total/NA	Analysis	8270D LL		10	307606	12/14/13 21:47	JPM	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 20:04	AJMC	TAL SAV
Total/NA	Prep	3010A			305848	12/03/13 11:41	BJB	TAL SAV

Client Sample ID: Field Dup1

Lab Sample ID: 680-96611-4

Date Collected: 11/26/13 00:00
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		1	306053	12/04/13 08:38	CME	TAL SAV
Total/NA	Prep	3010A			305848	12/03/13 11:41	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306872	12/09/13 18:14	BWR	TAL SAV

Client Sample ID: Equipment Blank 1

Lab Sample ID: 680-96611-5

Date Collected: 11/26/13 00:00
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	305600	12/02/13 19:40	JD1	TAL SAV
Total/NA	Prep	3520C			305704	12/02/13 16:15	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	306157	12/05/13 18:48	JPM	TAL SAV
Total/NA	Analysis	8015C		1	306699	12/09/13 13:36	AJMC	TAL SAV
Total/NA	Prep	3010A			305912	12/03/13 15:21	DAS	TAL SAV
Total/NA	Analysis	6020A		1	306306	12/04/13 19:06	BWR	TAL SAV
Total/NA	Prep	3010A			305912	12/03/13 15:21	DAS	TAL SAV
Total/NA	Analysis	6020A		1	306464	12/05/13 19:13	BWR	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-96611-6

Date Collected: 11/26/13 00:00
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	305600	12/02/13 20:09	JD1	TAL SAV

Client Sample ID: MW-3

Lab Sample ID: 680-96611-7

Date Collected: 11/26/13 11:15
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			305704	12/02/13 16:15	RBS	TAL SAV
Total/NA	Analysis	8270D LL		10	307606	12/14/13 22:12	JPM	TAL SAV

Client Sample ID: MW-4

Lab Sample ID: 680-96611-8

Date Collected: 11/26/13 12:50
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	305662	12/02/13 20:36	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 15:37	AJMC	TAL SAV
Total/NA	Prep	3010A			305848	12/03/13 11:41	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306053	12/04/13 08:43	CME	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-4U

Lab Sample ID: 680-96611-9

Date Collected: 11/26/13 14:30
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	305662	12/02/13 21:08	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 16:02	AJMC	TAL SAV
Total/NA	Prep	3010A			305848	12/03/13 11:41	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306053	12/04/13 09:42	CME	TAL SAV

Client Sample ID: MW-3

Lab Sample ID: 680-96611-10

Date Collected: 11/26/13 11:15
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		2	305687	12/02/13 19:02	PAT	TAL SAV
Total/NA	Analysis	9056A		2	307268	12/12/13 13:25	PAT	TAL SAV
Dissolved	Prep	3005A			305877	12/03/13 13:26	BJB	TAL SAV
Dissolved	Analysis	6020		1	306087	12/04/13 12:22	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305444	11/27/13 16:16	CRW	TAL SAV
Total/NA	Analysis	9034		1	305693	12/02/13 13:01	AJO	TAL SAV
Dissolved	Analysis	9034		1	305693	12/02/13 13:01	AJO	TAL SAV
Dissolved	Analysis	350.1		2	305811	12/02/13 17:23	JME	TAL SAV
Total/NA	Analysis	SM 2320B		1	306823	12/09/13 15:55	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 00:07	JER	TAL SAV

Client Sample ID: MW-4

Lab Sample ID: 680-96611-11

Date Collected: 11/26/13 12:50
Matrix: Water
Date Received: 11/27/13 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		2	305687	12/02/13 19:17	PAT	TAL SAV
Total/NA	Analysis	9056A		5	307268	12/12/13 13:37	PAT	TAL SAV
Total/NA	Analysis	9056A		20	307268	12/12/13 16:28	PAT	TAL SAV
Dissolved	Prep	3005A			305877	12/03/13 13:26	BJB	TAL SAV
Dissolved	Analysis	6020		1	306087	12/04/13 12:30	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305444	11/27/13 16:16	CRW	TAL SAV
Total/NA	Analysis	9034		1	305693	12/02/13 13:01	AJO	TAL SAV
Dissolved	Analysis	9034		1	305693	12/02/13 13:01	AJO	TAL SAV
Dissolved	Analysis	350.1		1	305811	12/02/13 17:08	JME	TAL SAV
Total/NA	Analysis	SM 2320B		1	306823	12/09/13 16:05	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 00:59	JER	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Client Sample ID: MW-4U
Date Collected: 11/26/13 14:30
Date Received: 11/27/13 10:13

Lab Sample ID: 680-96611-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		2	305687	12/02/13 19:32	PAT	TAL SAV
Total/NA	Analysis	9056A		5	307268	12/12/13 13:50	PAT	TAL SAV
Total/NA	Analysis	9056A		20	307268	12/12/13 16:41	PAT	TAL SAV
Dissolved	Prep	3005A			305877	12/03/13 13:26	BJB	TAL SAV
Dissolved	Analysis	6020		1	306087	12/04/13 12:37	BWR	TAL SAV
Dissolved	Analysis	6020		2	306087	12/04/13 13:29	BWR	TAL SAV
Dissolved	Analysis	365.1		1	305444	11/27/13 16:16	CRW	TAL SAV
Total/NA	Analysis	9034		1	305693	12/02/13 13:01	AJO	TAL SAV
Dissolved	Analysis	9034		1	305693	12/02/13 13:01	AJO	TAL SAV
Dissolved	Analysis	350.1		5	305811	12/02/13 17:52	JME	TAL SAV
Total/NA	Analysis	SM 2320B		1	306823	12/09/13 16:14	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	307265	12/12/13 13:26	JER	TAL SAV
Dissolved	Analysis	9060		1	307748	12/14/13 01:46	JER	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-14
Arkansas DEQ	State Program	6	88-0692	01-31-14 *
California	NELAP	9	3217CA	07-31-14
Colorado	State Program	8	N/A	12-31-14
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	06-30-14
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	04-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-14
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-14
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	LA100015	12-31-14
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	03-31-14
North Carolina DENR	State Program	4	269	12-31-14
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14 *
South Carolina	State Program	4	98001	06-30-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia DEP	State Program	3	94	06-30-14
West Virginia DHHR	State Program	3	9950C	12-31-13 *
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96611-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020	Metals (ICP/MS)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 81901

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Corrective Action Analyses

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 - Aqualon		VA
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Kathy Smith		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Erin Wright		
CLIENT NAME	CLIENT E-MAIL	
GES		
CLIENT ADDRESS		
Richmond, VA		
COMPANY CONTRACTING THIS WORK (if applicable)		

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) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: VOCs 8260B *	SVOCs 8270C	Metals 6020B	Methanol & 8015B Ethanol	Dissolved Metals (Field Filtered) 6020	REMARKS
		PRESERVATIVE						HCl		HNO3			
11/26/13	0940	RAB-MW1R	G	X				X	X	X	X		RAB-MW1R - unpreserved VOCs vials
	0950	MS (RAB-MW1R)						X	X	X	X		
	0950	MSD (RAB-MW1R)						X	X	X	X		
	1240	NAT-4						X		X	X	X	* see attached table for reporting compounds
	1400	MW-10						X	X	X			
		Field Dup1						X	X	X	X		
		Equipment Blank 1						X	X	X	X		
		Trip Blank						X					
	11:15	MW-3							X				
	1250	MW-4						X		X	X		
	1430	MW-4U						X		X	X		

680-96611 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Katt Hall	11/26/13	1630						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT YES ○ NO ○	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	11/27/13	10:13				04, 1.2°C 680-96611

Page 90 of 92

2/3/2014

Serial Number 81902

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Geochemical Analyses

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: Ashland - Aqualon	PROJECT NO.	PROJECT LOCATION (STATE): VA	PAGE 1 OF 1
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.	STANDARD REPORT DELIVERY ● DATE DUE
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX	EXPEDITED REPORT DELIVERY (SURCHARGE) ○ DATE DUE
CLIENT NAME: GES	CLIENT E-MAIL		
CLIENT ADDRESS: Richmond, VA			
COMPANY CONTRACTING THIS WORK (if applicable)			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

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

REQUIRED ANALYSIS — NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	Dissolved iron/manganese 6020	Dissolved major cations 6020	Dissolved ortho-phosphate 365.1 (125mL unp.)	Dissolved Ammonia 350	Total Sulfide 9034	Dissolved sulfide 9034	Alkalinity 2320B (250mL unp.)	Major Anions 9056A (125mL unpre.)	Dissolved organic carbon 9060		REMARKS
11/26/13	11:15	MW-3						X	X	X	X	X	X	X	X	X		
↓	12:50	MW-4						↓	↓	↓	↓	↓	↓	↓	↓	↓		Dissolved
↓	14:30	MW-4U						↓	↓	↓	↓	↓	↓	↓	↓	↓		samples were
																		field filtered

PRESERVATIVE

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Kate Hall	11/26/13	1630						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	11/27/13	10:13	YES ○ NO ○			0.4, 1.2°C 680-96611

TAL8240-680 (1008)

2/3/2014

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-96611-1

Login Number: 96611

List Source: TestAmerica Savannah

List Number: 1

Creator: Contreras, Cesar A

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.	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	

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: 680-96664-1
Client Project/Site: Hercules Aqualon Corrective Action
Revision: 1

For:
Ashland Inc
5200 Blazer Parkway
DS-4, EH&S
Dublin, Ohio 43017

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
12/20/2013 9:03:21 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
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.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.
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
U	Indicates the analyte was analyzed for but not detected.

GC VOA

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

Metals

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-96664-1	MW-6	Water	11/27/13 09:40	11/30/13 08:43
680-96664-2	WWL-1	Water	11/27/13 11:25	11/30/13 08:43
680-96664-3	WWL-2	Water	11/27/13 13:45	11/30/13 08:43
680-96664-4	LF-5	Water	11/27/13 10:00	11/30/13 08:43
680-96664-5	MW-7L	Water	11/27/13 12:15	11/30/13 08:43
680-96664-6	MW-7U	Water	11/27/13 13:05	11/30/13 08:43
680-96664-8	Field Dup 2	Water	11/27/13 00:00	11/30/13 08:43
680-96664-9	Trip Blank	Water	11/27/13 00:00	11/30/13 08:43
680-96664-10	MW-9	Water	11/27/13 14:15	11/30/13 08:43

Job ID: 680-96664-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-96664-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/30/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WWL-1 (680-96664-2), LF-5 (680-96664-4), Field Blank 1 (680-96664-7) and Trip Blank (680-96664-9) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/05/2013 and 12/06/2013.

1,2,3-Trichlorobenzene was detected in method blank MB 680-306385/7 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.

1,2-Dichloroethane failed the recovery criteria high for LCS 680-306176/5. 2-Butanone and Vinyl acetate failed the recovery criteria high for LCS 680-306385/4. Vinyl acetate exceeded the RPD limit for LCSD 680-306385/5. Refer to the QC report for details.

Sample WWL-1 (680-96664-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Sample MW-7U (680-96664-6) was analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 12/02/2013 and analyzed on 12/03/2013.

No difficulties were encountered during the SVOAs analysis.

All quality control parameters were within the acceptance limits.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples WWL-2 (680-96664-3), LF-5 (680-96664-4) and MW-7L (680-96664-5) were analyzed for organics by direct aqueous injection

Job ID: 680-96664-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

(DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 12/06/2013.

No difficulties were encountered during the DAI analysis.

All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples MW-6 (680-96664-1), WWL-1 (680-96664-2), WWL-2 (680-96664-3), LF-5 (680-96664-4), MW-7L (680-96664-5), MW-7U (680-96664-6), Field Dup 2 (680-96664-8) and MW-9 (680-96664-10) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 12/02/2013 and analyzed on 12/04/2013.

Samples WWL-2 (680-96664-3)[20X], MW-7U (680-96664-6)[20X] and Field Dup 2 (680-96664-8)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-6 — Lab Sample ID: 680-96664-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1100		100	50	ug/L	1		6020A	Total/NA
Lead	0.66	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-1 — Lab Sample ID: 680-96664-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	330		25	13	ug/L	5		8260B	Total/NA
Aluminum	260		100	50	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-2 — Lab Sample ID: 680-96664-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	4.3	J	5.0	1.0	mg/L	1		8015C	Total/NA
Aluminum	120		100	50	ug/L	1		6020A	Total/NA
Barium	3000		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	170		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	47000		100	40	ug/L	20		6020A	Total/NA
Nickel	33		5.0	2.0	ug/L	1		6020A	Total/NA
Arsenic	4.3		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: LF-5 — Lab Sample ID: 680-96664-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.2		1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	0.66	J	1.0	0.13	ug/L	1		8260B	Total/NA
Methanol	1.0	J	5.0	1.0	mg/L	1		8015C	Total/NA
Chromium	3.9	J	5.0	2.5	ug/L	1		6020A	Total/NA

Client Sample ID: MW-7L — Lab Sample ID: 680-96664-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	2.2	J	5.0	1.0	mg/L	1		8015C	Total/NA
Aluminum	89	J	100	50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-7U — Lab Sample ID: 680-96664-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	240		100	50	ug/L	1		6020A	Total/NA
Beryllium	1.2		0.50	0.15	ug/L	1		6020A	Total/NA
Cadmium	5.7		0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	200		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	58		5.0	1.1	ug/L	1		6020A	Total/NA
Lead	0.75	J	1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	23000		100	40	ug/L	20		6020A	Total/NA
Nickel	63		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: Field Dup 2 — Lab Sample ID: 680-96664-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	240		100	50	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Field Dup 2 (Continued)

Lab Sample ID: 680-96664-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	42		5.0	1.4	ug/L	1		6020A	Total/NA
Beryllium	1.1		0.50	0.15	ug/L	1		6020A	Total/NA
Cadmium	4.7		0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	190		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	57		5.0	1.1	ug/L	1		6020A	Total/NA
Iron	26000		100	44	ug/L	1		6020A	Total/NA
Lead	0.73	J	1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	22000		100	40	ug/L	20		6020A	Total/NA
Nickel	59		5.0	2.0	ug/L	1		6020A	Total/NA
Zinc	45		20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-96664-9

No Detections.

Client Sample ID: MW-9

Lab Sample ID: 680-96664-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	270		100	50	ug/L	1		6020A	Total/NA
Iron	120000		100	44	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-6
Date Collected: 11/27/13 09:40
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-1
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1100		100	50	ug/L		12/02/13 11:33	12/04/13 02:16	1
Lead	0.66	J	1.5	0.50	ug/L		12/02/13 11:33	12/04/13 02:16	1

Client Sample ID: WWL-1
Date Collected: 11/27/13 11:25
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	330		25	13	ug/L			12/05/13 19:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*87*		*70 - 130*		*12/05/13 19:01*	*5*
Toluene-d8 (Surr)	*103*		*70 - 130*		*12/05/13 19:01*	*5*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	260		100	50	ug/L		12/02/13 11:33	12/04/13 02:54	1
Antimony	5.0	U	5.0	2.0	ug/L		12/02/13 11:33	12/04/13 02:54	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/02/13 11:33	12/04/13 02:54	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: WWL-2
Date Collected: 11/27/13 13:45
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-3
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	4.3	J	5.0	1.0	mg/L			12/06/13 16:26	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	120		100	50	ug/L		12/02/13 11:33	12/04/13 03:01	1
Barium	3000		5.0	1.4	ug/L		12/02/13 11:33	12/04/13 03:01	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/02/13 11:33	12/04/13 03:01	1
Cobalt	170		0.50	0.12	ug/L		12/02/13 11:33	12/04/13 03:01	1
Manganese	47000		100	40	ug/L		12/02/13 11:33	12/04/13 13:07	20
Nickel	33		5.0	2.0	ug/L		12/02/13 11:33	12/04/13 03:01	1
Arsenic	4.3		2.5	1.3	ug/L		12/02/13 11:33	12/04/13 03:01	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: LF-5
Date Collected: 11/27/13 10:00
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.2		1.0	0.25	ug/L			12/05/13 20:02	1
1,2-Dichloroethane	1.0	U *	1.0	0.10	ug/L			12/05/13 20:02	1
Trichloroethene	0.66	J	1.0	0.13	ug/L			12/05/13 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/05/13 20:02*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	1.0	J	5.0	1.0	mg/L			12/06/13 16:50	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	3.9	J	5.0	2.5	ug/L		12/02/13 11:33	12/04/13 03:09	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-7L
Date Collected: 11/27/13 12:15
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-5
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	2.2	J	5.0	1.0	mg/L			12/06/13 17:14	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	89	J	100	50	ug/L		12/02/13 11:33	12/04/13 03:31	1
Chromium	5.0	U	5.0	2.5	ug/L		12/02/13 11:33	12/04/13 03:31	1
Lead	1.5	U	1.5	0.50	ug/L		12/02/13 11:33	12/04/13 03:31	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-7U
Date Collected: 11/27/13 13:05
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.26	U	0.26	0.13	ug/L		12/02/13 16:15	12/03/13 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*30 - 130*	*12/02/13 16:15*	*12/03/13 23:08*	*1*
2-Fluorophenol (Surr)	*67*		*25 - 130*	*12/02/13 16:15*	*12/03/13 23:08*	*1*
Terphenyl-d14 (Surr)	*89*		*36 - 130*	*12/02/13 16:15*	*12/03/13 23:08*	*1*
Phenol-d5 (Surr)	*65*		*27 - 130*	*12/02/13 16:15*	*12/03/13 23:08*	*1*
Nitrobenzene-d5 (Surr)	*67*		*32 - 130*	*12/02/13 16:15*	*12/03/13 23:08*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**240**		100	50	ug/L		12/02/13 11:33	12/04/13 03:38	1
Beryllium	**1.2**		0.50	0.15	ug/L		12/02/13 11:33	12/04/13 03:38	1
Cadmium	**5.7**		0.50	0.13	ug/L		12/02/13 11:33	12/04/13 03:38	1
Cobalt	**200**		0.50	0.12	ug/L		12/02/13 11:33	12/04/13 03:38	1
Copper	**58**		5.0	1.1	ug/L		12/02/13 11:33	12/04/13 03:38	1
Lead	**0.75**	**J**	1.5	0.50	ug/L		12/02/13 11:33	12/04/13 03:38	1
Manganese	**23000**		100	40	ug/L		12/02/13 11:33	12/04/13 13:14	20
Mercury	0.80	U	0.80	0.40	ug/L		12/02/13 11:33	12/04/13 03:38	1
Nickel	**63**		5.0	2.0	ug/L		12/02/13 11:33	12/04/13 03:38	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: Field Dup 2
Date Collected: 11/27/13 00:00
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-8
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**240**		100	50	ug/L		12/02/13 11:33	12/04/13 03:46	1
Antimony	5.0	U	5.0	2.0	ug/L		12/02/13 11:33	12/04/13 03:46	1
Barium	**42**		5.0	1.4	ug/L		12/02/13 11:33	12/04/13 03:46	1
Beryllium	**1.1**		0.50	0.15	ug/L		12/02/13 11:33	12/04/13 03:46	1
Cadmium	**4.7**		0.50	0.13	ug/L		12/02/13 11:33	12/04/13 03:46	1
Chromium	5.0	U	5.0	2.5	ug/L		12/02/13 11:33	12/04/13 03:46	1
Cobalt	**190**		0.50	0.12	ug/L		12/02/13 11:33	12/04/13 03:46	1
Copper	**57**		5.0	1.1	ug/L		12/02/13 11:33	12/04/13 03:46	1
Iron	**26000**		100	44	ug/L		12/02/13 11:33	12/04/13 03:46	1
Lead	**0.73**	**J**	1.5	0.50	ug/L		12/02/13 11:33	12/04/13 03:46	1
Manganese	**22000**		100	40	ug/L		12/02/13 11:33	12/04/13 13:22	20
Mercury	0.80	U	0.80	0.40	ug/L		12/02/13 11:33	12/04/13 03:46	1
Nickel	**59**		5.0	2.0	ug/L		12/02/13 11:33	12/04/13 03:46	1
Selenium	2.5	U	2.5	1.1	ug/L		12/02/13 11:33	12/04/13 03:46	1
Vanadium	10	U	10	3.2	ug/L		12/02/13 11:33	12/04/13 03:46	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/02/13 11:33	12/04/13 03:46	1
Thallium	1.0	U	1.0	0.25	ug/L		12/02/13 11:33	12/04/13 03:46	1
Silver	1.0	U	1.0	0.18	ug/L		12/02/13 11:33	12/04/13 03:46	1
Zinc	**45**		20	8.4	ug/L		12/02/13 11:33	12/04/13 03:46	1
Tin	5.0	U	5.0	1.4	ug/L		12/02/13 11:33	12/04/13 03:46	1

Client Sample ID: Trip Blank
Date Collected: 11/27/13 00:00
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/06/13 14:09	1
Acetonitrile	40	U	40	10	ug/L			12/06/13 14:09	1
Acrolein	20	U	20	7.4	ug/L			12/06/13 14:09	1
Acrylonitrile	20	U	20	7.2	ug/L			12/06/13 14:09	1
Benzene	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/06/13 14:09	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/06/13 14:09	1
2-Butanone	10	U *	10	1.0	ug/L			12/06/13 14:09	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/06/13 14:09	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/06/13 14:09	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/06/13 14:09	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/06/13 14:09	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/06/13 14:09	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/06/13 14:09	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/06/13 14:09	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/06/13 14:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/06/13 14:09	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/06/13 14:09	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/06/13 14:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/06/13 14:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/06/13 14:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/06/13 14:09	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/06/13 14:09	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/06/13 14:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			12/06/13 14:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			12/06/13 14:09	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/06/13 14:09	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
2-Hexanone	10	U	10	1.0	ug/L			12/06/13 14:09	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/06/13 14:09	1
Isobutyl alcohol	40	U	40	11	ug/L			12/06/13 14:09	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/06/13 14:09	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/06/13 14:09	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/06/13 14:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/06/13 14:09	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/06/13 14:09	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/06/13 14:09	1
Propionitrile	20	U	20	4.6	ug/L			12/06/13 14:09	1
Styrene	1.0	U	1.0	0.11	ug/L			12/06/13 14:09	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/06/13 14:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/06/13 14:09	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/06/13 14:09	1
Toluene	1.0	U	1.0	0.33	ug/L			12/06/13 14:09	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			12/06/13 14:09	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: Trip Blank
Date Collected: 11/27/13 00:00
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/06/13 14:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/06/13 14:09	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/06/13 14:09	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/06/13 14:09	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/06/13 14:09	1
Vinyl acetate	2.0	U *	2.0	0.28	ug/L			12/06/13 14:09	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/06/13 14:09	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/06/13 14:09	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/06/13 14:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Acetamide, 2-(4-morpholylcarbonylmethyl)	*26*	*T J N*	*ug/L*		*1.13*	*1000294-57-8*		*12/06/13 14:09*	*1*
1,4-Dichlorobenzene-D4	*51*	*T J N*	*ug/L*		*8.90*	*3855-82-1*		*12/06/13 14:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*12/06/13 14:09*	*1*
Dibromofluoromethane	*118*		*70 - 130*		*12/06/13 14:09*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*12/06/13 14:09*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-9
Date Collected: 11/27/13 14:15
Date Received: 11/30/13 08:43

Lab Sample ID: 680-96664-10
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**270**		100	50	ug/L		12/02/13 11:33	12/04/13 03:53	1
Iron	**120000**		100	44	ug/L		12/02/13 11:33	12/04/13 03:53	1
Lead	1.5	U	1.5	0.50	ug/L		12/02/13 11:33	12/04/13 03:53	1

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-96664-2	WWL-1	87	103	
680-96664-4	LF-5		102	
680-96664-9	Trip Blank	118	105	99
LCS 680-306176/5	Lab Control Sample	79	106	98
LCS 680-306385/4	Lab Control Sample	104	109	103
LCSD 680-306176/10	Lab Control Sample Dup	76	102	95
LCSD 680-306385/5	Lab Control Sample Dup	99	99	101
MB 680-306176/9	Method Blank	86	101	92
MB 680-306385/7	Method Blank	116	101	102

Surrogate Legend

DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	TPH	PHL	NBZ
Lab Sample ID	Client Sample ID	(30-130)	(34-130)	(25-130)	(36-130)	(27-130)	(32-130)
680-96664-6	MW-7U	82		67	89	65	67
LCS 680-305667/5-A	Lab Control Sample	82	70	63	75	61	64
LCSD 680-305667/6-A	Lab Control Sample Dup	87	72	66	76	66	65
MB 680-305667/4-A	Method Blank	53	53	43	63	35	47

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-306176/9
Matrix: Water
Analysis Batch: 306176

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U	5.0	2.6	ug/L			12/05/13 12:37	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/05/13 12:37	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/05/13 12:37	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/05/13 12:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/05/13 12:37	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			12/05/13 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*12/05/13 12:37*	*1*
Dibromofluoromethane	*86*		*70 - 130*		*12/05/13 12:37*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/05/13 12:37*	*1*

Lab Sample ID: LCS 680-306176/5
Matrix: Water
Analysis Batch: 306176

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diethyl ether	50.0	49.6		ug/L		99	40 - 160
t-Butanol	50.0	42.0		ug/L		84	49 - 148
Chloroform	50.0	44.9		ug/L		90	76 - 128
1,1-Dichloroethane	50.0	47.7		ug/L		95	69 - 132
1,2-Dichloroethane	50.0	62.1	*	ug/L		124	75 - 120
Tetrachloroethene	50.0	46.8		ug/L		94	77 - 128
Trichloroethene	50.0	52.2		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane	*79*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 680-306176/10
Matrix: Water
Analysis Batch: 306176

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
Diethyl ether	50.0	46.8		ug/L		94	40 - 160	6	50
t-Butanol	50.0	41.4		ug/L		83	49 - 148	2	50
Chloroform	50.0	42.8		ug/L		86	76 - 128	5	30
1,1-Dichloroethane	50.0	43.8		ug/L		88	69 - 132	9	30
1,2-Dichloroethane	50.0	58.7		ug/L		117	75 - 120	6	30
Tetrachloroethene	50.0	45.4		ug/L		91	77 - 128	3	30
Trichloroethene	50.0	49.6		ug/L		99	80 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane	*76*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-306385/7
Matrix: Water
Analysis Batch: 306385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			12/06/13 11:34	1
Acetonitrile	40	U	40	10	ug/L			12/06/13 11:34	1
Acrolein	20	U	20	7.4	ug/L			12/06/13 11:34	1
Acrylonitrile	20	U	20	7.2	ug/L			12/06/13 11:34	1
Benzene	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
Bromoform	1.0	U	1.0	0.50	ug/L			12/06/13 11:34	1
Bromomethane	5.0	U	5.0	2.0	ug/L			12/06/13 11:34	1
2-Butanone	10	U	10	1.0	ug/L			12/06/13 11:34	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			12/06/13 11:34	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			12/06/13 11:34	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
Chloroprene	1.0	U	1.0	0.30	ug/L			12/06/13 11:34	1
Chloroethane	5.0	U	5.0	2.0	ug/L			12/06/13 11:34	1
Chloroform	1.0	U	1.0	0.14	ug/L			12/06/13 11:34	1
Chloromethane	1.0	U	1.0	0.33	ug/L			12/06/13 11:34	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			12/06/13 11:34	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			12/06/13 11:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			12/06/13 11:34	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			12/06/13 11:34	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			12/06/13 11:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			12/06/13 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			12/06/13 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			12/06/13 11:34	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			12/06/13 11:34	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			12/06/13 11:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			12/06/13 11:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			12/06/13 11:34	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/06/13 11:34	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
2-Hexanone	10	U	10	1.0	ug/L			12/06/13 11:34	1
Iodomethane	5.0	U	5.0	1.0	ug/L			12/06/13 11:34	1
Isobutyl alcohol	40	U	40	11	ug/L			12/06/13 11:34	1
Methacrylonitrile	20	U	20	3.3	ug/L			12/06/13 11:34	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			12/06/13 11:34	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			12/06/13 11:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			12/06/13 11:34	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			12/06/13 11:34	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			12/06/13 11:34	1
Propionitrile	20	U	20	4.6	ug/L			12/06/13 11:34	1
Styrene	1.0	U	1.0	0.11	ug/L			12/06/13 11:34	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			12/06/13 11:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			12/06/13 11:34	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/06/13 11:34	1
Toluene	1.0	U	1.0	0.33	ug/L			12/06/13 11:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-306385/7
Matrix: Water
Analysis Batch: 306385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	0.358	J	1.0	0.35	ug/L			12/06/13 11:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			12/06/13 11:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			12/06/13 11:34	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			12/06/13 11:34	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			12/06/13 11:34	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			12/06/13 11:34	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			12/06/13 11:34	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			12/06/13 11:34	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			12/06/13 11:34	1
n-Heptane	1.0	U	1.0	0.42	ug/L			12/06/13 11:34	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,2,4-Trichlorobenzene	*0.309*	*J*	*ug/L*		*10.26*	*120-82-1*		*12/06/13 11:34*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*12/06/13 11:34*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*12/06/13 11:34*	*1*
Dibromofluoromethane	*116*		*70 - 130*		*12/06/13 11:34*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/06/13 11:34*	*1*

Lab Sample ID: LCS 680-306385/4
Matrix: Water
Analysis Batch: 306385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	109		ug/L		109	39 - 162
Benzene	50.0	51.5		ug/L		103	74 - 123
Bromodichloromethane	50.0	51.0		ug/L		102	72 - 129
Bromoform	50.0	36.0		ug/L		72	60 - 134
Bromomethane	50.0	33.9		ug/L		68	10 - 171
2-Butanone	100	159	*	ug/L		159	55 - 142
Carbon disulfide	50.0	47.2		ug/L		94	63 - 142
Carbon tetrachloride	50.0	44.7		ug/L		89	70 - 131
Chlorobenzene	50.0	53.2		ug/L		106	79 - 120
Chloroethane	50.0	42.8		ug/L		86	47 - 148
Chloroform	50.0	49.8		ug/L		100	76 - 128
Chloromethane	50.0	42.1		ug/L		84	47 - 151
Dibromochloromethane	50.0	45.8		ug/L		92	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	55.8		ug/L		112	57 - 126
1,2-Dibromoethane	50.0	57.4		ug/L		115	75 - 127
Dibromomethane	50.0	59.4		ug/L		119	75 - 122
Dichlorodifluoromethane	50.0	40.7		ug/L		81	41 - 165
1,1-Dichloroethane	50.0	48.9		ug/L		98	69 - 132
1,2-Dichloroethane	50.0	54.4		ug/L		109	75 - 120
cis-1,2-Dichloroethene	50.0	53.5		ug/L		107	78 - 127
trans-1,2-Dichloroethene	50.0	55.2		ug/L		110	78 - 130
1,1-Dichloroethene	50.0	42.7		ug/L		85	73 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-306385/4
Matrix: Water
Analysis Batch: 306385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	46.8		ug/L		94	71 - 126
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128
trans-1,3-Dichloropropene	50.0	50.8		ug/L		102	72 - 127
Ethylbenzene	50.0	52.7		ug/L		105	78 - 125
2-Hexanone	100	106		ug/L		106	52 - 149
Methylene Chloride	50.0	49.9		ug/L		100	79 - 124
4-Methyl-2-pentanone (MIBK)	100	117		ug/L		117	51 - 143
Methyl tert-butyl ether	100	111		ug/L		111	76 - 126
Styrene	50.0	54.7		ug/L		109	75 - 129
1,1,1,2-Tetrachloroethane	50.0	49.6		ug/L		99	68 - 132
1,1,2,2-Tetrachloroethane	50.0	55.1		ug/L		110	71 - 127
Tetrachloroethene	50.0	51.0		ug/L		102	77 - 128
Toluene	50.0	57.3		ug/L		115	77 - 125
1,2,3-Trichlorobenzene	50.0	59.8		ug/L		120	63 - 136
1,1,1-Trichloroethane	50.0	47.3		ug/L		95	76 - 126
1,1,2-Trichloroethane	50.0	60.1		ug/L		120	69 - 127
Trichloroethylene	50.0	50.6		ug/L		101	80 - 120
Trichlorofluoromethane	50.0	37.9		ug/L		76	66 - 144
1,2,3-Trichloropropane	50.0	48.8		ug/L		98	74 - 126
Vinyl acetate	100	203	*	ug/L		203	10 - 200
Vinyl chloride	50.0	45.1		ug/L		90	58 - 141
Xylenes, Total	150	154		ug/L		103	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 680-306385/5
Matrix: Water
Analysis Batch: 306385

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
Acetone	100	78.4		ug/L		78	39 - 162	33	50
Benzene	50.0	47.6		ug/L		95	74 - 123	8	30
Bromodichloromethane	50.0	48.0		ug/L		96	72 - 129	6	30
Bromoform	50.0	34.5		ug/L		69	60 - 134	4	30
Bromomethane	50.0	33.6		ug/L		67	10 - 171	1	50
2-Butanone	100	126		ug/L		126	55 - 142	24	30
Carbon disulfide	50.0	35.4		ug/L		71	63 - 142	29	30
Carbon tetrachloride	50.0	39.2		ug/L		78	70 - 131	13	30
Chlorobenzene	50.0	50.4		ug/L		101	79 - 120	5	30
Chloroethane	50.0	39.9		ug/L		80	47 - 148	7	40
Chloroform	50.0	47.2		ug/L		94	76 - 128	5	30
Chloromethane	50.0	38.3		ug/L		77	47 - 151	10	30
Dibromochloromethane	50.0	46.6		ug/L		93	63 - 134	2	50
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/L		100	57 - 126	11	50
1,2-Dibromoethane	50.0	52.1		ug/L		104	75 - 127	10	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-306385/5
Matrix: Water
Analysis Batch: 306385

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
Dibromomethane	50.0	53.5		ug/L		107	75 - 122	10	30
Dichlorodifluoromethane	50.0	36.7		ug/L		73	41 - 165	10	50
1,1-Dichloroethane	50.0	45.0		ug/L		90	69 - 132	8	30
1,2-Dichloroethane	50.0	52.3		ug/L		105	75 - 120	4	30
cis-1,2-Dichloroethene	50.0	49.6		ug/L		99	78 - 127	8	30
trans-1,2-Dichloroethene	50.0	51.2		ug/L		102	78 - 130	8	30
1,1-Dichloroethene	50.0	37.6		ug/L		75	73 - 134	13	30
1,2-Dichloropropane	50.0	49.1		ug/L		98	71 - 126	5	30
cis-1,3-Dichloropropene	50.0	51.4		ug/L		103	73 - 128	5	30
trans-1,3-Dichloropropene	50.0	52.8		ug/L		106	72 - 127	4	50
Ethylbenzene	50.0	48.8		ug/L		98	78 - 125	8	30
2-Hexanone	100	97.6		ug/L		98	52 - 149	8	30
Methylene Chloride	50.0	43.8		ug/L		88	79 - 124	13	30
4-Methyl-2-pentanone (MIBK)	100	96.8		ug/L		97	51 - 143	19	30
Methyl tert-butyl ether	100	97.9		ug/L		98	76 - 126	13	30
Styrene	50.0	53.0		ug/L		106	75 - 129	3	30
1,1,1,2-Tetrachloroethane	50.0	49.9		ug/L		100	68 - 132	1	30
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	71 - 127	5	30
Tetrachloroethene	50.0	47.8		ug/L		96	77 - 128	6	30
Toluene	50.0	49.2		ug/L		98	77 - 125	15	30
1,2,3-Trichlorobenzene	50.0	57.6		ug/L		115	63 - 136	4	30
1,1,1-Trichloroethane	50.0	43.5		ug/L		87	76 - 126	9	30
1,1,2-Trichloroethane	50.0	52.9		ug/L		106	69 - 127	13	30
Trichloroethylene	50.0	46.8		ug/L		94	80 - 120	8	30
Trichlorofluoromethane	50.0	35.0		ug/L		70	66 - 144	8	30
1,2,3-Trichloropropane	50.0	53.6		ug/L		107	74 - 126	9	30
Vinyl acetate	100	123	*	ug/L		123	10 - 200	49	30
Vinyl chloride	50.0	37.1		ug/L		74	58 - 141	19	30
Xylenes, Total	150	149		ug/L		100	80 - 124	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*99*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-305667/4-A
Matrix: Water
Analysis Batch: 305928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.20	U	0.20	0.10	ug/L		12/02/13 16:15	12/03/13 19:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*53*		*30 - 130*	*12/02/13 16:15*	*12/03/13 19:26*	*1*
2-Fluorophenol (Surr)	*43*		*25 - 130*	*12/02/13 16:15*	*12/03/13 19:26*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-305667/4-A
Matrix: Water
Analysis Batch: 305928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305667

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	*63*		*36 - 130*	*12/02/13 16:15*	*12/03/13 19:26*	*1*
Phenol-d5 (Surr)	*35*		*27 - 130*	*12/02/13 16:15*	*12/03/13 19:26*	*1*
Nitrobenzene-d5 (Surr)	*47*		*32 - 130*	*12/02/13 16:15*	*12/03/13 19:26*	*1*

Lab Sample ID: LCS 680-305667/5-A
Matrix: Water
Analysis Batch: 305928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	6.19		ug/L		62	10 - 130
Bis(2-chloroethyl)ether	10.0	8.23		ug/L		82	36 - 130
Naphthalene	10.0	8.51		ug/L		85	35 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*82*		*30 - 130*
2-Fluorobiphenyl	*70*		*34 - 130*
2-Fluorophenol (Surr)	*63*		*25 - 130*
Terphenyl-d14 (Surr)	*75*		*36 - 130*
Phenol-d5 (Surr)	*61*		*27 - 130*
Nitrobenzene-d5 (Surr)	*64*		*32 - 130*

Lab Sample ID: LCSD 680-305667/6-A
Matrix: Water
Analysis Batch: 305928

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305667

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	10.0	6.11		ug/L		61	10 - 130	1	50
Bis(2-chloroethyl)ether	10.0	7.84		ug/L		78	36 - 130	5	50
Naphthalene	10.0	8.21		ug/L		82	35 - 130	4	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*87*		*30 - 130*
2-Fluorobiphenyl	*72*		*34 - 130*
2-Fluorophenol (Surr)	*66*		*25 - 130*
Terphenyl-d14 (Surr)	*76*		*36 - 130*
Phenol-d5 (Surr)	*66*		*27 - 130*
Nitrobenzene-d5 (Surr)	*65*		*32 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-306407/8
Matrix: Water
Analysis Batch: 306407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			12/06/13 12:30	1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: LCS 680-306407/4
Matrix: Water
Analysis Batch: 306407

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	20.0	22.0		mg/L		110	43 - 143

Lab Sample ID: LCSD 680-306407/5
Matrix: Water
Analysis Batch: 306407

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
Methanol	20.0	22.2		mg/L		111	43 - 143	1	50

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-305676/1-A
Matrix: Water
Analysis Batch: 306087

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		12/02/13 11:33	12/04/13 02:02	1
Antimony	5.0	U	5.0	2.0	ug/L		12/02/13 11:33	12/04/13 02:02	1
Barium	5.0	U	5.0	1.4	ug/L		12/02/13 11:33	12/04/13 02:02	1
Beryllium	0.50	U	0.50	0.15	ug/L		12/02/13 11:33	12/04/13 02:02	1
Cadmium	0.50	U	0.50	0.13	ug/L		12/02/13 11:33	12/04/13 02:02	1
Chromium	5.0	U	5.0	2.5	ug/L		12/02/13 11:33	12/04/13 02:02	1
Cobalt	0.50	U	0.50	0.12	ug/L		12/02/13 11:33	12/04/13 02:02	1
Copper	5.0	U	5.0	1.1	ug/L		12/02/13 11:33	12/04/13 02:02	1
Iron	100	U	100	44	ug/L		12/02/13 11:33	12/04/13 02:02	1
Lead	1.5	U	1.5	0.50	ug/L		12/02/13 11:33	12/04/13 02:02	1
Manganese	5.0	U	5.0	2.0	ug/L		12/02/13 11:33	12/04/13 02:02	1
Mercury	0.80	U	0.80	0.40	ug/L		12/02/13 11:33	12/04/13 02:02	1
Nickel	5.0	U	5.0	2.0	ug/L		12/02/13 11:33	12/04/13 02:02	1
Selenium	2.5	U	2.5	1.1	ug/L		12/02/13 11:33	12/04/13 02:02	1
Vanadium	10	U	10	3.2	ug/L		12/02/13 11:33	12/04/13 02:02	1
Arsenic	2.5	U	2.5	1.3	ug/L		12/02/13 11:33	12/04/13 02:02	1
Thallium	1.0	U	1.0	0.25	ug/L		12/02/13 11:33	12/04/13 02:02	1
Silver	1.0	U	1.0	0.18	ug/L		12/02/13 11:33	12/04/13 02:02	1
Zinc	20	U	20	8.4	ug/L		12/02/13 11:33	12/04/13 02:02	1
Tin	5.0	U	5.0	1.4	ug/L		12/02/13 11:33	12/04/13 02:02	1

Lab Sample ID: LCS 680-305676/2-A
Matrix: Water
Analysis Batch: 306087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5220		ug/L		104	75 - 125
Antimony	50.0	56.3		ug/L		113	75 - 125
Barium	100	109		ug/L		109	75 - 125
Beryllium	50.0	53.2		ug/L		106	75 - 125
Cadmium	50.0	53.1		ug/L		106	75 - 125
Chromium	100	104		ug/L		104	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-305676/2-A
Matrix: Water
Analysis Batch: 306087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.0	52.4		ug/L		105	75 - 125
Copper	100	106		ug/L		106	75 - 125
Iron	5000	5420		ug/L		108	75 - 125
Lead	50.0	55.6		ug/L		111	75 - 125
Manganese	500	563		ug/L		113	75 - 125
Mercury	5.00	5.19		ug/L		104	75 - 125
Nickel	100	106		ug/L		106	75 - 125
Selenium	100	104		ug/L		104	75 - 125
Vanadium	100	101		ug/L		101	75 - 125
Arsenic	100	106		ug/L		106	75 - 125
Thallium	40.0	42.8		ug/L		107	75 - 125
Silver	50.0	54.7		ug/L		109	75 - 125
Zinc	100	114		ug/L		114	75 - 125
Tin	200	223		ug/L		112	75 - 125

Lab Sample ID: 680-96664-1 MS
Matrix: Water
Analysis Batch: 306087

Client Sample ID: MW-6
Prep Type: Total/NA
Prep Batch: 305676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1100		5000	6080		ug/L		100	75 - 125
Antimony	5.0		50.0	55.4		ug/L		111	75 - 125
Barium	440		100	542	4	ug/L		106	75 - 125
Beryllium	0.50		50.0	48.4		ug/L		97	75 - 125
Cadmium	1.4		50.0	52.1		ug/L		101	75 - 125
Chromium	6.9		100	110		ug/L		103	75 - 125
Cobalt	28		50.0	77.0		ug/L		98	75 - 125
Copper	3.8		100	104		ug/L		101	75 - 125
Iron	41000		5000	45900	4	ug/L		97	75 - 125
Lead	0.66	J	50.0	50.7		ug/L		100	75 - 125
Manganese	5200		500	5730	4	ug/L		97	75 - 125
Mercury	0.80		5.00	5.42		ug/L		108	75 - 125
Nickel	7.8		100	108		ug/L		100	75 - 125
Selenium	2.5		100	102		ug/L		102	75 - 125
Vanadium	4.6		100	109		ug/L		104	75 - 125
Arsenic	2.4		100	109		ug/L		106	75 - 125
Thallium	1.0		40.0	38.7		ug/L		97	75 - 125
Silver	1.0		50.0	50.7		ug/L		101	75 - 125
Zinc	20		100	112		ug/L		112	75 - 125
Tin	5.0		200	220		ug/L		110	75 - 125

Lab Sample ID: 680-96664-1 MSD
Matrix: Water
Analysis Batch: 306087

Client Sample ID: MW-6
Prep Type: Total/NA
Prep Batch: 305676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	1100		5000	6000		ug/L		99	75 - 125	1	20
Antimony	5.0		50.0	54.9		ug/L		110	75 - 125	1	20
Barium	440		100	547	4	ug/L		111	75 - 125	1	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-96664-1 MSD
Matrix: Water
Analysis Batch: 306087

Client Sample ID: MW-6
Prep Type: Total/NA
Prep Batch: 305676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	0.50		50.0	48.7		ug/L		97	75 - 125	1	20
Cadmium	1.4		50.0	52.3		ug/L		102	75 - 125	0	20
Chromium	6.9		100	110		ug/L		103	75 - 125	0	20
Cobalt	28		50.0	76.7		ug/L		97	75 - 125	0	20
Copper	3.8		100	105		ug/L		101	75 - 125	0	20
Iron	41000		5000	46900	4	ug/L		116	75 - 125	2	20
Lead	0.66	J	50.0	50.7		ug/L		100	75 - 125	0	20
Manganese	5200		500	5780	4	ug/L		107	75 - 125	1	20
Mercury	0.80		5.00	5.47		ug/L		109	75 - 125	1	20
Nickel	7.8		100	107		ug/L		100	75 - 125	1	20
Selenium	2.5		100	101		ug/L		101	75 - 125	1	20
Vanadium	4.6		100	109		ug/L		104	75 - 125	0	20
Arsenic	2.4		100	108		ug/L		105	75 - 125	1	20
Thallium	1.0		40.0	38.5		ug/L		96	75 - 125	1	20
Silver	1.0		50.0	49.7		ug/L		99	75 - 125	2	20
Zinc	20		100	112		ug/L		112	75 - 125	0	20
Tin	5.0		200	219		ug/L		109	75 - 125	0	20

GC/MS VOA

Analysis Batch: 306176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-2	WWL-1	Total/NA	Water	8260B	
680-96664-4	LF-5	Total/NA	Water	8260B	
LCS 680-306176/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-306176/10	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-306176/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 306385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-9	Trip Blank	Total/NA	Water	8260B	
LCS 680-306385/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-306385/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-306385/7	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 305667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-6	MW-7U	Total/NA	Water	3520C	
LCS 680-305667/5-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-305667/6-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 680-305667/4-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 305928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-6	MW-7U	Total/NA	Water	8270D LL	305667
LCS 680-305667/5-A	Lab Control Sample	Total/NA	Water	8270D LL	305667
LCSD 680-305667/6-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	305667
MB 680-305667/4-A	Method Blank	Total/NA	Water	8270D LL	305667

GC VOA

Analysis Batch: 306407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-3	WWL-2	Total/NA	Water	8015C	
680-96664-4	LF-5	Total/NA	Water	8015C	
680-96664-5	MW-7L	Total/NA	Water	8015C	
LCS 680-306407/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-306407/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-306407/8	Method Blank	Total/NA	Water	8015C	

Metals

Prep Batch: 305676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-1	MW-6	Total/NA	Water	3010A	
680-96664-1 MS	MW-6	Total/NA	Water	3010A	
680-96664-1 MSD	MW-6	Total/NA	Water	3010A	
680-96664-2	WWL-1	Total/NA	Water	3010A	
680-96664-3	WWL-2	Total/NA	Water	3010A	
680-96664-4	LF-5	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 305676 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-5	MW-7L	Total/NA	Water	3010A	
680-96664-6	MW-7U	Total/NA	Water	3010A	
680-96664-8	Field Dup 2	Total/NA	Water	3010A	
680-96664-10	MW-9	Total/NA	Water	3010A	
LCS 680-305676/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-305676/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 306087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-96664-1	MW-6	Total/NA	Water	6020A	305676
680-96664-1 MS	MW-6	Total/NA	Water	6020A	305676
680-96664-1 MSD	MW-6	Total/NA	Water	6020A	305676
680-96664-2	WWL-1	Total/NA	Water	6020A	305676
680-96664-3	WWL-2	Total/NA	Water	6020A	305676
680-96664-3	WWL-2	Total/NA	Water	6020A	305676
680-96664-4	LF-5	Total/NA	Water	6020A	305676
680-96664-5	MW-7L	Total/NA	Water	6020A	305676
680-96664-6	MW-7U	Total/NA	Water	6020A	305676
680-96664-6	MW-7U	Total/NA	Water	6020A	305676
680-96664-8	Field Dup 2	Total/NA	Water	6020A	305676
680-96664-8	Field Dup 2	Total/NA	Water	6020A	305676
680-96664-10	MW-9	Total/NA	Water	6020A	305676
LCS 680-305676/2-A	Lab Control Sample	Total/NA	Water	6020A	305676
MB 680-305676/1-A	Method Blank	Total/NA	Water	6020A	305676

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-6

Lab Sample ID: 680-96664-1

Date Collected: 11/27/13 09:40

Matrix: Water

Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 02:16	BWR	TAL SAV

Client Sample ID: WWL-1

Lab Sample ID: 680-96664-2

Date Collected: 11/27/13 11:25

Matrix: Water

Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	306176	12/05/13 19:01	JD1	TAL SAV
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 02:54	BWR	TAL SAV

Client Sample ID: WWL-2

Lab Sample ID: 680-96664-3

Date Collected: 11/27/13 13:45

Matrix: Water

Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	306407	12/06/13 16:26	AJMC	TAL SAV
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		20	306087	12/04/13 13:07	BWR	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 03:01	BWR	TAL SAV

Client Sample ID: LF-5

Lab Sample ID: 680-96664-4

Date Collected: 11/27/13 10:00

Matrix: Water

Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	306176	12/05/13 20:02	JD1	TAL SAV
Total/NA	Analysis	8015C		1	306407	12/06/13 16:50	AJMC	TAL SAV
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 03:09	BWR	TAL SAV

Client Sample ID: MW-7L

Lab Sample ID: 680-96664-5

Date Collected: 11/27/13 12:15

Matrix: Water

Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	306407	12/06/13 17:14	AJMC	TAL SAV
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 03:31	BWR	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Client Sample ID: MW-7U

Lab Sample ID: 680-96664-6

Date Collected: 11/27/13 13:05
Matrix: Water
Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			305667	12/02/13 16:15	RNJ	TAL SAV
Total/NA	Analysis	8270D LL		1	305928	12/03/13 23:08	JPM	TAL SAV
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		20	306087	12/04/13 13:14	BWR	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 03:38	BWR	TAL SAV

Client Sample ID: Field Dup 2

Lab Sample ID: 680-96664-8

Date Collected: 11/27/13 00:00
Matrix: Water
Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020A		20	306087	12/04/13 13:22	BWR	TAL SAV
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 03:46	BWR	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-96664-9

Date Collected: 11/27/13 00:00
Matrix: Water
Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	306385	12/06/13 14:09	JD1	TAL SAV

Client Sample ID: MW-9

Lab Sample ID: 680-96664-10

Date Collected: 11/27/13 14:15
Matrix: Water
Date Received: 11/30/13 08:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			305676	12/02/13 11:33	BJB	TAL SAV
Total/NA	Analysis	6020A		1	306087	12/04/13 03:53	BWR	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-14
Arkansas DEQ	State Program	6	88-0692	02-01-14
California	NELAP	9	3217CA	07-31-14
Colorado	State Program	8	N/A	12-31-13 *
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13 *
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	06-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-14
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13 *
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13 *
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13 *
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14 *
South Carolina	State Program	4	98001	06-30-14
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13 *
West Virginia DEP	State Program	3	94	06-30-14
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-96664-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 81904

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)
Ashland-Aqualon		VA
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Kathy Smith		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Erin Wright		
CLIENT NAME	CLIENT E-MAIL	
GES		
CLIENT ADDRESS		
Richmond, VA		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF

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

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS * VOC's 8260	SVOCs 8270	Metals 6020	Methanol/ethanol 8015	PRESERVATIVE HCl	PRESERVATIVE HNO3	NUMBER OF CONTAINERS SUBMITTED	REMARKS
11/27/13	0940	MW-6	G	X						X					* See attached
	1125	WWL-1						X		X					table for
	1345	WWL-2								X	X				reporting
	1000	LF-5						X		X	X				compounds
	1215	MW-7L								X	X				
	1305	MW-7U							X	X					
		Field Blank 1						X							
		Field Dup 2								X					
		Trip Blank						X							

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Kate Hall	11/29	1230						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME		DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABOR
	11/30/13	0843	YES ( ) NO ( )		96664	

680-96664 Chain of Custody

0.4°C

TAL8240-680 (1008)

Page 34 of 35

12/20/2013

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-96664-1

Login Number: 96664

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

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.	False	Received extra samples not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT C

JULY 2014 SITE-WIDTE GROUNDWATER SAMPLING EVENT LABORATORY ANALYTICAL DATA (ON CD)

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: 680-103320-1
Client Project/Site: Hercules Aqualon Corrective Action

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

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
7/29/2014 2:29:41 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

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.
*	ISTD response or retention time outside acceptable limits
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

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

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
A	The tentatively identified compound is a suspected aldol-condensation product.
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits

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, 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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-103320-1	RAB-MW-4	Water	07/15/14 10:55	07/16/14 09:43
680-103320-2	MW-10	Water	07/15/14 15:50	07/16/14 09:43
680-103320-3	NAT-1	Water	07/15/14 10:47	07/16/14 09:43
680-103320-4	MW-5	Water	07/15/14 14:57	07/16/14 09:43
680-103320-5	MW-5U	Water	07/15/14 15:46	07/16/14 09:43
680-103320-6	NAT-3	Water	07/14/14 13:58	07/16/14 09:43
680-103320-7	NAT-2	Water	07/14/14 16:05	07/16/14 09:43
680-103320-8	Trip Blank	Water	07/15/14 00:00	07/16/14 09:43

Job ID: 680-103320-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-103320-1

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

RECEIPT

The samples were received on 07/16/2014; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4º C and 2.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-10 (680-103320-2), NAT-1 (680-103320-3), NAT-3 (680-103320-6) and Trip Blank (680-103320-8) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/18/2014 and 07/21/2014.

Trichlorofluoromethane recovered low for LCS 680-339665/4 and Vinyl acetate recovered high. Vinyl acetate recovered high for LCSD 680-339665/7.

The continuing calibration verification (CCV) analyzed in batch 339665 was outside the method criteria for the following analyte: iodomethane. This compound is a known poor performer; therefore the samples have been reported.

The continuing calibration verification (CCV) associated with batch 339665 recovered above the upper control limit for vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 680-339665/3).

The internal standards for the trip blank in batch 339665 were detected high. Re-analysis occured but internals failed low. Sample was reported biased high but no detections were found.

Sample NAT-3 (680-103320-6)[2000X] 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.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples MW-10 (680-103320-2) and MW-5U (680-103320-5) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/17/2014 and analyzed on 07/23/2014 and 07/24/2014.

The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 340489 was outside criteria for the following analyte(s): Bis(2-chloroethyl)ehter. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 340717 was outside the method criteria for the following analyte(s): Aramite, 2,4-Dinitrophenol, 4-Nitroaniline, Carbazole and Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed;

Job ID: 680-103320-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 340458 was outside the method criteria for the following analyte(s): Caprolactum and Carbazole. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: 3,3'-dichlorobenzidine, Benzidine. These analytes may have a %D >60% if the average %D of all the analytes in the continuing calibration verification (CCV) is 30%.

Sample MW-10 (680-103320-2)[2X] 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.

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples MW-5U (680-103320-5) and NAT-2 (680-103320-7) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 07/23/2014.

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

METALS (ICPMS)

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 07/17/2014 and analyzed on 07/25/2014 and 07/28/2014.

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

METALS (ICPMS)

Samples RAB-MW-4 (680-103320-1), MW-10 (680-103320-2), NAT-1 (680-103320-3), MW-5 (680-103320-4), NAT-3 (680-103320-6) and NAT-2 (680-103320-7) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 07/16/2014 and analyzed on 07/24/2014.

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

ALKALINITY

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 07/20/2014.

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

AMMONIA

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 07/21/2014.

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

ORTHOPHOSPHATE

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 07/16/2014.

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

SULFIDE

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 07/21/2014.

Job ID: 680-103320-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

SULFIDE

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 07/21/2014.

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

9056 ANIONS

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 07/23/2014 and 07/24/2014.

Samples MW-5 (680-103320-4)[2X], MW-5 (680-103320-4)[25X], MW-5U (680-103320-5)[10X] and MW-5U (680-103320-5)[100X] 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.

ANIONS BY IC (NITRATE/NITRITE)

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 07/16/2014.

Nitrite as N recovered high for LCS 680-339465/14.

Samples MW-5 (680-103320-4)[10X] and MW-5U (680-103320-5)[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.

DISSOLVED ORGANIC CARBON

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 07/25/2014.

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

UNIONIZED AMMONIA

Samples MW-5 (680-103320-4) and MW-5U (680-103320-5) were analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 07/17/2014.

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

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: RAB-MW-4 — Lab Sample ID: 680-103320-1

No Detections.

Client Sample ID: MW-10 — Lab Sample ID: 680-103320-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.82	J	1.0	0.14	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	0.18	J	1.0	0.10	ug/L	1		8260B	Total/NA
1,4-Dioxane	24		4.0	0.62	ug/L	2		8270D LL	Total/NA
Aluminum	460		100	50	ug/L	1		6020A	Total/NA
Cadmium	3.7		0.50	0.13	ug/L	1		6020A	Total/NA
Nickel	63		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-1 — Lab Sample ID: 680-103320-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	33		1.0	0.13	ug/L	1		8260B	Total/NA
Cadmium	0.35	J	0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	10		0.50	0.12	ug/L	1		6020A	Total/NA
Lead	0.56	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 680-103320-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1200		13	6.3	mg/L	25		9056A	Total/NA
Sulfate	95		1.0	0.50	mg/L	2		9056A	Total/NA
Aluminum	630		100	50	ug/L	1		6020A	Total/NA
Barium	1000		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	69000		100	44	ug/L	1		6020A	Total/NA
Iron, Dissolved	64000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	3200		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	710000		1000	500	ug/L	2		6020A	Dissolved
Potassium, Dissolved	5300		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	180000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	36000		250	43	ug/L	1		6020A	Dissolved
Ammonia	2.7		0.10	0.052	mg/L	2		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	320		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	3.5		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.4		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	19		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	18		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-5U — Lab Sample ID: 680-103320-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methanol	2.5	J	5.0	1.0	mg/L	1		8015C	Total/NA
Chloride	2400		50	25	mg/L	100		9056A	Total/NA
Sulfate	430		5.0	2.5	mg/L	10		9056A	Total/NA
Iron, Dissolved	12000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	2300		5.0	1.0	ug/L	1		6020A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-5U (Continued) — Lab Sample ID: 680-103320-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium, Dissolved	1900000		5000	2500	ug/L	10		6020A	Dissolved
Potassium, Dissolved	5100		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	150000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	38000		250	43	ug/L	1		6020A	Dissolved
Ammonia	0.90		0.050	0.026	mg/L	1		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	1100		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	1100		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	1.2		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.7		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	21		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	35		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: NAT-3 — Lab Sample ID: 680-103320-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	84000		10000	5200	ug/L	2000		8260B	Total/NA
Chromium	5.2		5.0	2.5	ug/L	1		6020A	Total/NA
Nickel	20		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-2 — Lab Sample ID: 680-103320-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.80	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-103320-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: RAB-MW-4
Date Collected: 07/15/14 10:55
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-1
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U	0.50	0.13	ug/L		07/16/14 20:08	07/24/14 00:02	1

Client Sample ID: MW-10
Date Collected: 07/15/14 15:50
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.82	J	1.0	0.14	ug/L			07/18/14 18:03	1
1,2-Dichloroethane	0.18	J	1.0	0.10	ug/L			07/18/14 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*07/18/14 18:03*	*1*
Dibromofluoromethane	*106*		*70 - 130*		*07/18/14 18:03*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/18/14 18:03*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	24		4.0	0.62	ug/L		07/17/14 14:08	07/24/14 17:08	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*30 - 130*	*07/17/14 14:08*	*07/24/14 17:08*	*2*
2-Fluorobiphenyl	*42*		*34 - 130*	*07/17/14 14:08*	*07/24/14 17:08*	*2*
2-Fluorophenol (Surr)	*47*		*25 - 130*	*07/17/14 14:08*	*07/24/14 17:08*	*2*
Terphenyl-d14 (Surr)	*66*		*36 - 130*	*07/17/14 14:08*	*07/24/14 17:08*	*2*
Phenol-d5 (Surr)	*43*		*27 - 130*	*07/17/14 14:08*	*07/24/14 17:08*	*2*
Nitrobenzene-d5 (Surr)	*41*		*32 - 130*	*07/17/14 14:08*	*07/24/14 17:08*	*2*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	460		100	50	ug/L		07/16/14 20:08	07/24/14 00:09	1
Cadmium	3.7		0.50	0.13	ug/L		07/16/14 20:08	07/24/14 00:09	1
Lead	1.5	U	1.5	0.50	ug/L		07/16/14 20:08	07/24/14 00:09	1
Nickel	63		5.0	2.0	ug/L		07/16/14 20:08	07/24/14 00:09	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: NAT-1
Date Collected: 07/15/14 10:47
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	33		1.0	0.13	ug/L			07/18/14 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*07/18/14 18:32*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*07/18/14 18:32*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*07/18/14 18:32*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.35	J	0.50	0.13	ug/L		07/16/14 20:08	07/24/14 00:16	1
Cobalt	10		0.50	0.12	ug/L		07/16/14 20:08	07/24/14 00:16	1
Lead	0.56	J	1.5	0.50	ug/L		07/16/14 20:08	07/24/14 00:16	1

Client Sample ID: MW-5
Date Collected: 07/15/14 14:57
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-4
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1200**		13	6.3	mg/L			07/23/14 20:47	25
Nitrate as N	0.50	U	0.50	0.25	mg/L			07/16/14 20:10	10
Nitrite as N	0.50	U *	0.50	0.25	mg/L			07/16/14 20:10	10
Sulfate	**95**		1.0	0.50	mg/L			07/23/14 21:02	2

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**630**		100	50	ug/L		07/16/14 20:08	07/24/14 00:38	1
Barium	**1000**		5.0	1.4	ug/L		07/16/14 20:08	07/24/14 00:38	1
Iron	**69000**		100	44	ug/L		07/16/14 20:08	07/24/14 00:38	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**64000**		100	33	ug/L		07/17/14 17:33	07/25/14 16:29	1
Manganese, Dissolved	**3200**		5.0	1.0	ug/L		07/17/14 17:33	07/25/14 16:29	1
Sodium, Dissolved	**710000**		1000	500	ug/L		07/17/14 17:33	07/28/14 21:12	2
Potassium, Dissolved	**5300**		500	170	ug/L		07/17/14 17:33	07/25/14 16:29	1
Calcium, Dissolved	**180000**		250	130	ug/L		07/17/14 17:33	07/25/14 16:29	1
Magnesium, Dissolved	**36000**		250	43	ug/L		07/17/14 17:33	07/25/14 16:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	**320**		5.0	5.0	mg/L			07/20/14 22:00	1
Bicarbonate Alkalinity as CaCO3	**320**		5.0	5.0	mg/L			07/20/14 22:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/20/14 22:00	1
Ammonium ion as NH4	**3.5**		0.050	0.050	mg/L			07/17/14 13:29	1
pH	**6.4**		1.0	1.0	SU			07/17/14 13:29	1
Temperature	**19**		1.0	1.0	Degrees C			07/17/14 13:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**2.7**		0.10	0.052	mg/L			07/21/14 11:41	2
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/16/14 18:16	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**18**		1.0	1.0	mg/L			07/25/14 05:38	1

Client Sample ID: MW-5U

Date Collected: 07/15/14 15:46
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-5

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		07/17/14 14:08	07/23/14 19:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Aldol condensation product	*15*	*T J A*	*ug/L*		*5.64*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*47*	*T J*	*ug/L*		*5.92*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*32*	*T J*	*ug/L*		*6.68*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*30*	*T J*	*ug/L*		*7.15*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*44*	*T J*	*ug/L*		*7.58*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*53*	*T J*	*ug/L*		*9.55*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*42*	*T J*	*ug/L*		*9.67*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*36*	*T J*	*ug/L*		*9.74*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*15*	*T J*	*ug/L*		*10.75*		*07/17/14 14:08*	*07/23/14 19:15*	*1*
Unknown	*15*	*T J*	*ug/L*		*10.95*		*07/17/14 14:08*	*07/23/14 19:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*34 - 130*	*07/17/14 14:08*	*07/23/14 19:15*	*1*
2-Fluorophenol	*56*		*25 - 130*	*07/17/14 14:08*	*07/23/14 19:15*	*1*
Nitrobenzene-d5	*59*		*32 - 130*	*07/17/14 14:08*	*07/23/14 19:15*	*1*
Phenol-d5	*59*		*27 - 130*	*07/17/14 14:08*	*07/23/14 19:15*	*1*
Terphenyl-d14	*75*		*36 - 130*	*07/17/14 14:08*	*07/23/14 19:15*	*1*
2,4,6-Tribromophenol	*83*		*30 - 130*	*07/17/14 14:08*	*07/23/14 19:15*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	**2.5**	**J**	5.0	1.0	mg/L			07/23/14 18:08	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		50	25	mg/L			07/23/14 21:18	100
Nitrate as N	0.50	U	0.50	0.25	mg/L			07/16/14 20:25	10
Nitrite as N	0.50	U *	0.50	0.25	mg/L			07/16/14 20:25	10
Sulfate	**430**		5.0	2.5	mg/L			07/24/14 14:14	10

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**12000**		100	33	ug/L		07/17/14 17:33	07/25/14 16:36	1
Manganese, Dissolved	**2300**		5.0	1.0	ug/L		07/17/14 17:33	07/25/14 16:36	1
Sodium, Dissolved	**1900000**		5000	2500	ug/L		07/17/14 17:33	07/28/14 21:17	10
Potassium, Dissolved	**5100**		500	170	ug/L		07/17/14 17:33	07/25/14 16:36	1
Calcium, Dissolved	**150000**		250	130	ug/L		07/17/14 17:33	07/25/14 16:36	1
Magnesium, Dissolved	**38000**		250	43	ug/L		07/17/14 17:33	07/25/14 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	**1100**		5.0	5.0	mg/L			07/20/14 22:14	1
Bicarbonate Alkalinity as CaCO3	**1100**		5.0	5.0	mg/L			07/20/14 22:14	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/20/14 22:14	1
Ammonium ion as NH4	**1.2**		0.050	0.050	mg/L			07/17/14 13:29	1
pH	**6.7**		1.0	1.0	SU			07/17/14 13:29	1
Temperature	**21**		1.0	1.0	Degrees C			07/17/14 13:29	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: MW-5U
Date Collected: 07/15/14 15:46
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-5
Matrix: Water

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.90**		0.050	0.026	mg/L			07/21/14 11:30	1
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/16/14 18:16	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**35**		1.0	1.0	mg/L			07/25/14 06:24	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: NAT-3
Date Collected: 07/14/14 13:58
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	**84000**		10000	5200	ug/L			07/21/14 18:46	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*07/21/14 18:46*	*2000*
Dibromofluoromethane	*116*		*70 - 130*		*07/21/14 18:46*	*2000*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/21/14 18:46*	*2000*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U	0.50	0.13	ug/L		07/16/14 20:08	07/24/14 00:46	1
Chromium	**5.2**		5.0	2.5	ug/L		07/16/14 20:08	07/24/14 00:46	1
Lead	1.5	U	1.5	0.50	ug/L		07/16/14 20:08	07/24/14 00:46	1
Nickel	**20**		5.0	2.0	ug/L		07/16/14 20:08	07/24/14 00:46	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: NAT-2
Date Collected: 07/14/14 16:05
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-7
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 18:32	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.80**	**J**	1.5	0.50	ug/L		07/16/14 20:08	07/24/14 00:53	1

Client Sample ID: Trip Blank — **Lab Sample ID: 680-103320-8**

Date Collected: 07/15/14 00:00 — **Matrix: Water**

Date Received: 07/16/14 09:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U *	25	5.0	ug/L			07/18/14 13:40	1
Acetonitrile	40	U *	40	10	ug/L			07/18/14 13:40	1
Acrolein	20	U *	20	7.4	ug/L			07/18/14 13:40	1
Acrylonitrile	20	U *	20	7.2	ug/L			07/18/14 13:40	1
Allyl chloride	1.0	U *	1.0	0.20	ug/L			07/18/14 13:40	1
Benzene	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
Bromodichloromethane	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
Bromoform	1.0	U *	1.0	0.50	ug/L			07/18/14 13:40	1
Bromomethane	5.0	U *	5.0	2.0	ug/L			07/18/14 13:40	1
2-Butanone	10	U *	10	1.0	ug/L			07/18/14 13:40	1
Carbon disulfide	2.0	U *	2.0	0.60	ug/L			07/18/14 13:40	1
Carbon tetrachloride	1.0	U *	1.0	0.50	ug/L			07/18/14 13:40	1
Chlorobenzene	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
Chloroethane	5.0	U *	5.0	2.0	ug/L			07/18/14 13:40	1
Chloroform	1.0	U *	1.0	0.14	ug/L			07/18/14 13:40	1
Chloromethane	1.0	U *	1.0	0.33	ug/L			07/18/14 13:40	1
Chloroprene	1.0	U *	1.0	0.30	ug/L			07/18/14 13:40	1
cis-1,2-Dichloroethene	1.0	U *	1.0	0.15	ug/L			07/18/14 13:40	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.11	ug/L			07/18/14 13:40	1
Dibromochloromethane	1.0	U *	1.0	0.10	ug/L			07/18/14 13:40	1
1,2-Dibromo-3-Chloropropane	1.0	U *	1.0	0.44	ug/L			07/18/14 13:40	1
1,2-Dibromoethane	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
Dibromomethane	1.0	U *	1.0	0.20	ug/L			07/18/14 13:40	1
Dichlorodifluoromethane	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
1,1-Dichloroethane	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
1,2-Dichloroethane	1.0	U *	1.0	0.10	ug/L			07/18/14 13:40	1
1,1-Dichloroethene	1.0	U *	1.0	0.11	ug/L			07/18/14 13:40	1
1,2-Dichloropropane	1.0	U *	1.0	0.13	ug/L			07/18/14 13:40	1
Ethylbenzene	1.0	U *	1.0	0.11	ug/L			07/18/14 13:40	1
Ethyl methacrylate	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
2-Hexanone	10	U *	10	1.0	ug/L			07/18/14 13:40	1
Iodomethane	5.0	U *	5.0	1.0	ug/L			07/18/14 13:40	1
Isobutyl alcohol	40	U *	40	11	ug/L			07/18/14 13:40	1
Methacrylonitrile	20	U *	20	3.3	ug/L			07/18/14 13:40	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			07/18/14 13:40	1
Methyl methacrylate	1.0	U *	1.0	0.48	ug/L			07/18/14 13:40	1
4-Methyl-2-pentanone (MIBK)	10	U *	10	1.0	ug/L			07/18/14 13:40	1
Methyl tert-butyl ether	10	U *	10	0.20	ug/L			07/18/14 13:40	1
n-Heptane	1.0	U *	1.0	0.42	ug/L			07/18/14 13:40	1
Pentachloroethane	5.0	U *	5.0	1.2	ug/L			07/18/14 13:40	1
Propionitrile	20	U *	20	4.6	ug/L			07/18/14 13:40	1
Styrene	1.0	U *	1.0	0.11	ug/L			07/18/14 13:40	1
1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.33	ug/L			07/18/14 13:40	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.18	ug/L			07/18/14 13:40	1
Tetrachloroethene	1.0	U *	1.0	0.15	ug/L			07/18/14 13:40	1
Toluene	1.0	U *	1.0	0.33	ug/L			07/18/14 13:40	1
trans-1,4-Dichloro-2-butene	2.0	U *	2.0	0.50	ug/L			07/18/14 13:40	1
trans-1,2-Dichloroethene	1.0	U *	1.0	0.20	ug/L			07/18/14 13:40	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.21	ug/L			07/18/14 13:40	1

Client Sample ID: Trip Blank
Date Collected: 07/15/14 00:00
Date Received: 07/16/14 09:43

Lab Sample ID: 680-103320-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	1.0	U *	1.0	0.35	ug/L			07/18/14 13:40	1
1,1,1-Trichloroethane	1.0	U *	1.0	0.50	ug/L			07/18/14 13:40	1
1,1,2-Trichloroethane	1.0	U *	1.0	0.13	ug/L			07/18/14 13:40	1
Trichloroethylene	1.0	U *	1.0	0.13	ug/L			07/18/14 13:40	1
Trichlorofluoromethane	1.0	U *	1.0	0.25	ug/L			07/18/14 13:40	1
1,2,3-Trichloropropane	1.0	U *	1.0	0.41	ug/L			07/18/14 13:40	1
Vinyl acetate	2.0	U *	2.0	0.28	ug/L			07/18/14 13:40	1
Vinyl chloride	1.0	U *	1.0	0.18	ug/L			07/18/14 13:40	1
Xylenes, Total	2.0	U *	2.0	0.20	ug/L			07/18/14 13:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Acetamide, 2-(4-morpholylcarbonylmethyl)	*14*	*T J N*	*ug/L*		*1.06*	*1000294-57-8*		*07/18/14 13:40*	*1*
Unknown	*54*	*T J*	*ug/L*		*1.10*			*07/18/14 13:40*	*1*
1,4-Dichlorobenzene-D4	*54*	*T J N*	*ug/L*		*8.74*	*3855-82-1*		*07/18/14 13:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*	*70 - 130*		*07/18/14 13:40*	*1*
Dibromofluoromethane	*101*	*	*70 - 130*		*07/18/14 13:40*	*1*
Toluene-d8 (Surr)	*100*	*	*70 - 130*		*07/18/14 13:40*	*1*

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		BFB	DBFM	TOL					
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)					
680-103320-2	MW-10	96	106	97					
680-103320-3	NAT-1	93	99	103					
680-103320-6	NAT-3	96	116	96					
680-103320-8	Trip Blank	94 *	101 *	100 *					
LCS 680-339665/4	Lab Control Sample	101	98	105					
LCS 680-339987/5	Lab Control Sample	105	103	101					
LCSD 680-339665/7	Lab Control Sample Dup	101	98	111					
LCSD 680-339987/6	Lab Control Sample Dup	108	116	107					
MB 680-339665/10	Method Blank	94	104	98					
MB 680-339987/9	Method Blank	98	122	96					

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	TBP	FBP	2FP	2FP	TPH	TPH	PHL
Lab Sample ID	Client Sample ID	(30-130)	(30-130)	(34-130)	(25-130)	(25-130)	(36-130)	(36-130)	(27-130)
680-103320-2	MW-10	55	55	42	47	47	66	66	43
680-103320-5	MW-5U	83	83	62	56	56	75	75	59
680-103320-5 MS	MW-5U	78	78	66	62	62	72	72	40
680-103320-5 MSD	MW-5U	71	71	60	49	49	57	57	54
LCS 680-339460/6-A	Lab Control Sample	85	85	69	68	68	81	81	69
MB 680-339460/5-A	Method Blank	73	73	67	71	71	96	96	70

		Percent Surrogate Recovery (Acceptance Limits)							
		PHL	NBZ	NBZ					
Lab Sample ID	Client Sample ID	(27-130)	(32-130)	(32-130)					
680-103320-2	MW-10	43	41	41					
680-103320-5	MW-5U	59	59	59					
680-103320-5 MS	MW-5U	40	54	54					
680-103320-5 MSD	MW-5U	54	52	52					
LCS 680-339460/6-A	Lab Control Sample	69	67	67					
MB 680-339460/5-A	Method Blank	70	71	71					

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-339665/10
Matrix: Water
Analysis Batch: 339665

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			07/18/14 12:38	1
Acetonitrile	40	U	40	10	ug/L			07/18/14 12:38	1
Acrolein	20	U	20	7.4	ug/L			07/18/14 12:38	1
Acrylonitrile	20	U	20	7.2	ug/L			07/18/14 12:38	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			07/18/14 12:38	1
Benzene	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/18/14 12:38	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
Bromoform	1.0	U	1.0	0.50	ug/L			07/18/14 12:38	1
Bromomethane	5.0	U	5.0	2.0	ug/L			07/18/14 12:38	1
2-Butanone	10	U	10	1.0	ug/L			07/18/14 12:38	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			07/18/14 12:38	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			07/18/14 12:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
Chloroethane	5.0	U	5.0	2.0	ug/L			07/18/14 12:38	1
Chloroform	1.0	U	1.0	0.14	ug/L			07/18/14 12:38	1
Chloromethane	1.0	U	1.0	0.33	ug/L			07/18/14 12:38	1
Chloroprene	1.0	U	1.0	0.30	ug/L			07/18/14 12:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			07/18/14 12:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			07/18/14 12:38	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			07/18/14 12:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			07/18/14 12:38	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			07/18/14 12:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/18/14 12:38	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			07/18/14 12:38	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			07/18/14 12:38	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			07/18/14 12:38	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
2-Hexanone	10	U	10	1.0	ug/L			07/18/14 12:38	1
Iodomethane	5.0	U	5.0	1.0	ug/L			07/18/14 12:38	1
Isobutyl alcohol	40	U	40	11	ug/L			07/18/14 12:38	1
Methacrylonitrile	20	U	20	3.3	ug/L			07/18/14 12:38	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			07/18/14 12:38	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			07/18/14 12:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			07/18/14 12:38	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			07/18/14 12:38	1
n-Heptane	1.0	U	1.0	0.42	ug/L			07/18/14 12:38	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			07/18/14 12:38	1
Propionitrile	20	U	20	4.6	ug/L			07/18/14 12:38	1
Styrene	1.0	U	1.0	0.11	ug/L			07/18/14 12:38	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			07/18/14 12:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			07/18/14 12:38	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/18/14 12:38	1
Toluene	1.0	U	1.0	0.33	ug/L			07/18/14 12:38	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			07/18/14 12:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-339665/10
Matrix: Water
Analysis Batch: 339665

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			07/18/14 12:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			07/18/14 12:38	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			07/18/14 12:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			07/18/14 12:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			07/18/14 12:38	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/18/14 12:38	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			07/18/14 12:38	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			07/18/14 12:38	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			07/18/14 12:38	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			07/18/14 12:38	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			07/18/14 12:38	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			07/18/14 12:38	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/18/14 12:38*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*07/18/14 12:38*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*07/18/14 12:38*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/18/14 12:38*	*1*

Lab Sample ID: LCS 680-339665/4
Matrix: Water
Analysis Batch: 339665

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	106		ug/L		106	39 - 162
Benzene	50.0	53.4		ug/L		107	74 - 123
Diethyl ether	50.0	56.5		ug/L		113	40 - 160
t-Butanol	50.0	42.0		ug/L		84	49 - 148
Bromodichloromethane	50.0	54.2		ug/L		108	72 - 129
Bromoform	50.0	51.4		ug/L		103	60 - 134
Bromomethane	50.0	33.9		ug/L		68	10 - 171
2-Butanone	100	98.6		ug/L		99	55 - 142
Carbon disulfide	50.0	40.2		ug/L		80	63 - 142
Carbon tetrachloride	50.0	44.4		ug/L		89	70 - 131
Chlorobenzene	50.0	51.9		ug/L		104	79 - 120
Chloroethane	50.0	67.3		ug/L		135	47 - 148
Chloroform	50.0	51.9		ug/L		104	76 - 128
Chloromethane	50.0	44.6		ug/L		89	47 - 151
cis-1,2-Dichloroethene	50.0	54.7		ug/L		109	78 - 127
cis-1,3-Dichloropropene	50.0	54.6		ug/L		109	73 - 128
Dibromochloromethane	50.0	52.3		ug/L		105	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	45.0		ug/L		90	57 - 126
1,2-Dibromoethane	50.0	54.5		ug/L		109	75 - 127
Dibromomethane	50.0	53.4		ug/L		107	75 - 122
Dichlorodifluoromethane	50.0	30.3		ug/L		61	41 - 165

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-339665/4
Matrix: Water
Analysis Batch: 339665

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.6		ug/L		101	69 - 132
1,2-Dichloroethane	50.0	54.1		ug/L		108	75 - 120
1,1-Dichloroethene	50.0	38.8		ug/L		78	73 - 134
1,2-Dichloropropane	50.0	54.2		ug/L		108	71 - 126
Ethylbenzene	50.0	52.1		ug/L		104	78 - 125
2-Hexanone	100	101		ug/L		101	52 - 149
Methylene Chloride	50.0	50.9		ug/L		102	79 - 124
4-Methyl-2-pentanone (MIBK)	100	108		ug/L		108	51 - 143
Methyl tert-butyl ether	100	99.8		ug/L		100	76 - 126
Styrene	50.0	51.4		ug/L		103	75 - 129
1,1,1,2-Tetrachloroethane	50.0	52.1		ug/L		104	68 - 132
1,1,2,2-Tetrachloroethane	50.0	52.1		ug/L		104	71 - 127
Tetrachloroethene	50.0	45.6		ug/L		91	77 - 128
Toluene	50.0	53.6		ug/L		107	77 - 125
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	78 - 130
trans-1,3-Dichloropropene	50.0	54.4		ug/L		109	72 - 127
1,2,3-Trichlorobenzene	50.0	50.4		ug/L		101	63 - 136
1,1,1-Trichloroethane	50.0	48.4		ug/L		97	76 - 126
1,1,2-Trichloroethane	50.0	55.0		ug/L		110	69 - 127
Trichloroethene	50.0	51.7		ug/L		103	80 - 120
Trichloroethylene	50.0	51.7		ug/L		103	80 - 120
Trichlorofluoromethane	50.0	31.0	*	ug/L		62	66 - 144
1,2,3-Trichloropropane	50.0	49.6		ug/L		99	74 - 126
Vinyl acetate	100	215	*	ug/L		215	10 - 200
Vinyl chloride	50.0	48.0		ug/L		96	58 - 141
Xylenes, Total	150	156		ug/L		104	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*98*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 680-339665/7
Matrix: Water
Analysis Batch: 339665

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
Acetone	100	115		ug/L		115	39 - 162	8	50
Benzene	50.0	53.3		ug/L		107	74 - 123	0	30
Diethyl ether	50.0	58.2		ug/L		116	40 - 160	3	50
t-Butanol	50.0	44.3		ug/L		89	49 - 148	5	50
Bromodichloromethane	50.0	55.1		ug/L		110	72 - 129	2	30
Bromoform	50.0	51.4		ug/L		103	60 - 134	0	30
Bromomethane	50.0	31.6		ug/L		63	10 - 171	7	50
2-Butanone	100	107		ug/L		107	55 - 142	8	30
Carbon disulfide	50.0	47.8		ug/L		96	63 - 142	17	30
Carbon tetrachloride	50.0	46.9		ug/L		94	70 - 131	5	30
Chlorobenzene	50.0	49.7		ug/L		99	79 - 120	4	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-339665/7
Matrix: Water
Analysis Batch: 339665

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
Chloroethane	50.0	69.0		ug/L		138	47 - 148	3	40
Chloroform	50.0	49.7		ug/L		99	76 - 128	4	30
Chloromethane	50.0	53.3		ug/L		107	47 - 151	18	30
cis-1,2-Dichloroethene	50.0	52.2		ug/L		104	78 - 127	5	30
cis-1,3-Dichloropropene	50.0	55.8		ug/L		112	73 - 128	2	30
Dibromochloromethane	50.0	51.4		ug/L		103	63 - 134	2	50
1,2-Dibromo-3-Chloropropane	50.0	48.3		ug/L		97	57 - 126	7	50
1,2-Dibromoethane	50.0	54.4		ug/L		109	75 - 127	0	30
Dibromomethane	50.0	53.9		ug/L		108	75 - 122	1	30
Dichlorodifluoromethane	50.0	29.3		ug/L		59	41 - 165	3	50
1,1-Dichloroethane	50.0	53.3		ug/L		107	69 - 132	5	30
1,2-Dichloroethane	50.0	54.9		ug/L		110	75 - 120	1	30
1,1-Dichloroethene	50.0	51.7		ug/L		103	73 - 134	29	30
1,2-Dichloropropane	50.0	54.6		ug/L		109	71 - 126	1	30
Ethylbenzene	50.0	49.0		ug/L		98	78 - 125	6	30
2-Hexanone	100	110		ug/L		110	52 - 149	8	30
Methylene Chloride	50.0	51.6		ug/L		103	79 - 124	1	30
4-Methyl-2-pentanone (MIBK)	100	115		ug/L		115	51 - 143	6	30
Methyl tert-butyl ether	100	105		ug/L		105	76 - 126	5	30
Styrene	50.0	50.9		ug/L		102	75 - 129	1	30
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/L		100	68 - 132	4	30
1,1,2,2-Tetrachloroethane	50.0	53.1		ug/L		106	71 - 127	2	30
Tetrachloroethene	50.0	47.8		ug/L		96	77 - 128	5	30
Toluene	50.0	54.6		ug/L		109	77 - 125	2	30
trans-1,2-Dichloroethene	50.0	50.9		ug/L		102	78 - 130	3	30
trans-1,3-Dichloropropene	50.0	54.9		ug/L		110	72 - 127	1	50
1,2,3-Trichlorobenzene	50.0	50.2		ug/L		100	63 - 136	0	30
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	76 - 126	5	30
1,1,2-Trichloroethane	50.0	55.3		ug/L		111	69 - 127	1	30
Trichloroethene	50.0	52.8		ug/L		106	80 - 120	2	30
Trichloroethylene	50.0	52.8		ug/L		106	80 - 120	2	30
Trichlorofluoromethane	50.0	34.1		ug/L		68	66 - 144	10	30
1,2,3-Trichloropropane	50.0	50.9		ug/L		102	74 - 126	3	30
Vinyl acetate	100	205	*	ug/L		205	10 - 200	5	30
Vinyl chloride	50.0	51.1		ug/L		102	58 - 141	6	30
Xylenes, Total	150	153		ug/L		102	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*98*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*

Lab Sample ID: MB 680-339987/9
Matrix: Water
Analysis Batch: 339987

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U	5.0	2.6	ug/L			07/21/14 11:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-339987/9
Matrix: Water
Analysis Batch: 339987

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			07/21/14 11:55	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/21/14 11:55	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/21/14 11:55	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/21/14 11:55	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/21/14 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*07/21/14 11:55*	*1*
Dibromofluoromethane	*122*		*70 - 130*		*07/21/14 11:55*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/21/14 11:55*	*1*

Lab Sample ID: LCS 680-339987/5
Matrix: Water
Analysis Batch: 339987

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diethyl ether			50.0	53.8		ug/L		108	40 - 160		
t-Butanol			50.0	36.2		ug/L		72	49 - 148		
Chloroform			50.0	49.2		ug/L		98	76 - 128		
1,1-Dichloroethane			50.0	48.6		ug/L		97	69 - 132		
1,2-Dichloroethane			50.0	52.4		ug/L		105	75 - 120		
Tetrachloroethene			50.0	48.0		ug/L		96	77 - 128		
Trichloroethene			50.0	47.7		ug/L		95	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 680-339987/6
Matrix: Water
Analysis Batch: 339987

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
Diethyl ether			50.0	59.7		ug/L		119	40 - 160	10	50
t-Butanol			50.0	45.1		ug/L		90	49 - 148	22	50
Chloroform			50.0	58.2		ug/L		116	76 - 128	17	30
1,1-Dichloroethane			50.0	53.5		ug/L		107	69 - 132	10	30
1,2-Dichloroethane			50.0	57.4		ug/L		115	75 - 120	9	30
Tetrachloroethene			50.0	52.1		ug/L		104	77 - 128	8	30
Trichloroethene			50.0	52.3		ug/L		105	80 - 120	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*70 - 130*
Dibromofluoromethane	*116*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-339460/5-A
Matrix: Water
Analysis Batch: 340489

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339460

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		07/17/14 14:08	07/23/14 18:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/17/14 14:08	07/23/14 18:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
2-Fluorophenol	*71*		*25 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
2-Fluorophenol (Surr)	*71*		*25 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
Nitrobenzene-d5	*71*		*32 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
Nitrobenzene-d5 (Surr)	*71*		*32 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
Phenol-d5	*70*		*27 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
Phenol-d5 (Surr)	*70*		*27 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
Terphenyl-d14	*96*		*36 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
Terphenyl-d14 (Surr)	*96*		*36 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
2,4,6-Tribromophenol	*73*		*30 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*30 - 130*	*07/17/14 14:08*	*07/23/14 18:00*	*1*

Lab Sample ID: LCS 680-339460/6-A
Matrix: Water
Analysis Batch: 340489

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339460

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	6.02		ug/L		60	10 - 130		
1,4-Dichlorobenzene			10.0	5.21		ug/L		52	34 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*34 - 130*
2-Fluorophenol	*68*		*25 - 130*
2-Fluorophenol (Surr)	*68*		*25 - 130*
Nitrobenzene-d5	*67*		*32 - 130*
Nitrobenzene-d5 (Surr)	*67*		*32 - 130*
Phenol-d5	*69*		*27 - 130*
Phenol-d5 (Surr)	*69*		*27 - 130*
Terphenyl-d14	*81*		*36 - 130*
Terphenyl-d14 (Surr)	*81*		*36 - 130*
2,4,6-Tribromophenol	*85*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*85*		*30 - 130*

Lab Sample ID: 680-103320-5 MS
Matrix: Water
Analysis Batch: 340489

Client Sample ID: MW-5U
Prep Type: Total/NA
Prep Batch: 339460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	1.7		9.99	6.75		ug/L		50	10 - 130		
1,4-Dichlorobenzene	0.99	U	9.99	4.30		ug/L		43	34 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*34 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-103320-5 MS
Matrix: Water
Analysis Batch: 340489

Client Sample ID: MW-5U
Prep Type: Total/NA
Prep Batch: 339460

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	62		25 - 130
2-Fluorophenol (Surr)	62		25 - 130
Nitrobenzene-d5	54		32 - 130
Nitrobenzene-d5 (Surr)	54		32 - 130
Phenol-d5	40		27 - 130
Phenol-d5 (Surr)	40		27 - 130
Terphenyl-d14	72		36 - 130
Terphenyl-d14 (Surr)	72		36 - 130
2,4,6-Tribromophenol	78		30 - 130
2,4,6-Tribromophenol (Surr)	78		30 - 130

Lab Sample ID: 680-103320-5 MSD
Matrix: Water
Analysis Batch: 340489

Client Sample ID: MW-5U
Prep Type: Total/NA
Prep Batch: 339460

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.7		9.02	5.84		ug/L		45	10 - 130	15	50
1,4-Dichlorobenzene	0.99	U	9.02	3.46		ug/L		38	34 - 130	22	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	60		34 - 130
2-Fluorophenol	49		25 - 130
2-Fluorophenol (Surr)	49		25 - 130
Nitrobenzene-d5	52		32 - 130
Nitrobenzene-d5 (Surr)	52		32 - 130
Phenol-d5	54		27 - 130
Phenol-d5 (Surr)	54		27 - 130
Terphenyl-d14	57		36 - 130
Terphenyl-d14 (Surr)	57		36 - 130
2,4,6-Tribromophenol	71		30 - 130
2,4,6-Tribromophenol (Surr)	71		30 - 130

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-340462/7
Matrix: Water
Analysis Batch: 340462

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 14:05	1

Lab Sample ID: LCS 680-340462/4
Matrix: Water
Analysis Batch: 340462

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	20.0	16.8		mg/L		84	43 - 143

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: LCSD 680-340462/5
Matrix: Water
Analysis Batch: 340462

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
Methanol	20.0	18.4		mg/L		92	43 - 143	9	50

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-339465/13
Matrix: Water
Analysis Batch: 339465

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			07/16/14 18:07	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			07/16/14 18:07	1

Lab Sample ID: LCS 680-339465/14
Matrix: Water
Analysis Batch: 339465

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.04		mg/L		104	90 - 110
Nitrite as N	0.997	1.13	*	mg/L		114	90 - 110

Lab Sample ID: MB 680-340644/2
Matrix: Water
Analysis Batch: 340644

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			07/23/14 18:14	1
Sulfate	0.50	U	0.50	0.25	mg/L			07/23/14 18:14	1

Lab Sample ID: LCS 680-340644/3
Matrix: Water
Analysis Batch: 340644

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.89		mg/L		99	90 - 110
Sulfate	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-340644/4
Matrix: Water
Analysis Batch: 340644

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
Chloride	10.0	9.88		mg/L		99	90 - 110	0	30
Sulfate	10.0	10.1		mg/L		101	90 - 110	0	30

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 680-340714/2
Matrix: Water
Analysis Batch: 340714

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.50	U	0.50	0.25	mg/L			07/24/14 13:13	1

Lab Sample ID: LCS 680-340714/3
Matrix: Water
Analysis Batch: 340714

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 680-340714/4
Matrix: Water
Analysis Batch: 340714

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
Sulfate	10.0	9.93		mg/L		99	90 - 110	1	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-339428/1-A
Matrix: Water
Analysis Batch: 340758

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339428

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/16/14 20:08	07/23/14 21:43	1
Barium	5.0	U	5.0	1.4	ug/L		07/16/14 20:08	07/23/14 21:43	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/16/14 20:08	07/23/14 21:43	1
Chromium	5.0	U	5.0	2.5	ug/L		07/16/14 20:08	07/23/14 21:43	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/16/14 20:08	07/23/14 21:43	1
Iron	100	U	100	44	ug/L		07/16/14 20:08	07/23/14 21:43	1
Lead	1.5	U	1.5	0.50	ug/L		07/16/14 20:08	07/23/14 21:43	1
Manganese	5.0	U	5.0	2.0	ug/L		07/16/14 20:08	07/23/14 21:43	1
Nickel	5.0	U	5.0	2.0	ug/L		07/16/14 20:08	07/23/14 21:43	1

Lab Sample ID: LCS 680-339428/2-A
Matrix: Water
Analysis Batch: 340758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	4840		ug/L		97	75 - 125
Antimony	50.0	48.8		ug/L		98	75 - 125
Barium	100	98.7		ug/L		99	75 - 125
Beryllium	50.0	49.6		ug/L		99	75 - 125
Cadmium	50.0	49.2		ug/L		98	75 - 125
Chromium	100	100		ug/L		100	75 - 125
Cobalt	50.0	50.6		ug/L		101	75 - 125
Copper	100	101		ug/L		101	75 - 125
Iron	5000	5230		ug/L		105	75 - 125
Lead	50.0	50.3		ug/L		101	75 - 125
Manganese	500	516		ug/L		103	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-339428/2-A
Matrix: Water
Analysis Batch: 340758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.63		ug/L		93	75 - 125
Nickel	100	100		ug/L		100	75 - 125
Selenium	100	97.4		ug/L		97	75 - 125
Vanadium	100	96.3		ug/L		96	75 - 125
Arsenic	100	98.8		ug/L		99	75 - 125

Lab Sample ID: MB 680-339634/1-A
Matrix: Water
Analysis Batch: 341073

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 339634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	100	U	100	33	ug/L		07/17/14 17:33	07/25/14 15:38	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		07/17/14 17:33	07/25/14 15:38	1
Sodium, Dissolved	500	U	500	250	ug/L		07/17/14 17:33	07/25/14 15:38	1
Potassium, Dissolved	500	U	500	170	ug/L		07/17/14 17:33	07/25/14 15:38	1
Calcium, Dissolved	250	U	250	130	ug/L		07/17/14 17:33	07/25/14 15:38	1
Magnesium, Dissolved	250	U	250	43	ug/L		07/17/14 17:33	07/25/14 15:38	1

Lab Sample ID: LCS 680-339634/2-A
Matrix: Water
Analysis Batch: 341073

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 339634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	5000	4910		ug/L		98	75 - 125
Manganese, Dissolved	500	472		ug/L		94	75 - 125
Sodium, Dissolved	5000	4580		ug/L		92	75 - 125
Potassium, Dissolved	5000	4810		ug/L		96	75 - 125
Calcium, Dissolved	5000	4930		ug/L		99	75 - 125
Magnesium, Dissolved	5000	4640		ug/L		93	75 - 125

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-340094/2
Matrix: Water
Analysis Batch: 340094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			07/21/14 10:49	1

Lab Sample ID: LCS 680-340094/1
Matrix: Water
Analysis Batch: 340094

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	1.00		mg/L		100	90 - 110

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-339427/2
Matrix: Water
Analysis Batch: 339427

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/16/14 13:51	1

Lab Sample ID: LCS 680-339427/1
Matrix: Water
Analysis Batch: 339427

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.21		mg/L		101	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-340020/1
Matrix: Water
Analysis Batch: 340020

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Lab Sample ID: LCS 680-340020/2
Matrix: Water
Analysis Batch: 340020

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.50		mg/L		95	75 - 125

Lab Sample ID: LCSD 680-340020/3
Matrix: Water
Analysis Batch: 340020

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
Sulfide	10.0	9.68		mg/L		97	75 - 125	2	30

Lab Sample ID: 680-103320-4 DU
Matrix: Water
Analysis Batch: 340020

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-341085/3
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			07/25/14 04:52	1

Lab Sample ID: LCS 680-341085/4
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon			20.0	19.3		mg/L		96	80 - 120		

Lab Sample ID: LCSD 680-341085/5
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon			20.0	16.3		mg/L		82	80 - 120	17	20

Lab Sample ID: 680-103320-4 MS
Matrix: Water
Analysis Batch: 341085

Client Sample ID: MW-5
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon	18		20.0	38.5		mg/L		102	80 - 120		

Lab Sample ID: 680-103320-4 MSD
Matrix: Water
Analysis Batch: 341085

Client Sample ID: MW-5
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon	18		20.0	37.0		mg/L		94	80 - 120	4	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-340006/5
Matrix: Water
Analysis Batch: 340006

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			07/20/14 19:22	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/20/14 19:22	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/20/14 19:22	1

Lab Sample ID: LCS 680-340006/6
Matrix: Water
Analysis Batch: 340006

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	215		mg/L		86	80 - 120		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 680-340006/32
Matrix: Water
Analysis Batch: 340006

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
Alkalinity			250	257		mg/L		103	80 - 120	18	30

GC/MS VOA

Analysis Batch: 339665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-2	MW-10	Total/NA	Water	8260B	
680-103320-3	NAT-1	Total/NA	Water	8260B	
680-103320-8	Trip Blank	Total/NA	Water	8260B	
LCS 680-339665/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-339665/7	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-339665/10	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 339987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-6	NAT-3	Total/NA	Water	8260B	
LCS 680-339987/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-339987/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-339987/9	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 339460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-2	MW-10	Total/NA	Water	3520C	
680-103320-5	MW-5U	Total/NA	Water	3520C	
680-103320-5 MS	MW-5U	Total/NA	Water	3520C	
680-103320-5 MSD	MW-5U	Total/NA	Water	3520C	
LCS 680-339460/6-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-339460/5-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 340489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-5	MW-5U	Total/NA	Water	8270D LL	339460
680-103320-5 MS	MW-5U	Total/NA	Water	8270D LL	339460
680-103320-5 MSD	MW-5U	Total/NA	Water	8270D LL	339460
LCS 680-339460/6-A	Lab Control Sample	Total/NA	Water	8270D LL	339460
MB 680-339460/5-A	Method Blank	Total/NA	Water	8270D LL	339460

Analysis Batch: 340717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-2	MW-10	Total/NA	Water	8270D LL	339460

GC VOA

Analysis Batch: 340462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-5	MW-5U	Total/NA	Water	8015C	
680-103320-7	NAT-2	Total/NA	Water	8015C	
LCS 680-340462/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-340462/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-340462/7	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 339465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Total/NA	Water	9056A	
680-103320-5	MW-5U	Total/NA	Water	9056A	
LCS 680-339465/14	Lab Control Sample	Total/NA	Water	9056A	
MB 680-339465/13	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Total/NA	Water	9056A	
680-103320-4	MW-5	Total/NA	Water	9056A	
680-103320-5	MW-5U	Total/NA	Water	9056A	
LCS 680-340644/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340644/4	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340644/2	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-5	MW-5U	Total/NA	Water	9056A	
LCS 680-340714/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340714/4	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340714/2	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 339428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-1	RAB-MW-4	Total/NA	Water	3010A	
680-103320-2	MW-10	Total/NA	Water	3010A	
680-103320-3	NAT-1	Total/NA	Water	3010A	
680-103320-4	MW-5	Total/NA	Water	3010A	
680-103320-6	NAT-3	Total/NA	Water	3010A	
680-103320-7	NAT-2	Total/NA	Water	3010A	
LCS 680-339428/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-339428/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 339634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	3005A	
680-103320-5	MW-5U	Dissolved	Water	3005A	
LCS 680-339634/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-339634/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 340758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-1	RAB-MW-4	Total/NA	Water	6020A	339428
680-103320-2	MW-10	Total/NA	Water	6020A	339428
680-103320-3	NAT-1	Total/NA	Water	6020A	339428
680-103320-4	MW-5	Total/NA	Water	6020A	339428
680-103320-6	NAT-3	Total/NA	Water	6020A	339428
680-103320-7	NAT-2	Total/NA	Water	6020A	339428
LCS 680-339428/2-A	Lab Control Sample	Total/NA	Water	6020A	339428

Metals (Continued)

Analysis Batch: 340758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-339428/1-A	Method Blank	Total/NA	Water	6020A	339428

Analysis Batch: 341073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	6020A	339634
680-103320-5	MW-5U	Dissolved	Water	6020A	339634
LCS 680-339634/2-A	Lab Control Sample	Total Recoverable	Water	6020A	339634
MB 680-339634/1-A	Method Blank	Total Recoverable	Water	6020A	339634

Analysis Batch: 341340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	6020A	339634
680-103320-5	MW-5U	Dissolved	Water	6020A	339634

General Chemistry

Analysis Batch: 339427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	365.1	
680-103320-5	MW-5U	Dissolved	Water	365.1	
680-103320-5 MS	MW-5U	Dissolved	Water	365.1	
680-103320-5 MSD	MW-5U	Dissolved	Water	365.1	
LCS 680-339427/1	Lab Control Sample	Total/NA	Water	365.1	
MB 680-339427/2	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 339533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Total/NA	Water	UnionizedNH3	
680-103320-5	MW-5U	Total/NA	Water	UnionizedNH3	

Analysis Batch: 340006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Total/NA	Water	SM 2320B	
680-103320-5	MW-5U	Total/NA	Water	SM 2320B	
LCS 680-340006/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-340006/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-340006/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 340020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	9034	
680-103320-4	MW-5	Total/NA	Water	9034	
680-103320-4 DU	MW-5	Total/NA	Water	9034	
680-103320-5	MW-5U	Dissolved	Water	9034	
680-103320-5	MW-5U	Total/NA	Water	9034	
LCS 680-340020/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-340020/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-340020/1	Method Blank	Total/NA	Water	9034	

General Chemistry (Continued)

Analysis Batch: 340094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	350.1	
680-103320-5	MW-5U	Dissolved	Water	350.1	
LCS 680-340094/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-340094/2	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 341085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103320-4	MW-5	Dissolved	Water	9060	
680-103320-4 MS	MW-5	Dissolved	Water	9060	
680-103320-4 MSD	MW-5	Dissolved	Water	9060	
680-103320-5	MW-5U	Dissolved	Water	9060	
LCS 680-341085/4	Lab Control Sample	Dissolved	Water	9060	
LCSD 680-341085/5	Lab Control Sample Dup	Dissolved	Water	9060	
MB 680-341085/3	Method Blank	Dissolved	Water	9060	

Client Sample ID: RAB-MW-4

Lab Sample ID: 680-103320-1

Date Collected: 07/15/14 10:55

Matrix: Water

Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339428	07/16/14 20:08	SP	TAL SAV
Total/NA	Analysis	6020A		1	340758	07/24/14 00:02	BWR	TAL SAV

Client Sample ID: MW-10

Lab Sample ID: 680-103320-2

Date Collected: 07/15/14 15:50

Matrix: Water

Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339665	07/18/14 18:03	MMT	TAL SAV
Total/NA	Prep	3520C			339460	07/17/14 14:08	RBS	TAL SAV
Total/NA	Analysis	8270D LL		2	340717	07/24/14 17:08	SMC	TAL SAV
Total/NA	Prep	3010A			339428	07/16/14 20:08	SP	TAL SAV
Total/NA	Analysis	6020A		1	340758	07/24/14 00:09	BWR	TAL SAV

Client Sample ID: NAT-1

Lab Sample ID: 680-103320-3

Date Collected: 07/15/14 10:47

Matrix: Water

Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339665	07/18/14 18:32	MMT	TAL SAV
Total/NA	Prep	3010A			339428	07/16/14 20:08	SP	TAL SAV
Total/NA	Analysis	6020A		1	340758	07/24/14 00:16	BWR	TAL SAV

Client Sample ID: MW-5

Lab Sample ID: 680-103320-4

Date Collected: 07/15/14 14:57

Matrix: Water

Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		25	340644	07/23/14 20:47	DAS	TAL SAV
Total/NA	Analysis	9056A		2	340644	07/23/14 21:02	DAS	TAL SAV
Total/NA	Analysis	9056A		10	339465	07/16/14 20:10	VAS	TAL SAV
Dissolved	Prep	3005A			339634	07/17/14 17:33	SP	TAL SAV
Dissolved	Analysis	6020A		1	341073	07/25/14 16:29	BWR	TAL SAV
Dissolved	Prep	3005A			339634	07/17/14 17:33	SP	TAL SAV
Dissolved	Analysis	6020A		2	341340	07/28/14 21:12	BWR	TAL SAV
Total/NA	Prep	3010A			339428	07/16/14 20:08	SP	TAL SAV
Total/NA	Analysis	6020A		1	340758	07/24/14 00:38	BWR	TAL SAV
Dissolved	Analysis	350.1		2	340094	07/21/14 11:41	JME	TAL SAV
Dissolved	Analysis	365.1		1	339427	07/16/14 18:16	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 05:38	PAT	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: MW-5

Lab Sample ID: 680-103320-4

Date Collected: 07/15/14 14:57
Matrix: Water
Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	340006	07/20/14 22:00	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	339533	07/17/14 13:29	JER	TAL SAV

Client Sample ID: MW-5U

Lab Sample ID: 680-103320-5

Date Collected: 07/15/14 15:46
Matrix: Water
Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			339460	07/17/14 14:08	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	340489	07/23/14 19:15	SMC	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 18:08	AJMC	TAL SAV
Total/NA	Analysis	9056A		100	340644	07/23/14 21:18	DAS	TAL SAV
Total/NA	Analysis	9056A		10	340714	07/24/14 14:14	DAS	TAL SAV
Total/NA	Analysis	9056A		10	339465	07/16/14 20:25	VAS	TAL SAV
Dissolved	Prep	3005A			339634	07/17/14 17:33	SP	TAL SAV
Dissolved	Analysis	6020A		1	341073	07/25/14 16:36	BWR	TAL SAV
Dissolved	Prep	3005A			339634	07/17/14 17:33	SP	TAL SAV
Dissolved	Analysis	6020A		10	341340	07/28/14 21:17	BWR	TAL SAV
Dissolved	Analysis	350.1		1	340094	07/21/14 11:30	JME	TAL SAV
Dissolved	Analysis	365.1		1	339427	07/16/14 18:16	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 06:24	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340006	07/20/14 22:14	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	339533	07/17/14 13:29	JER	TAL SAV

Client Sample ID: NAT-3

Lab Sample ID: 680-103320-6

Date Collected: 07/14/14 13:58
Matrix: Water
Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	339987	07/21/14 18:46	MMT	TAL SAV
Total/NA	Prep	3010A			339428	07/16/14 20:08	SP	TAL SAV
Total/NA	Analysis	6020A		1	340758	07/24/14 00:46	BWR	TAL SAV

Client Sample ID: NAT-2

Lab Sample ID: 680-103320-7

Date Collected: 07/14/14 16:05
Matrix: Water
Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	340462	07/23/14 18:32	AJMC	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Client Sample ID: NAT-2

Lab Sample ID: 680-103320-7

Date Collected: 07/14/14 16:05
Matrix: Water
Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339428	07/16/14 20:08	SP	TAL SAV
Total/NA	Analysis	6020A		1	340758	07/24/14 00:53	BWR	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-103320-8

Date Collected: 07/15/14 00:00
Matrix: Water
Date Received: 07/16/14 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339665	07/18/14 13:40	MMT	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-15
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-14
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-30-14 *
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	09-005r	04-16-15
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-14
Kentucky (UST)	State Program	4	18	06-30-15
Louisiana	NELAP	6	30690	06-30-14 *
Louisiana (DW)	NELAP	6	LA140023	12-31-14
Maine	State Program	1	GA00006	08-16-14 *
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-14 *
Mississippi	State Program	4	N/A	06-30-14 *
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14 *
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-14 *
New York	NELAP	2	10842	03-31-15
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-14
South Carolina	State Program	4	98001	06-30-14 *
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-14
West Virginia DEP	State Program	3	94	06-30-14 *
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103320-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 83779

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: Hercules Aqualon
PROJECT NO.:
PROJECT LOCATION (STATE):
TAL (LAB) PROJECT MANAGER:
P.O. NUMBER:
CONTRACT NO.: VA
CLIENT (SITE) PM: Erin Wright, Kate Hall
CLIENT PHONE: 866-222-7786
CLIENT FAX:
CLIENT NAME: GES
CLIENT E-MAIL: ewright@gesonline.com, khall@gesonline.com
CLIENT ADDRESS: 23 S 13th Street Suite 103 Richmond, VA 23219
COMPANY CONTRACTING THIS WORK (if applicable):

PAGE 1 OF 2

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

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

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	Metals (6020) Nitric	SVOCs (8270C)	VOCs (8260B) HCl or none	Alcohols (8015)	Dissolved Metals 6020	Dissolved Cations 6020	Dissolved Other Phosphate (365.1)	Dissolved Ammonia 350.1	Total Sulfide 9034	Dissolved Sulfide 9034	REMARKS
7-15-14	1055	RAB-MW-4	G	X				X										Tables of requested
7-15-14	1550	MW-10						X	X	X								Analyses included
7-15-14	1047	NAT-1						X		X								
7-15-14	1457	MW-5						X				X	X	X	X	X	X	
7-15-14	1546	MW-5U							X		X	X	X	X	X	X	X	
7-14-14	1358	NAT-3						X		X								
7-14-14	1605	NAT-2						X			X							

680-103320 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Nathan J Gylet	7-15-14	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
Marilyn Kaldas	7/16/14	09:43	YES / NO		680-103320	2.8 °C 2.4 °C

TAL8240-680 (1008)

Serial Number 80979

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:

PAGE 2 OF 2

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
CLIENT NAME	CLIENT E-MAIL	
CLIENT ADDRESS		
COMPANY CONTRACTING THIS WORK (if applicable)		

STANDARD REPORT DELIVERY ◯ DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯ DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

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

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

PRESERVATIVE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	Alkalinity (2320B)	Anions (9056A)	DOC (9060)								REMARKS
7-15-14	1456	MW-5						X	X	X								
7-15-14	1546	MW-50						X	X	X								

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Nicholas A. Gingleton	7-15-14	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
E.B.	07/16/14	0943	YES ◯ NO ◯		680-103320	2.8c/2.4c

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-103320-1

Login Number: 103320

List Source: TestAmerica Savannah

List Number: 1

Creator: White, Menica R

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	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
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: 680-103417-1
Client Project/Site: Hercules Aqualon Corrective Action

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

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
7/31/2014 2:55:13 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery exceeds the control limits
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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
X	Surrogate is outside control limits
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
A	The tentatively identified compound is a suspected aldol-condensation product.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC VOA

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

HPLC/IC

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.

Metals

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.
F1	MS and/or MSD Recovery exceeds the control limits
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

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

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-103417-5	MW-1	Water	07/17/14 08:50	07/18/14 09:47
680-103417-6	LF-1	Water	07/17/14 09:50	07/18/14 09:47
680-103417-7	LF-2	Water	07/17/14 10:10	07/18/14 09:47
680-103417-8	LF-3	Water	07/17/14 10:50	07/18/14 09:47
680-103417-9	LF-5	Water	07/17/14 11:35	07/18/14 09:47
680-103417-10	WWL-2	Water	07/17/14 14:15	07/18/14 09:47
680-103417-11	WWL-3L	Water	07/17/14 16:15	07/18/14 09:47
680-103417-12	MW-2	Water	07/17/14 08:40	07/18/14 09:47
680-103417-13	MW-3	Water	07/17/14 10:30	07/18/14 09:47
680-103417-14	MW-8U	Water	07/17/14 14:35	07/18/14 09:47
680-103417-17	FB-2	Water	07/17/14 09:00	07/18/14 09:47
680-103417-18	EB-2	Water	07/17/14 09:05	07/18/14 09:47
680-103417-19	MW-6	Water	07/17/14 13:33	07/18/14 09:47
680-103417-20	MW-8LR	Water	07/17/14 15:35	07/18/14 09:47
680-103417-21	Trip Blank	Water	07/17/14 00:00	07/18/14 09:47

Job ID: 680-103417-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-103417-1

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

RECEIPT

The samples were received on 07/18/2014; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.8º C, 1.8º C, 3.0º C and 3.6º C.
Samples RAB-MW1R, Field Duplicate, Field Blank and Equipment Blank for 8260 analysis is being reported on job 680-103376-1.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples LF-1 (680-103417-6), LF-2 (680-103417-7), LF-5 (680-103417-9), MW-2 (680-103417-12), MW-8U (680-103417-14), MW-8LR (680-103417-20) and Trip Blank (680-103417-21) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/21/2014.

Diethyl ether failed the recovery criteria high for the MS of sample MW-2-MSMS (680-103417-12) in batch 680-339990.

Samples MW-2 (680-103417-12)[100X], MW-8U (680-103417-14)[25X] and MW-8LR (680-103417-20)[50X] 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.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8LR (680-103417-20) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/21/2014 and analyzed on 07/29/2014.

Acetophenone and Bis(2-ethylhexyl) phthalate were detected in method blank MB 680-340039/6-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have 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.

Terphenyl-d14 recovered low for MW-3 (680-103417-13). Nitrobenzene-d5 (Surr) and Phenol-d5 (Surr) recovered low for MW-8LR (680-103417-20) and MW-1 (680-103417-5).

Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): MW-2-MS (680-103417-12 MS), MW-2-MSD (680-103417-12 MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

N-Nitrosomethylethylamine recovered low for LCS 680-340039/10-A. 3-Methylcholanthrene, Aramite, Total and Isosafrole recovered high.

1,4-Dioxane recovered low for the MS of sample MW-2-MSMS (680-103417-12) in batch 680-341364.

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

Job ID: 680-103417-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples LF-1 (680-103417-6), LF-2 (680-103417-7), LF-3 (680-103417-8), LF-5 (680-103417-9), WWL-2 (680-103417-10) and MW-2 (680-103417-12) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 07/23/2014 and 07/24/2014.

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

METALS (ICPMS)

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 07/21/2014 and 07/22/2014 and analyzed on 07/23/2014, 07/25/2014 and 07/28/2014.

Calcium, Dissolved, Iron, Dissolved, Magnesium, Dissolved and Sodium, Dissolved failed the recovery criteria high for the MS/MSD of sample MW-3MSD (680-103417-13) in batch 680-340538.

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

METALS (ICPMS)

Samples MW-1 (680-103417-5), LF-1 (680-103417-6), LF-2 (680-103417-7), LF-3 (680-103417-8), LF-5 (680-103417-9), WWL-2 (680-103417-10), WWL-3L (680-103417-11), MW-2 (680-103417-12), MW-8U (680-103417-14), FB-2 (680-103417-17), EB-2 (680-103417-18), MW-6 (680-103417-19) and MW-8LR (680-103417-20) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 07/19/2014 and 07/22/2014 and analyzed on 07/25/2014, 07/29/2014 and 07/30/2014.

Iron and Manganese recovered low for the MSD of sample MW-2-MSD (680-103417-12) in batch 680-340872.

Manganese recovered high for the MS of sample LF-2-MSMS (680-103417-7) in batch 680-340872.

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

ALKALINITY

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 07/23/2014 and 07/24/2014.

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

AMMONIA

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 07/21/2014.

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

ORTHOPHOSPHATE

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 07/18/2014.

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

SULFIDE

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 07/21/2014.

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

SULFIDE

Job ID: 680-103417-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 07/21/2014.

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

9056 ANIONS

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 07/24/2014 and 07/25/2014.

Samples MW-1 (680-103417-5)[10X], MW-1 (680-103417-5)[20X], MW-2 (680-103417-12)[10X], MW-2 (680-103417-12)[25X], MW-3 (680-103417-13)[2X] and MW-8U (680-103417-14)[20X] 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.

ANIONS BY IC (NITRATE/NITRITE)

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 07/18/2014.

Samples MW-2 (680-103417-12)[2X], MW-3 (680-103417-13)[2X] and MW-8U (680-103417-14)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED ORGANIC CARBON

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 07/25/2014.

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

UNIONIZED AMMONIA

Samples MW-1 (680-103417-5), MW-2 (680-103417-12), MW-3 (680-103417-13) and MW-8U (680-103417-14) were analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 07/24/2014.

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

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-1 — Lab Sample ID: 680-103417-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.2		1.9	0.30	ug/L	1		8270D LL	Total/NA
Chloride	210		5.0	2.5	mg/L	10		9056A	Total/NA
Nitrate as N	0.053		0.050	0.025	mg/L	1		9056A	Total/NA
Sulfate	850		10	5.0	mg/L	20		9056A	Total/NA
Chromium	9.8		5.0	2.5	ug/L	1		6020A	Total/NA
Lead	1.0	J	1.5	0.50	ug/L	1		6020A	Total/NA
Iron, Dissolved	8800		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	2700		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	230000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	3500		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	170000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	46000		250	43	ug/L	1		6020A	Dissolved
Ammonia	0.12		0.050	0.026	mg/L	1		350.1	Dissolved
Orthophosphate, Dissolved	0.41		0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	120		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	120		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.15		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.0		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	21		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	8.7		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: LF-1 — Lab Sample ID: 680-103417-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.0		1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	0.38	J	1.0	0.13	ug/L	1		8260B	Total/NA
Aluminum	130		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.52		0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: LF-2 — Lab Sample ID: 680-103417-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.92	J	1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	0.71	J	1.0	0.13	ug/L	1		8260B	Total/NA
Aluminum	98	J	100	50	ug/L	1		6020A	Total/NA
Cadmium	0.79		0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: LF-3 — Lab Sample ID: 680-103417-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	530		100	50	ug/L	1		6020A	Total/NA
Barium	160		5.0	1.4	ug/L	1		6020A	Total/NA
Chromium	2.8	J	5.0	2.5	ug/L	1		6020A	Total/NA
Cobalt	6.7		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	3000		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	8.5		5.0	2.0	ug/L	1		6020A	Total/NA
Vanadium	4.7	J	10	3.2	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: LF-5 — Lab Sample ID: 680-103417-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.2		1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethene	0.55	J	1.0	0.13	ug/L	1		8260B	Total/NA
Chromium	22		5.0	2.5	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-2 — Lab Sample ID: 680-103417-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	170		100	50	ug/L	1		6020A	Total/NA
Barium	1300		5.0	1.4	ug/L	1		6020A	Total/NA
Cadmium	0.13	J	0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	70		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	11000		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	18		5.0	2.0	ug/L	1		6020A	Total/NA
Arsenic	9.2		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-3L — Lab Sample ID: 680-103417-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	610		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.17	J	0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 680-103417-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl ether	6100		1000	100	ug/L	100		8260B	Total/NA
Bis(2-chloroethyl)ether	0.14	J	1.0	0.10	ug/L	1		8270D LL	Total/NA
1,4-Dioxane	13		2.0	0.31	ug/L	1		8270D LL	Total/NA
Ethanol	7.0		5.0	0.33	mg/L	1		8015C	Total/NA
Chloride	1100		13	6.3	mg/L	25		9056A	Total/NA
Sulfate	470		5.0	2.5	mg/L	10		9056A	Total/NA
Aluminum	400		100	50	ug/L	1		6020A	Total/NA
Iron	180000		100	44	ug/L	1		6020A	Total/NA
Manganese	13000		5.0	2.0	ug/L	1		6020A	Total/NA
Iron, Dissolved	150000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	11000		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	290000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	4100		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	250000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	85000		250	43	ug/L	1		6020A	Dissolved
Ammonia	0.19		0.050	0.026	mg/L	1		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	160		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.24		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	5.4		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	20		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	5.1		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-3 — Lab Sample ID: 680-103417-13

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-3 (Continued) — Lab Sample ID: 680-103417-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.8	J B	2.0	0.63	ug/L	1		8270D LL	Total/NA
Chloride	6.1		1.0	0.50	mg/L	2		9056A	Total/NA
Nitrate as N	0.076	J	0.10	0.050	mg/L	2		9056A	Total/NA
Sulfate	0.53	J	1.0	0.50	mg/L	2		9056A	Total/NA
Iron, Dissolved	11000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	410		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	20000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	2900		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	40000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	4600		250	43	ug/L	1		6020A	Dissolved
Ammonia	2.0		0.10	0.052	mg/L	2		350.1	Dissolved
Orthophosphate, Dissolved	0.088		0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	160		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	2.6		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.2		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	18		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	3.5		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-8U — Lab Sample ID: 680-103417-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	650		130	65	ug/L	25		8260B	Total/NA
Chloride	460		10	5.0	mg/L	20		9056A	Total/NA
Sulfate	560		10	5.0	mg/L	20		9056A	Total/NA
Aluminum	390		100	50	ug/L	1		6020A	Total/NA
Chromium	2.7	J	5.0	2.5	ug/L	1		6020A	Total/NA
Iron, Dissolved	58000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	1600		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	390000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	31000		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	170000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	47000		250	43	ug/L	1		6020A	Dissolved
Ammonia	12		0.50	0.26	mg/L	10		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	490		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	490		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	15		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.4		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	22		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	13		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: FB-2 — Lab Sample ID: 680-103417-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	55	J	100	50	ug/L	1		6020A	Total/NA

Client Sample ID: EB-2 — Lab Sample ID: 680-103417-18

This Detection Summary does not include radiochemical test results.

Client Sample ID: EB-2 (Continued) — Lab Sample ID: 680-103417-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	75	J	100	44	ug/L	1		6020A	Total/NA
Manganese	3.3	J	5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 680-103417-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1200		100	50	ug/L	1		6020A	Total/NA
Lead	0.82	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: MW-8LR — Lab Sample ID: 680-103417-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	2600		250	130	ug/L	50		8260B	Total/NA
1,4-Dioxane	12		2.1	0.33	ug/L	1		8270D LL	Total/NA
Aluminum	110		100	50	ug/L	1		6020A	Total/NA
Arsenic	33		2.5	1.3	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-103417-21

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1

Date Collected: 07/17/14 08:50
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-5

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.2**		1.9	0.30	ug/L		07/21/14 15:50	07/29/14 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*30 - 130*	*07/21/14 15:50*	*07/29/14 18:41*	*1*
2-Fluorophenol (Surr)	*62*		*25 - 130*	*07/21/14 15:50*	*07/29/14 18:41*	*1*
Terphenyl-d14 (Surr)	*70*		*36 - 130*	*07/21/14 15:50*	*07/29/14 18:41*	*1*
Phenol-d5 (Surr)	*16*	*X*	*27 - 130*	*07/21/14 15:50*	*07/29/14 18:41*	*1*
Nitrobenzene-d5 (Surr)	*30*	*X*	*32 - 130*	*07/21/14 15:50*	*07/29/14 18:41*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**210**		5.0	2.5	mg/L			07/25/14 16:50	10
Nitrate as N	**0.053**		0.050	0.025	mg/L			07/18/14 16:28	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			07/18/14 16:28	1
Sulfate	**850**		10	5.0	mg/L			07/25/14 17:06	20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**9.8**		5.0	2.5	ug/L		07/19/14 09:35	07/25/14 01:24	1
Lead	**1.0**	**J**	1.5	0.50	ug/L		07/19/14 09:35	07/25/14 01:24	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**8800**		100	33	ug/L		07/21/14 13:37	07/25/14 11:07	1
Manganese, Dissolved	**2700**		5.0	1.0	ug/L		07/21/14 13:37	07/25/14 11:07	1
Sodium, Dissolved	**230000**		500	250	ug/L		07/21/14 13:37	07/25/14 11:07	1
Potassium, Dissolved	**3500**		500	170	ug/L		07/21/14 13:37	07/25/14 11:07	1
Calcium, Dissolved	**170000**		250	130	ug/L		07/21/14 13:37	07/28/14 20:24	1
Magnesium, Dissolved	**46000**		250	43	ug/L		07/21/14 13:37	07/25/14 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	**120**		5.0	5.0	mg/L			07/23/14 12:36	1
Bicarbonate Alkalinity as CaCO3	**120**		5.0	5.0	mg/L			07/23/14 12:36	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 12:36	1
Ammonium ion as NH4	**0.15**		0.050	0.050	mg/L			07/24/14 12:45	1
pH	**6.0**		1.0	1.0	SU			07/24/14 12:45	1
Temperature	**21**		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.12**		0.050	0.026	mg/L			07/21/14 11:30	1
Orthophosphate, Dissolved	**0.41**		0.050	0.016	mg/L			07/18/14 15:42	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**8.7**		1.0	1.0	mg/L			07/25/14 11:52	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: LF-1
Date Collected: 07/17/14 09:50
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0		1.0	0.25	ug/L			07/21/14 13:40	1
Trichloroethene	0.38	J	1.0	0.13	ug/L			07/21/14 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*07/21/14 13:40*	*1*
Dibromofluoromethane	*106*		*70 - 130*		*07/21/14 13:40*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*07/21/14 13:40*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 15:42	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	130		100	50	ug/L		07/19/14 09:35	07/25/14 01:29	1
Cadmium	0.52		0.50	0.13	ug/L		07/19/14 09:35	07/30/14 20:47	1

Client Sample ID: LF-2

Lab Sample ID: 680-103417-7

Date Collected: 07/17/14 10:10

Matrix: Water

Date Received: 07/18/14 09:47

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.92	J	1.0	0.25	ug/L			07/21/14 14:01	1
Trichloroethene	0.71	J	1.0	0.13	ug/L			07/21/14 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*07/21/14 14:01*	*1*
Dibromofluoromethane	*110*		*70 - 130*		*07/21/14 14:01*	*1*
Toluene-d8 (Surr)	*117*		*70 - 130*		*07/21/14 14:01*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 16:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	98	J	100	50	ug/L		07/19/14 09:35	07/25/14 01:35	1
Cadmium	0.79		0.50	0.13	ug/L		07/19/14 09:35	07/30/14 20:54	1
Lead	1.5	U	1.5	0.50	ug/L		07/19/14 09:35	07/25/14 01:35	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: LF-3
Date Collected: 07/17/14 10:50
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-8
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 16:31	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	530		100	50	ug/L		07/19/14 09:35	07/25/14 02:01	1
Barium	160		5.0	1.4	ug/L		07/19/14 09:35	07/25/14 02:01	1
Chromium	2.8	J	5.0	2.5	ug/L		07/19/14 09:35	07/25/14 02:01	1
Cobalt	6.7		0.50	0.12	ug/L		07/19/14 09:35	07/25/14 02:01	1
Manganese	3000		5.0	2.0	ug/L		07/19/14 09:35	07/25/14 02:01	1
Nickel	8.5		5.0	2.0	ug/L		07/19/14 09:35	07/25/14 02:01	1
Vanadium	4.7	J	10	3.2	ug/L		07/19/14 09:35	07/25/14 02:01	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: LF-5
Date Collected: 07/17/14 11:35
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**3.2**		1.0	0.25	ug/L			07/21/14 14:22	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/21/14 14:22	1
Trichloroethene	**0.55**	**J**	1.0	0.13	ug/L			07/21/14 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*07/21/14 14:22*	*1*
Dibromofluoromethane	*106*		*70 - 130*		*07/21/14 14:22*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*07/21/14 14:22*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 16:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**22**		5.0	2.5	ug/L		07/19/14 09:35	07/25/14 02:17	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: WWL-2
Date Collected: 07/17/14 14:15
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-10
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 20:33	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	170		100	50	ug/L		07/19/14 09:35	07/25/14 02:22	1
Barium	1300		5.0	1.4	ug/L		07/19/14 09:35	07/25/14 02:22	1
Cadmium	0.13	J	0.50	0.13	ug/L		07/19/14 09:35	07/30/14 22:00	1
Cobalt	70		0.50	0.12	ug/L		07/19/14 09:35	07/25/14 02:22	1
Manganese	11000		5.0	2.0	ug/L		07/19/14 09:35	07/25/14 02:22	1
Nickel	18		5.0	2.0	ug/L		07/19/14 09:35	07/25/14 02:22	1
Arsenic	9.2		2.5	1.3	ug/L		07/19/14 09:35	07/25/14 02:22	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: WWL-3L
Date Collected: 07/17/14 16:15
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-11
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	610		100	50	ug/L		07/19/14 09:35	07/25/14 02:28	1
Cadmium	0.17	J	0.50	0.13	ug/L		07/19/14 09:35	07/30/14 22:07	1

Client Sample ID: MW-2
Date Collected: 07/17/14 08:40
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	6100		1000	100	ug/L			07/21/14 14:43	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*07/21/14 14:43*	*100*
Dibromofluoromethane	*97*		*70 - 130*		*07/21/14 14:43*	*100*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/21/14 14:43*	*100*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.14	J	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 19:07	1
1,4-Dioxane	13		2.0	0.31	ug/L		07/21/14 15:50	07/29/14 19:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Aldol condensation product	*15*	*T J A*	*ug/L*		*2.62*		*07/21/14 15:50*	*07/29/14 19:07*	*1*
Unknown	*7.1*	*T J*	*ug/L*		*3.74*		*07/21/14 15:50*	*07/29/14 19:07*	*1*
Unknown	*100*	*T J*	*ug/L*		*4.87*		*07/21/14 15:50*	*07/29/14 19:07*	*1*
Unknown	*52*	*T J*	*ug/L*		*6.43*		*07/21/14 15:50*	*07/29/14 19:07*	*1*
Unknown	*5.9*	*T J*	*ug/L*		*7.08*		*07/21/14 15:50*	*07/29/14 19:07*	*1*
Tetraethylene glycol diethyl ether	*29*	*T J N*	*ug/L*		*7.88*	*4353-28-0*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
n-Hexadecanoic acid	*8.3*	*T J N*	*ug/L*		*9.56*	*57-10-3*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
6-Octadecenoic acid, (Z)-	*11*	*T J N*	*ug/L*		*10.40*	*593-39-5*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
Octadecanoic acid	*9.6*	*T J N*	*ug/L*		*10.50*	*57-11-4*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
Unknown	*20*	*T J*	*ug/L*		*15.01*		*07/21/14 15:50*	*07/29/14 19:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 130*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
2-Fluorophenol	*56*		*25 - 130*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
Nitrobenzene-d5	*57*		*32 - 130*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
Phenol-d5	*51*		*27 - 130*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
Terphenyl-d14	*54*		*36 - 130*	*07/21/14 15:50*	*07/29/14 19:07*	*1*
2,4,6-Tribromophenol	*71*		*30 - 130*	*07/21/14 15:50*	*07/29/14 19:07*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	7.0		5.0	0.33	mg/L			07/24/14 15:40	1
Methanol	5.0	U	5.0	1.0	mg/L			07/24/14 15:40	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		13	6.3	mg/L			07/24/14 18:32	25
Nitrate as N	0.10	U	0.10	0.050	mg/L			07/18/14 16:44	2
Nitrite as N	0.10	U	0.10	0.050	mg/L			07/18/14 16:44	2
Sulfate	470		5.0	2.5	mg/L			07/24/14 18:17	10

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	400		100	50	ug/L		07/19/14 09:35	07/25/14 02:33	1
Iron	180000		100	44	ug/L		07/19/14 09:35	07/25/14 02:33	1
Manganese	13000		5.0	2.0	ug/L		07/19/14 09:35	07/25/14 02:33	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-2
Date Collected: 07/17/14 08:40
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-12
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	150000		100	33	ug/L		07/21/14 13:37	07/25/14 11:12	1
Manganese, Dissolved	11000		5.0	1.0	ug/L		07/21/14 13:37	07/25/14 11:12	1
Sodium, Dissolved	290000		500	250	ug/L		07/21/14 13:37	07/25/14 11:12	1
Potassium, Dissolved	4100		500	170	ug/L		07/21/14 13:37	07/25/14 11:12	1
Calcium, Dissolved	250000		250	130	ug/L		07/21/14 13:37	07/28/14 20:29	1
Magnesium, Dissolved	85000		250	43	ug/L		07/21/14 13:37	07/25/14 11:12	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	160		5.0	5.0	mg/L			07/23/14 12:52	1
Bicarbonate Alkalinity as CaCO3	160		5.0	5.0	mg/L			07/23/14 12:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 12:52	1
Ammonium ion as NH4	0.24		0.050	0.050	mg/L			07/24/14 12:45	1
pH	5.4		1.0	1.0	SU			07/24/14 12:45	1
Temperature	20		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.19		0.050	0.026	mg/L			07/21/14 11:30	1
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/18/14 15:42	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	5.1		1.0	1.0	mg/L			07/25/14 12:11	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-3
Date Collected: 07/17/14 10:30
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Acenaphthylene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Acetophenone	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Acetylaminofluorene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
alpha,alpha-Dimethyl phenethylamine	9.8	U	9.8	3.3	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Aminobiphenyl	4.9	U	4.9	0.30	ug/L		07/21/14 15:50	07/29/14 19:32	1
Aniline	2.0	U	2.0	0.95	ug/L		07/21/14 15:50	07/29/14 19:32	1
Anthracene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Aramite, Total	1.5	U *	1.5	0.11	ug/L		07/21/14 15:50	07/29/14 19:32	1
Benzo[a]anthracene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Benzo[a]pyrene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Benzo[b]fluoranthene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Benzo[k]fluoranthene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Benzyl alcohol	0.98	U	0.98	0.14	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,1'-Biphenyl	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Bis(2-chloroethoxy)methane	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Bis(2-chloroethyl)ether	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	2.0	0.63	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Bromophenyl phenyl ether	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
Butyl benzyl phthalate	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Chloroaniline	2.0	U	2.0	0.35	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Chloro-3-methylphenol	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Chloronaphthalene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Chlorophenol	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Chlorophenyl phenyl ether	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Chrysene	0.20	U	0.20	0.044	ug/L		07/21/14 15:50	07/29/14 19:32	1
Diallate	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Dibenzofuran	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,2-Dichlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,3-Dichlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,4-Dichlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,4-Dichlorophenol	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,6-Dichlorophenol	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Diethyl phthalate	0.98	U	0.98	0.11	ug/L		07/21/14 15:50	07/29/14 19:32	1
Dimethoate	2.0	U	2.0	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
7,12-Dimethylbenz(a)anthracene	0.98	U	0.98	0.20	ug/L		07/21/14 15:50	07/29/14 19:32	1
3,3'-Dimethylbenzidine	20	U	20	4.9	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,4-Dimethylphenol	2.0	U	2.0	0.67	ug/L		07/21/14 15:50	07/29/14 19:32	1
Dimethyl phthalate	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Di-n-butyl phthalate	0.98	U	0.98	0.38	ug/L		07/21/14 15:50	07/29/14 19:32	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,4-Dinitrophenol	9.8	U	9.8	1.1	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,4-Dinitrotoluene	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,6-Dinitrotoluene	0.98	U	0.98	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
Di-n-octyl phthalate	0.98	U	0.98	0.17	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,4-Dioxane	2.0	U	2.0	0.30	ug/L		07/21/14 15:50	07/29/14 19:32	1

Client Sample ID: MW-3
Date Collected: 07/17/14 10:30
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Ethyl methanesulfonate	2.0	U	2.0	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Ethyl Parathion	2.0	U	2.0	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Famphur	0.98	U	0.98	0.16	ug/L		07/21/14 15:50	07/29/14 19:32	1
Fluoranthene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Fluorene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Hexachlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Hexachlorobutadiene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
Hexachloroethane	0.98	U	0.98	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
Hexachlorophene	490	U	490	24	ug/L		07/21/14 15:50	07/29/14 19:32	1
Hexachloropropene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Isophorone	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Isosafrole	0.98	U *	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
m-Dinitrobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Methapyrilene	200	U	200	1.3	ug/L		07/21/14 15:50	07/29/14 19:32	1
3-Methylcholanthrene	0.98	U *	0.98	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
Methyl methanesulfonate	2.0	U	2.0	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Methylnaphthalene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Methyl parathion	0.98	U	0.98	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Methylphenol	2.0	U	2.0	0.72	ug/L		07/21/14 15:50	07/29/14 19:32	1
3 & 4 Methylphenol	2.0	U	2.0	0.64	ug/L		07/21/14 15:50	07/29/14 19:32	1
1-Naphthalenamine	4.9	U	4.9	1.3	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Naphthalenamine	4.9	U	4.9	1.3	ug/L		07/21/14 15:50	07/29/14 19:32	1
Naphthalene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,4-Naphthoquinone	0.98	U	0.98	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Nitroaniline	0.98	U	0.98	0.16	ug/L		07/21/14 15:50	07/29/14 19:32	1
3-Nitroaniline	4.9	U	4.9	0.16	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Nitroaniline	4.9	U	4.9	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
Nitrobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
5-Nitro-o-toluidine	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Nitrophenol	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Nitrophenol	4.9	U	4.9	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosodiethylamine	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosodimethylamine	0.98	U	0.98	0.24	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosodi-n-butylamine	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosodi-n-propylamine	0.98	U	0.98	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosodiphenylamine	0.98	U	0.98	0.36	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosomethylethylamine	2.0	U *	2.0	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosomorpholine	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosopiperidine	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
N-Nitrosopyrrolidine	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
o,o',o''-Triethylphosphorothioate	0.98	U	0.98	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
o-Toluidine	0.98	U	0.98	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,2'-oxybis[1-chloropropane]	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
p-Dimethylamino azobenzene	4.9	U	4.9	0.15	ug/L		07/21/14 15:50	07/29/14 19:32	1
Pentachlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1

Client Sample ID: MW-3
Date Collected: 07/17/14 10:30
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	0.98	U	0.98	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1
Pentachlorophenol	4.9	U	4.9	0.39	ug/L		07/21/14 15:50	07/29/14 19:32	1
Phenacetin	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Phenanthrene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Phenol	0.98	U	0.98	0.13	ug/L		07/21/14 15:50	07/29/14 19:32	1
Phenyl ether	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Phorate	0.98	U	0.98	0.20	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-Picoline	2.0	U	2.0	0.15	ug/L		07/21/14 15:50	07/29/14 19:32	1
p-Phenylene diamine	200	U	200	16	ug/L		07/21/14 15:50	07/29/14 19:32	1
Pronamide	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
Pyrene	0.20	U	0.20	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Pyridine	4.9	U	4.9	0.71	ug/L		07/21/14 15:50	07/29/14 19:32	1
Safrole, Total	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		07/21/14 15:50	07/29/14 19:32	1
Sulfotepp	0.98	U	0.98	0.14	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,2,4,5-Tetrachlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,3,4,6-Tetrachlorophenol	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
Thionazin	0.98	U	0.98	0.20	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,2,4-Trichlorobenzene	0.98	U	0.98	0.098	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,4,5-Trichlorophenol	0.98	U	0.98	0.12	ug/L		07/21/14 15:50	07/29/14 19:32	1
2,4,6-Trichlorophenol	0.98	U	0.98	0.17	ug/L		07/21/14 15:50	07/29/14 19:32	1
1,3,5-Trinitrobenzene	0.98	U	0.98	0.49	ug/L		07/21/14 15:50	07/29/14 19:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Aldol condensation product	*4.3*	*T A J*	*ug/L*		*2.64*		*07/21/14 15:50*	*07/29/14 19:32*	*1*
Unknown	*1.3*	*T J*	*ug/L*		*3.05*		*07/21/14 15:50*	*07/29/14 19:32*	*1*
Unknown	*0.99*	*T J*	*ug/L*		*4.86*		*07/21/14 15:50*	*07/29/14 19:32*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*7.06*		*07/21/14 15:50*	*07/29/14 19:32*	*1*
o-Terphenyl	*0.92*	*T J N*	*ug/L*		*9.31*	*84-15-1*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
Hexadecenoic acid, Z-11-	*1.3*	*T J N*	*ug/L*		*9.46*	*2416-20-8*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
9-Octadecenoic acid, (E)-	*1.5*	*T J N*	*ug/L*		*10.39*	*112-79-8*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
Unknown	*8.2*	*T J*	*ug/L*		*14.61*		*07/21/14 15:50*	*07/29/14 19:32*	*1*
Unknown	*1.4*	*T J*	*ug/L*		*16.68*		*07/21/14 15:50*	*07/29/14 19:32*	*1*
Unknown	*3.1*	*T J*	*ug/L*		*16.92*		*07/21/14 15:50*	*07/29/14 19:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 130*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
2-Fluorophenol	*58*		*25 - 130*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
Nitrobenzene-d5	*58*		*32 - 130*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
Phenol-d5	*54*		*27 - 130*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
Terphenyl-d14	*28*	*X*	*36 - 130*	*07/21/14 15:50*	*07/29/14 19:32*	*1*
2,4,6-Tribromophenol	*66*		*30 - 130*	*07/21/14 15:50*	*07/29/14 19:32*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.1**		1.0	0.50	mg/L			07/24/14 18:47	2
Nitrate as N	**0.076**	**J**	0.10	0.050	mg/L			07/18/14 16:59	2
Nitrite as N	0.10	U	0.10	0.050	mg/L			07/18/14 16:59	2
Sulfate	**0.53**	**J**	1.0	0.50	mg/L			07/24/14 18:47	2

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-3
Date Collected: 07/17/14 10:30
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-13
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	11000		100	33	ug/L		07/22/14 11:45	07/23/14 10:53	1
Manganese, Dissolved	410		5.0	1.0	ug/L		07/22/14 11:45	07/23/14 10:53	1
Sodium, Dissolved	20000		500	250	ug/L		07/22/14 11:45	07/23/14 10:53	1
Potassium, Dissolved	2900		500	170	ug/L		07/22/14 11:45	07/23/14 10:53	1
Calcium, Dissolved	40000		250	130	ug/L		07/22/14 11:45	07/23/14 10:53	1
Magnesium, Dissolved	4600		250	43	ug/L		07/22/14 11:45	07/23/14 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	160		5.0	5.0	mg/L			07/23/14 12:25	1
Bicarbonate Alkalinity as CaCO3	160		5.0	5.0	mg/L			07/23/14 12:25	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 12:25	1
Ammonium ion as NH4	2.6		0.050	0.050	mg/L			07/24/14 12:45	1
pH	6.2		1.0	1.0	SU			07/24/14 12:45	1
Temperature	18		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	2.0		0.10	0.052	mg/L			07/21/14 11:41	2
Orthophosphate, Dissolved	0.088		0.050	0.016	mg/L			07/18/14 15:42	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	3.5		1.0	1.0	mg/L			07/25/14 12:42	1

Client Sample ID: MW-8U
Date Collected: 07/17/14 14:35
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	650		130	65	ug/L			07/21/14 15:04	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*07/21/14 15:04*	*25*
Dibromofluoromethane	*91*		*70 - 130*		*07/21/14 15:04*	*25*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/21/14 15:04*	*25*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	460		10	5.0	mg/L			07/24/14 19:03	20
Nitrate as N	0.25	U	0.25	0.13	mg/L			07/18/14 17:14	5
Nitrite as N	0.25	U	0.25	0.13	mg/L			07/18/14 17:14	5
Sulfate	560		10	5.0	mg/L			07/24/14 19:03	20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	390		100	50	ug/L		07/19/14 09:35	07/25/14 02:54	1
Chromium	2.7	J	5.0	2.5	ug/L		07/19/14 09:35	07/25/14 02:54	1
Lead	1.5	U	1.5	0.50	ug/L		07/19/14 09:35	07/25/14 02:54	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	58000		100	33	ug/L		07/21/14 13:37	07/25/14 11:28	1
Manganese, Dissolved	1600		5.0	1.0	ug/L		07/21/14 13:37	07/25/14 11:28	1
Sodium, Dissolved	390000		500	250	ug/L		07/21/14 13:37	07/25/14 11:28	1
Potassium, Dissolved	31000		500	170	ug/L		07/21/14 13:37	07/25/14 11:28	1
Calcium, Dissolved	170000		250	130	ug/L		07/21/14 13:37	07/28/14 20:34	1
Magnesium, Dissolved	47000		250	43	ug/L		07/21/14 13:37	07/25/14 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	490		5.0	5.0	mg/L			07/24/14 15:28	1
Bicarbonate Alkalinity as CaCO3	490		5.0	5.0	mg/L			07/24/14 15:28	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/24/14 15:28	1
Ammonium ion as NH4	15		0.050	0.050	mg/L			07/24/14 12:45	1
pH	6.4		1.0	1.0	SU			07/24/14 12:45	1
Temperature	22		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	12		0.50	0.26	mg/L			07/21/14 11:41	10
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/18/14 15:42	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	13		1.0	1.0	mg/L			07/25/14 13:01	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: FB-2
Date Collected: 07/17/14 09:00
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-17
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**55**	**J**	100	50	ug/L		07/22/14 10:17	07/29/14 23:30	1
Barium	5.0	U	5.0	1.4	ug/L		07/22/14 10:17	07/29/14 23:30	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/22/14 10:17	07/29/14 23:30	1
Chromium	5.0	U	5.0	2.5	ug/L		07/22/14 10:17	07/29/14 23:30	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/22/14 10:17	07/29/14 23:30	1
Iron	100	U	100	44	ug/L		07/22/14 10:17	07/29/14 23:30	1
Lead	1.5	U	1.5	0.50	ug/L		07/22/14 10:17	07/29/14 23:30	1
Manganese	5.0	U	5.0	2.0	ug/L		07/22/14 10:17	07/29/14 23:30	1
Nickel	5.0	U	5.0	2.0	ug/L		07/22/14 10:17	07/29/14 23:30	1
Vanadium	10	U	10	3.2	ug/L		07/22/14 10:17	07/29/14 23:30	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/22/14 10:17	07/29/14 23:30	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: EB-2
Date Collected: 07/17/14 09:05
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-18
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/19/14 09:35	07/25/14 03:00	1
Barium	5.0	U	5.0	1.4	ug/L		07/19/14 09:35	07/25/14 03:00	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/19/14 09:35	07/30/14 22:51	1
Chromium	5.0	U	5.0	2.5	ug/L		07/19/14 09:35	07/25/14 03:00	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/19/14 09:35	07/25/14 03:00	1
Iron	**75**	**J**	100	44	ug/L		07/19/14 09:35	07/25/14 03:00	1
Lead	1.5	U	1.5	0.50	ug/L		07/19/14 09:35	07/25/14 03:00	1
Manganese	**3.3**	**J**	5.0	2.0	ug/L		07/19/14 09:35	07/25/14 03:00	1
Nickel	5.0	U	5.0	2.0	ug/L		07/19/14 09:35	07/25/14 03:00	1
Vanadium	10	U	10	3.2	ug/L		07/19/14 09:35	07/25/14 03:00	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/19/14 09:35	07/25/14 03:00	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-6
Date Collected: 07/17/14 13:33
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-19
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1200		100	50	ug/L		07/19/14 09:35	07/25/14 03:05	1
Lead	0.82	J	1.5	0.50	ug/L		07/19/14 09:35	07/25/14 03:05	1

Client Sample ID: MW-8LR
Date Collected: 07/17/14 15:35
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	2600		250	130	ug/L			07/21/14 15:25	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*70 - 130*		*07/21/14 15:25*	*50*
Dibromofluoromethane	*105*		*70 - 130*		*07/21/14 15:25*	*50*
Toluene-d8 (Surr)	*92*		*70 - 130*		*07/21/14 15:25*	*50*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		2.1	0.33	ug/L		07/21/14 15:50	07/29/14 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*30 - 130*	*07/21/14 15:50*	*07/29/14 19:57*	*1*
2-Fluorophenol (Surr)	*56*		*25 - 130*	*07/21/14 15:50*	*07/29/14 19:57*	*1*
Terphenyl-d14 (Surr)	*63*		*36 - 130*	*07/21/14 15:50*	*07/29/14 19:57*	*1*
Phenol-d5 (Surr)	*9*	*X*	*27 - 130*	*07/21/14 15:50*	*07/29/14 19:57*	*1*
Nitrobenzene-d5 (Surr)	*26*	*X*	*32 - 130*	*07/21/14 15:50*	*07/29/14 19:57*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	110		100	50	ug/L		07/19/14 09:35	07/25/14 03:21	1
Arsenic	33		2.5	1.3	ug/L		07/19/14 09:35	07/25/14 03:21	1

Client Sample ID: Trip Blank
Date Collected: 07/17/14 00:00
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/21/14 11:55	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/21/14 11:55	1
Diethyl ether	10	U	10	1.0	ug/L			07/21/14 11:55	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/21/14 11:55	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/21/14 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*07/21/14 11:55*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*07/21/14 11:55*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/21/14 11:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-103417-6	LF-1	95	106	107
680-103417-7	LF-2	94	110	117
680-103417-9	LF-5	94	106	110
680-103417-12	MW-2	94	97	95
680-103417-12 MS	MW-2-MS	90	91	104
680-103417-12 MSD	MW-2-MSD	110	101	113
680-103417-14	MW-8U	107	91	98
680-103417-20	MW-8LR	119	105	92
680-103417-21	Trip Blank	94	98	100
LCS 680-339990/5	Lab Control Sample	96	89	102
LCSD 680-339990/6	Lab Control Sample Dup	85	92	106
MB 680-339990/10	Method Blank	80	101	107

Surrogate Legend

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		FBP	2FP	2FP	NBZ	NBZ	PHL	PHL	TPH
Lab Sample ID	Client Sample ID	(34-130)	(25-130)	(25-130)	(32-130)	(32-130)	(27-130)	(27-130)	(36-130)
680-103417-5	MW-1		62	62	30 X	30 X	16 X	16 X	70
680-103417-12	MW-2	56	56	56	57	57	51	51	54
680-103417-12 MS	MW-2-MS	34	36	36	34	34	33	33	25 X
680-103417-12 MSD	MW-2-MSD	46	58	58	47	47	48	48	37
680-103417-13	MW-3	57	58	58	58	58	54	54	28 X
680-103417-20	MW-8LR		56	56	26 X	26 X	9 X	9 X	63
LCS 680-340039/10-A	Lab Control Sample	59	60	60	64	64	54	54	66
LCS 680-340039/7-A	Lab Control Sample	59	63	63	62	62	57	57	70
MB 680-340039/6-A	Method Blank	58	61	61	62	62	55	55	76

		Percent Surrogate Recovery (Acceptance Limits)		
		TPH	TBP	TBP
Lab Sample ID	Client Sample ID	(36-130)	(30-130)	(30-130)
680-103417-5	MW-1	70	75	75
680-103417-12	MW-2	54	71	71
680-103417-12 MS	MW-2-MS	25 X	44	44
680-103417-12 MSD	MW-2-MSD	37	57	57
680-103417-13	MW-3	28 X	66	66
680-103417-20	MW-8LR	63	69	69
LCS 680-340039/10-A	Lab Control Sample	66	76	76
LCS 680-340039/7-A	Lab Control Sample	70	75	75
MB 680-340039/6-A	Method Blank	76	62	62

Surrogate Legend

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-339990/10
Matrix: Water
Analysis Batch: 339990

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/21/14 11:34	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/21/14 11:34	1
Diethyl ether	10	U	10	1.0	ug/L			07/21/14 11:34	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/21/14 11:34	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/21/14 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*70 - 130*		*07/21/14 11:34*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*07/21/14 11:34*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*07/21/14 11:34*	*1*

Lab Sample ID: LCS 680-339990/5
Matrix: Water
Analysis Batch: 339990

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	45.6		ug/L		91	76 - 128		
1,1-Dichloroethane			50.0	45.8		ug/L		92	69 - 132		
1,2-Dichloroethane			50.0	52.3		ug/L		105	75 - 120		
Diethyl ether			50.0	43.5		ug/L		87	40 - 160		
t-Butanol			50.0	34.6		ug/L		69	49 - 148		
Tetrachloroethene			50.0	47.8		ug/L		96	77 - 128		
Trichloroethene			50.0	50.5		ug/L		101	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*70 - 130*
Dibromofluoromethane	*89*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-339990/6
Matrix: Water
Analysis Batch: 339990

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
Chloroform			50.0	45.8		ug/L		92	76 - 128	0	30
1,1-Dichloroethane			50.0	43.6		ug/L		87	69 - 132	5	30
1,2-Dichloroethane			50.0	49.9		ug/L		100	75 - 120	5	30
Diethyl ether			50.0	37.3		ug/L		75	40 - 160	15	50
t-Butanol			50.0	38.8		ug/L		78	49 - 148	11	50
Tetrachloroethene			50.0	50.0		ug/L		100	77 - 128	4	30
Trichloroethene			50.0	44.7		ug/L		89	80 - 120	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*85*		*70 - 130*
Dibromofluoromethane	*92*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-103417-12 MS
Matrix: Water
Analysis Batch: 339990

Client Sample ID: MW-2-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	100		5000	4960		ug/L		99	76 - 128
1,1-Dichloroethane	100		5000	4630		ug/L		93	69 - 132
1,2-Dichloroethane	100		5000	5170		ug/L		103	75 - 120
Diethyl ether	6100		5000	15500	E F1	ug/L		187	40 - 160
t-Butanol	500		5000	3820		ug/L		76	49 - 148
Tetrachloroethene	100		5000	4650		ug/L		93	77 - 128
Trichloroethene	100		5000	5030		ug/L		101	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*70 - 130*
Dibromofluoromethane	*91*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 680-103417-12 MSD
Matrix: Water
Analysis Batch: 339990

Client Sample ID: MW-2-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	100		5000	5510		ug/L		110	76 - 128	11	30
1,1-Dichloroethane	100		5000	5320		ug/L		106	69 - 132	14	30
1,2-Dichloroethane	100		5000	5940		ug/L		119	75 - 120	14	30
Diethyl ether	6100		5000	13800	E	ug/L		154	40 - 160	11	50
t-Butanol	500		5000	3990		ug/L		80	49 - 148	4	50
Tetrachloroethene	100		5000	5690		ug/L		114	77 - 128	20	30
Trichloroethene	100		5000	5500		ug/L		110	80 - 120	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*113*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-340039/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Acetophenone	0.280	J	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		07/21/14 15:50	07/29/14 17:26	1
Aniline	2.0	U	2.0	0.97	ug/L		07/21/14 15:50	07/29/14 17:26	1
Anthracene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		07/21/14 15:50	07/29/14 17:26	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-340039/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Bis(2-ethylhexyl) phthalate	1.35	J	2.0	0.64	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Chrysene	0.20	U	0.20	0.045	ug/L		07/21/14 15:50	07/29/14 17:26	1
Diallate	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Diethyl phthalate	1.0	U	1.0	0.11	ug/L		07/21/14 15:50	07/29/14 17:26	1
Dimethoate	2.0	U	2.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		07/21/14 15:50	07/29/14 17:26	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		07/21/14 15:50	07/29/14 17:26	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		07/21/14 15:50	07/29/14 17:26	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
Di-n-octyl phthalate	1.0	U	1.0	0.17	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		07/21/14 15:50	07/29/14 17:26	1
Disulfoton	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Famphur	1.0	U	1.0	0.16	ug/L		07/21/14 15:50	07/29/14 17:26	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Fluorene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-340039/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
Hexachlorophene	500	U	500	25	ug/L		07/21/14 15:50	07/29/14 17:26	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Isophorone	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Isosafrole	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Methapyrilene	200	U	200	1.3	ug/L		07/21/14 15:50	07/29/14 17:26	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		07/21/14 15:50	07/29/14 17:26	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		07/21/14 15:50	07/29/14 17:26	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		07/21/14 15:50	07/29/14 17:26	1
Naphthalene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		07/21/14 15:50	07/29/14 17:26	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		07/21/14 15:50	07/29/14 17:26	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		07/21/14 15:50	07/29/14 17:26	1
Phenacetin	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Phenol	1.0	U	1.0	0.13	ug/L		07/21/14 15:50	07/29/14 17:26	1
Phenyl ether	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Phorate	1.0	U	1.0	0.20	ug/L		07/21/14 15:50	07/29/14 17:26	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-340039/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Picoline	2.0	U	2.0	0.15	ug/L		07/21/14 15:50	07/29/14 17:26	1
p-Phenylene diamine	200	U	200	16	ug/L		07/21/14 15:50	07/29/14 17:26	1
Pronamide	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
Pyrene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Pyridine	5.0	U	5.0	0.73	ug/L		07/21/14 15:50	07/29/14 17:26	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		07/21/14 15:50	07/29/14 17:26	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
Thionazin	1.0	U	1.0	0.20	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		07/21/14 15:50	07/29/14 17:26	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		07/21/14 15:50	07/29/14 17:26	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		07/21/14 15:50	07/29/14 17:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
2-Fluorophenol	*61*		*25 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
2-Fluorophenol (Surr)	*61*		*25 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Nitrobenzene-d5	*62*		*32 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Nitrobenzene-d5 (Surr)	*62*		*32 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Phenol-d5	*55*		*27 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Phenol-d5 (Surr)	*55*		*27 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Terphenyl-d14	*76*		*36 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Terphenyl-d14 (Surr)	*76*		*36 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
2,4,6-Tribromophenol	*62*		*30 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*30 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*

Lab Sample ID: LCS 680-340039/10-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Acetylaminofluorene	10.0	7.99		ug/L		80	10 - 130
alpha,alpha-Dimethyl phenethylamine	10.0	6.64	J	ug/L		66	10 - 130
4-Aminobiphenyl	10.0	3.85	J	ug/L		38	10 - 130
Aramite, Total	10.0	23.4	*	ug/L		234	10 - 130
Diallate	10.0	6.52		ug/L		65	10 - 130
2,6-Dichlorophenol	10.0	7.48		ug/L		75	10 - 130
Dimethoate	10.0	5.20		ug/L		52	10 - 130
7,12-Dimethylbenz(a)anthracene	10.0	8.67		ug/L		87	10 - 130
3,3'-Dimethylbenzidine	25.0	13.7	J	ug/L		55	10 - 130
Disulfoton	10.0	6.50		ug/L		65	10 - 130
Ethyl methanesulfonate	10.0	4.38		ug/L		44	10 - 130
Ethyl Parathion	10.0	7.45		ug/L		74	10 - 130
Famphur	10.0	1.36		ug/L		14	10 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-340039/10-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorophene	50.0	500	U	ug/L		12	10 - 130
Hexachloropropene	10.0	1.29		ug/L		13	10 - 130
Isosafrole	10.0	13.3	*	ug/L		133	10 - 130
m-Dinitrobenzene	10.0	7.33		ug/L		73	10 - 130
Methapyrilene	50.0	25.7	J E	ug/L		51	10 - 130
3-Methylcholanthrene	10.0	96.7	E *	ug/L		967	10 - 130
Methyl methanesulfonate	10.0	3.75		ug/L		38	10 - 130
Methyl parathion	10.0	5.48		ug/L		55	10 - 130
1-Naphthalenamine	10.0	3.54	J	ug/L		35	10 - 130
2-Naphthalenamine	10.0	3.10	J	ug/L		31	10 - 130
1,4-Naphthoquinone	10.0	3.27		ug/L		33	10 - 130
5-Nitro-o-toluidine	10.0	6.31		ug/L		63	10 - 130
4-Nitroquinoline-1-oxide	10.0	3.54		ug/L		35	10 - 130
N-Nitrosodiethylamine	10.0	5.38		ug/L		54	10 - 130
N-Nitrosodi-n-butylamine	10.0	7.38		ug/L		74	10 - 130
N-Nitrosomethylethylamine	10.0	0.336	J *	ug/L		3	10 - 130
N-Nitrosomorpholine	10.0	5.60		ug/L		56	10 - 130
N-Nitrosopiperidine	10.0	6.79		ug/L		68	10 - 130
N-Nitrosopyrrolidine	10.0	6.81		ug/L		68	10 - 130
o,o',o''-Triethylphosphorothioate	10.0	7.01		ug/L		70	10 - 130
o-Toluidine	10.0	5.36		ug/L		54	10 - 130
p-Dimethylamino azobenzene	10.0	6.94		ug/L		69	10 - 130
Pentachlorobenzene	10.0	5.67		ug/L		57	10 - 130
Pentachloronitrobenzene	10.0	7.78		ug/L		78	10 - 130
Phenacetin	10.0	7.42		ug/L		74	10 - 130
Phorate	10.0	6.42		ug/L		64	10 - 130
2-Picoline	10.0	5.58		ug/L		56	10 - 130
p-Phenylene diamine	50.0	200	U	ug/L		25	10 - 130
Pronamide	10.0	7.64		ug/L		76	10 - 130
Safrole, Total	10.0	7.22		ug/L		72	10 - 130
2-sec-Butyl-4,6-dinitrophenol	10.0	7.97		ug/L		80	10 - 130
Sulfotepp	10.0	6.79		ug/L		68	10 - 130
1,2,4,5-Tetrachlorobenzene	10.0	4.21		ug/L		42	10 - 130
2,3,4,6-Tetrachlorophenol	10.0	7.40		ug/L		74	10 - 130
Thionazin	10.0	7.78		ug/L		78	10 - 130
1,3,5-Trinitrobenzene	10.0	7.19		ug/L		72	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*34 - 130*
2-Fluorophenol	*60*		*25 - 130*
2-Fluorophenol (Surr)	*60*		*25 - 130*
Nitrobenzene-d5	*64*		*32 - 130*
Nitrobenzene-d5 (Surr)	*64*		*32 - 130*
Phenol-d5	*54*		*27 - 130*
Phenol-d5 (Surr)	*54*		*27 - 130*
Terphenyl-d14	*66*		*36 - 130*
Terphenyl-d14 (Surr)	*66*		*36 - 130*
2,4,6-Tribromophenol	*76*		*30 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-340039/10-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340039

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*76*		*30 - 130*

Lab Sample ID: LCS 680-340039/7-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	6.49		ug/L		65	42 - 130
Acenaphthylene	10.0	6.97		ug/L		70	45 - 130
Acetophenone	10.0	7.48		ug/L		75	45 - 130
Aniline	10.0	6.83		ug/L		68	10 - 130
Anthracene	10.0	7.25		ug/L		73	58 - 130
Benzo[a]anthracene	10.0	7.91		ug/L		79	42 - 143
Benzo[a]pyrene	10.0	6.76		ug/L		68	45 - 151
Benzo[b]fluoranthene	10.0	7.63		ug/L		76	41 - 140
Benzo[g,h,i]perylene	10.0	6.35		ug/L		63	27 - 134
Benzo[k]fluoranthene	10.0	6.93		ug/L		69	45 - 140
Benzyl alcohol	10.0	7.47		ug/L		75	34 - 130
1,1'-Biphenyl	10.0	6.14		ug/L		61	50 - 130
Bis(2-chloroethoxy)methane	10.0	7.47		ug/L		75	47 - 130
Bis(2-chloroethyl)ether	10.0	6.82		ug/L		68	36 - 130
Bis(2-ethylhexyl) phthalate	10.0	8.99		ug/L		90	10 - 158
4-Bromophenyl phenyl ether	10.0	7.30		ug/L		73	44 - 130
Butyl benzyl phthalate	10.0	8.71		ug/L		87	60 - 130
4-Chloroaniline	10.0	7.01		ug/L		70	17 - 130
4-Chloro-3-methylphenol	10.0	8.28		ug/L		83	54 - 130
2-Chloronaphthalene	10.0	5.96		ug/L		60	48 - 130
2-Chlorophenol	10.0	7.48		ug/L		75	45 - 130
4-Chlorophenyl phenyl ether	10.0	6.51		ug/L		65	52 - 130
Chrysene	10.0	6.96		ug/L		70	40 - 142
Dibenz(a,h)anthracene	10.0	5.79		ug/L		58	38 - 130
Dibenzofuran	10.0	6.80		ug/L		68	56 - 130
1,2-Dichlorobenzene	10.0	4.66		ug/L		47	36 - 130
1,3-Dichlorobenzene	10.0	4.63		ug/L		46	31 - 130
1,4-Dichlorobenzene	10.0	4.53		ug/L		45	34 - 130
3,3'-Dichlorobenzidine	30.0	25.7	E	ug/L		86	10 - 158
2,4-Dichlorophenol	10.0	7.97		ug/L		80	58 - 130
Diethyl phthalate	10.0	7.58		ug/L		76	60 - 130
3,3'-Dimethylbenzidine	20.0	12.4	J	ug/L		62	10 - 130
2,4-Dimethylphenol	10.0	6.98		ug/L		70	41 - 130
Dimethyl phthalate	10.0	7.50		ug/L		75	58 - 130
Di-n-butyl phthalate	10.0	8.13		ug/L		81	59 - 130
4,6-Dinitro-2-methylphenol	20.0	15.9		ug/L		80	10 - 182
2,4-Dinitrophenol	20.0	13.6		ug/L		68	10 - 200
2,4-Dinitrotoluene	10.0	7.80		ug/L		78	57 - 130
2,6-Dinitrotoluene	10.0	7.63		ug/L		76	53 - 130
Di-n-octyl phthalate	10.0	8.83		ug/L		88	19 - 130
1,4-Dioxane	10.0	5.54		ug/L		55	10 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-340039/7-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	10.0	8.27		ug/L		83	46 - 136
Fluorene	10.0	7.40		ug/L		74	48 - 130
Hexachlorobenzene	10.0	7.59		ug/L		76	49 - 130
Hexachlorobutadiene	10.0	4.58		ug/L		46	36 - 130
Hexachlorocyclopentadiene	10.0	1.82	J	ug/L		18	16 - 130
Hexachloroethane	10.0	4.14		ug/L		41	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	6.67		ug/L		67	12 - 130
Isophorone	10.0	6.80		ug/L		68	45 - 130
m-Dinitrobenzene	10.0	7.92		ug/L		79	10 - 130
2-Methylnaphthalene	10.0	6.05		ug/L		60	51 - 130
2-Methylphenol	10.0	7.53		ug/L		75	49 - 130
3 & 4 Methylphenol	10.0	7.28		ug/L		73	55 - 130
Naphthalene	10.0	5.72		ug/L		57	35 - 130
2-Nitroaniline	10.0	6.83		ug/L		68	48 - 130
3-Nitroaniline	10.0	6.30		ug/L		63	18 - 147
4-Nitroaniline	10.0	7.46		ug/L		75	31 - 147
Nitrobenzene	10.0	7.06		ug/L		71	45 - 130
2-Nitrophenol	10.0	7.74		ug/L		77	49 - 130
4-Nitrophenol	20.0	11.6		ug/L		58	36 - 132
N-Nitrosodimethylamine	10.0	5.69		ug/L		57	29 - 130
N-Nitrosodi-n-propylamine	10.0	7.09		ug/L		71	42 - 130
N-Nitrosodiphenylamine	10.0	7.31		ug/L		73	38 - 130
2,2'-oxybis[1-chloropropane]	10.0	5.77		ug/L		58	39 - 130
Pentachlorophenol	20.0	15.7		ug/L		78	12 - 156
Phenanthrene	10.0	7.62		ug/L		76	45 - 134
Phenol	10.0	6.80		ug/L		68	44 - 130
Pyrene	10.0	7.33		ug/L		73	47 - 143
Pyridine	10.0	4.53	J	ug/L		45	10 - 130
1,2,4,5-Tetrachlorobenzene	10.0	5.11		ug/L		51	10 - 130
2,3,4,6-Tetrachlorophenol	10.0	7.81		ug/L		78	10 - 130
1,2,4-Trichlorobenzene	10.0	5.02		ug/L		50	39 - 130
2,4,5-Trichlorophenol	10.0	8.09		ug/L		81	61 - 130
2,4,6-Trichlorophenol	10.0	7.98		ug/L		80	61 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*34 - 130*
2-Fluorophenol	*63*		*25 - 130*
2-Fluorophenol (Surr)	*63*		*25 - 130*
Nitrobenzene-d5	*62*		*32 - 130*
Nitrobenzene-d5 (Surr)	*62*		*32 - 130*
Phenol-d5	*57*		*27 - 130*
Phenol-d5 (Surr)	*57*		*27 - 130*
Terphenyl-d14	*70*		*36 - 130*
Terphenyl-d14 (Surr)	*70*		*36 - 130*
2,4,6-Tribromophenol	*75*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*75*		*30 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-103417-12 MS
Matrix: Water
Analysis Batch: 341364

Client Sample ID: MW-2-MS
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	0.14	J	9.95	4.13		ug/L		40	36 - 130
1,4-Dioxane	13		9.95	10.4	F1	ug/L		-26	10 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*34*		*34 - 130*
2-Fluorophenol	*36*		*25 - 130*
Nitrobenzene-d5	*34*		*32 - 130*
Phenol-d5	*33*		*27 - 130*
Terphenyl-d14	*25*	*X*	*36 - 130*
2,4,6-Tribromophenol	*44*		*30 - 130*

Lab Sample ID: 680-103417-12 MSD
Matrix: Water
Analysis Batch: 341577

Client Sample ID: MW-2-MSD
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	0.14		9.06	6.12		ug/L		66	36 - 130	NC	50
1,4-Dioxane	13		9.06	15.9		ug/L		31	10 - 130	NC	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*46*		*34 - 130*
2-Fluorophenol	*58*		*25 - 130*
Nitrobenzene-d5	*47*		*32 - 130*
Phenol-d5	*48*		*27 - 130*
Terphenyl-d14	*37*		*36 - 130*
2,4,6-Tribromophenol	*57*		*30 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-340462/7
Matrix: Water
Analysis Batch: 340462

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 14:05	1

Lab Sample ID: MB 680-340678/6
Matrix: Water
Analysis Batch: 340678

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			07/24/14 13:10	1
Methanol	5.0	U	5.0	1.0	mg/L			07/24/14 13:10	1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-339708/6
Matrix: Water
Analysis Batch: 339708

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			07/18/14 09:50	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			07/18/14 09:50	1

Lab Sample ID: LCS 680-339708/7
Matrix: Water
Analysis Batch: 339708

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.03		mg/L		103	90 - 110
Nitrite as N	0.997	1.07		mg/L		107	90 - 110

Lab Sample ID: LCSD 680-339708/8
Matrix: Water
Analysis Batch: 339708

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
Nitrate as N	0.999	1.03		mg/L		104	90 - 110	0	30
Nitrite as N	0.997	1.07		mg/L		108	90 - 110	0	30

Lab Sample ID: MB 680-340703/5
Matrix: Water
Analysis Batch: 340703

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			07/24/14 11:05	1
Sulfate	0.50	U	0.50	0.25	mg/L			07/24/14 11:05	1

Lab Sample ID: LCS 680-340703/6
Matrix: Water
Analysis Batch: 340703

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.7		mg/L		107	90 - 110

Lab Sample ID: LCSD 680-340703/7
Matrix: Water
Analysis Batch: 340703

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
Chloride	10.0	10.6		mg/L		106	90 - 110	0	30
Sulfate	10.0	10.7		mg/L		107	90 - 110	0	30

Lab Sample ID: MB 680-340895/5
Matrix: Water
Analysis Batch: 340895

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			07/25/14 14:32	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 680-340895/5
Matrix: Water
Analysis Batch: 340895

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.50	U	0.50	0.25	mg/L			07/25/14 14:32	1

Lab Sample ID: LCS 680-340895/6
Matrix: Water
Analysis Batch: 340895

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.6		mg/L		106	90 - 110
Sulfate	10.0	10.8		mg/L		108	90 - 110

Lab Sample ID: LCSD 680-340895/7
Matrix: Water
Analysis Batch: 340895

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
Chloride	10.0	10.6		mg/L		106	90 - 110	0	30
Sulfate	10.0	10.8		mg/L		108	90 - 110	0	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-339886/1-A
Matrix: Water
Analysis Batch: 340872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/19/14 09:35	07/25/14 01:13	1
Barium	5.0	U	5.0	1.4	ug/L		07/19/14 09:35	07/25/14 01:13	1
Chromium	5.0	U	5.0	2.5	ug/L		07/19/14 09:35	07/25/14 01:13	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/19/14 09:35	07/25/14 01:13	1
Iron	100	U	100	44	ug/L		07/19/14 09:35	07/25/14 01:13	1
Lead	1.5	U	1.5	0.50	ug/L		07/19/14 09:35	07/25/14 01:13	1
Manganese	5.0	U	5.0	2.0	ug/L		07/19/14 09:35	07/25/14 01:13	1
Nickel	5.0	U	5.0	2.0	ug/L		07/19/14 09:35	07/25/14 01:13	1
Vanadium	10	U	10	3.2	ug/L		07/19/14 09:35	07/25/14 01:13	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/19/14 09:35	07/25/14 01:13	1

Lab Sample ID: MB 680-339886/1-A
Matrix: Water
Analysis Batch: 341801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U	0.50	0.13	ug/L		07/19/14 09:35	07/30/14 20:25	1

Lab Sample ID: LCS 680-339886/2-A
Matrix: Water
Analysis Batch: 340872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5450		ug/L		109	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-339886/2-A
Matrix: Water
Analysis Batch: 340872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	54.8		ug/L		110	75 - 125
Barium	100	108		ug/L		108	75 - 125
Chromium	100	107		ug/L		107	75 - 125
Cobalt	50.0	53.7		ug/L		107	75 - 125
Copper	100	108		ug/L		108	75 - 125
Iron	5000	5300		ug/L		106	75 - 125
Lead	50.0	53.0		ug/L		106	75 - 125
Manganese	500	530		ug/L		106	75 - 125
Mercury	5.00	4.90		ug/L		98	75 - 125
Nickel	100	107		ug/L		107	75 - 125
Selenium	100	103		ug/L		103	75 - 125
Vanadium	100	105		ug/L		105	75 - 125
Arsenic	100	110		ug/L		110	75 - 125

Lab Sample ID: LCS 680-339886/2-A
Matrix: Water
Analysis Batch: 341801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	50.0	45.7		ug/L		91	75 - 125
Cadmium	50.0	53.3		ug/L		107	75 - 125

Lab Sample ID: 680-103417-7 MS
Matrix: Water
Analysis Batch: 340872

Client Sample ID: LF-2-MS
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	98	J	5000	6000		ug/L		118	75 - 125
Antimony	5.0		50.0	59.3		ug/L		119	75 - 125
Barium	110		100	230		ug/L		119	75 - 125
Chromium	5.0		100	114		ug/L		114	75 - 125
Cobalt	3.5		50.0	60.1		ug/L		113	75 - 125
Copper	1.8		100	114		ug/L		112	75 - 125
Iron	5700		5000	11600		ug/L		116	75 - 125
Lead	1.5	U	50.0	58.6		ug/L		117	75 - 125
Manganese	1300		500	1890	F1	ug/L		126	75 - 125
Mercury	0.80		5.00	5.28		ug/L		106	75 - 125
Nickel	5.0		100	112		ug/L		112	75 - 125
Selenium	2.5		100	119		ug/L		119	75 - 125
Vanadium	10		100	115		ug/L		115	75 - 125
Arsenic	2.5		100	118		ug/L		118	75 - 125

Lab Sample ID: 680-103417-7 MS
Matrix: Water
Analysis Batch: 341801

Client Sample ID: LF-2-MS
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.50		50.0	40.9		ug/L		82	75 - 125
Cadmium	0.79		50.0	51.1		ug/L		101	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-103417-7 MSD — **Client Sample ID: LF-2-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340872 — **Prep Batch: 339886**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	98	J	5000	5720		ug/L		112	75 - 125	5	20
Antimony	5.0		50.0	57.0		ug/L		114	75 - 125	4	20
Barium	110		100	221		ug/L		110	75 - 125	4	20
Chromium	5.0		100	106		ug/L		106	75 - 125	7	20
Cobalt	3.5		50.0	56.8		ug/L		107	75 - 125	6	20
Copper	1.8		100	108		ug/L		107	75 - 125	5	20
Iron	5700		5000	11100		ug/L		107	75 - 125	4	20
Lead	1.5	U	50.0	56.6		ug/L		113	75 - 125	3	20
Manganese	1300		500	1810		ug/L		109	75 - 125	4	20
Mercury	0.80		5.00	5.46		ug/L		109	75 - 125	3	20
Nickel	5.0		100	108		ug/L		108	75 - 125	4	20
Selenium	2.5		100	116		ug/L		116	75 - 125	2	20
Vanadium	10		100	106		ug/L		106	75 - 125	8	20
Arsenic	2.5		100	115		ug/L		115	75 - 125	3	20

Lab Sample ID: 680-103417-7 MSD — **Client Sample ID: LF-2-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 341801 — **Prep Batch: 339886**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	0.50		50.0	38.0		ug/L		76	75 - 125	7	20
Cadmium	0.79		50.0	49.2		ug/L		97	75 - 125	4	20

Lab Sample ID: 680-103417-12 MS — **Client Sample ID: MW-2-MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340872 — **Prep Batch: 339886**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	400		5000	6500		ug/L		122	75 - 125
Antimony	5.0		50.0	61.2		ug/L		122	75 - 125
Barium	180		100	296		ug/L		119	75 - 125
Chromium	11		100	129		ug/L		119	75 - 125
Cobalt	16		50.0	73.3		ug/L		114	75 - 125
Copper	12		100	121		ug/L		109	75 - 125
Iron	180000		5000	181000	4	ug/L		101	75 - 125
Lead	0.77		50.0	57.8		ug/L		114	75 - 125
Manganese	13000		500	13200	4	ug/L		100	75 - 125
Mercury	0.80		5.00	5.52		ug/L		110	75 - 125
Nickel	8.4		100	120		ug/L		112	75 - 125
Selenium	2.5		100	112		ug/L		112	75 - 125
Vanadium	10		100	117		ug/L		117	75 - 125
Arsenic	4.1		100	125		ug/L		121	75 - 125

Lab Sample ID: 680-103417-12 MS — **Client Sample ID: MW-2-MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 341801 — **Prep Batch: 339886**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.50		50.0	42.0		ug/L		84	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-103417-12 MS
Matrix: Water
Analysis Batch: 341801

Client Sample ID: MW-2-MS
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.16		50.0	48.7		ug/L		97	75 - 125

Lab Sample ID: 680-103417-12 MSD
Matrix: Water
Analysis Batch: 340872

Client Sample ID: MW-2-MSD
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	400		5000	6200		ug/L		116	75 - 125	5	20
Antimony	5.0		50.0	57.7		ug/L		115	75 - 125	6	20
Barium	180		100	275		ug/L		98	75 - 125	8	20
Chromium	11		100	122		ug/L		112	75 - 125	5	20
Cobalt	16		50.0	69.7		ug/L		106	75 - 125	5	20
Copper	12		100	115		ug/L		103	75 - 125	6	20
Iron	180000		5000	173000	4	ug/L		-60	75 - 125	5	20
Lead	0.77		50.0	55.4		ug/L		109	75 - 125	4	20
Manganese	13000		500	12700	4	ug/L		3	75 - 125	4	20
Mercury	0.80		5.00	5.34		ug/L		107	75 - 125	3	20
Nickel	8.4		100	114		ug/L		105	75 - 125	5	20
Selenium	2.5		100	108		ug/L		108	75 - 125	4	20
Vanadium	10		100	113		ug/L		113	75 - 125	4	20
Arsenic	4.1		100	120		ug/L		116	75 - 125	4	20

Lab Sample ID: 680-103417-12 MSD
Matrix: Water
Analysis Batch: 341801

Client Sample ID: MW-2-MSD
Prep Type: Total/NA
Prep Batch: 339886

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	0.50		50.0	41.5		ug/L		83	75 - 125	1	20
Cadmium	0.16		50.0	49.2		ug/L		98	75 - 125	1	20

Lab Sample ID: MB 680-340237/1-A
Matrix: Water
Analysis Batch: 341574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/22/14 10:17	07/30/14 11:15	1
Barium	5.0	U	5.0	1.4	ug/L		07/22/14 10:17	07/30/14 11:15	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/22/14 10:17	07/30/14 11:15	1
Chromium	5.0	U	5.0	2.5	ug/L		07/22/14 10:17	07/30/14 11:15	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/22/14 10:17	07/30/14 11:15	1
Iron	100	U	100	44	ug/L		07/22/14 10:17	07/30/14 11:15	1
Lead	1.5	U	1.5	0.50	ug/L		07/22/14 10:17	07/30/14 11:15	1
Manganese	5.0	U	5.0	2.0	ug/L		07/22/14 10:17	07/30/14 11:15	1
Nickel	5.0	U	5.0	2.0	ug/L		07/22/14 10:17	07/30/14 11:15	1
Vanadium	10	U	10	3.2	ug/L		07/22/14 10:17	07/30/14 11:15	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/22/14 10:17	07/30/14 11:15	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-340237/2-A
Matrix: Water
Analysis Batch: 341574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5390		ug/L		108	75 - 125
Antimony	50.0	55.1		ug/L		110	75 - 125
Barium	100	112		ug/L		112	75 - 125
Beryllium	50.0	52.4		ug/L		105	75 - 125
Cadmium	50.0	56.0		ug/L		112	75 - 125
Chromium	100	111		ug/L		111	75 - 125
Cobalt	50.0	55.3		ug/L		111	75 - 125
Copper	100	111		ug/L		111	75 - 125
Iron	5000	5630		ug/L		113	75 - 125
Lead	50.0	55.9		ug/L		112	75 - 125
Manganese	500	554		ug/L		111	75 - 125
Mercury	5.00	5.13		ug/L		103	75 - 125
Nickel	100	113		ug/L		113	75 - 125
Selenium	100	104		ug/L		104	75 - 125
Vanadium	100	110		ug/L		110	75 - 125
Arsenic	100	108		ug/L		108	75 - 125

Lab Sample ID: 680-103417-17 MS
Matrix: Water
Analysis Batch: 341574

Client Sample ID: FB-2
Prep Type: Total/NA
Prep Batch: 340237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	55	J	5000	5200		ug/L		103	75 - 125
Antimony	5.0		50.0	54.1		ug/L		108	75 - 125
Barium	5.0	U	100	110		ug/L		110	75 - 125
Beryllium	0.50		50.0	51.8		ug/L		104	75 - 125
Cadmium	0.50	U	50.0	54.2		ug/L		108	75 - 125
Chromium	5.0	U	100	109		ug/L		109	75 - 125
Cobalt	0.50	U	50.0	54.6		ug/L		109	75 - 125
Copper	5.0		100	109		ug/L		109	75 - 125
Iron	100	U	5000	5780		ug/L		116	75 - 125
Lead	1.5	U	50.0	54.8		ug/L		110	75 - 125
Manganese	5.0	U	500	546		ug/L		109	75 - 125
Mercury	0.80		5.00	4.94		ug/L		99	75 - 125
Nickel	5.0	U	100	111		ug/L		111	75 - 125
Selenium	2.5		100	101		ug/L		101	75 - 125
Vanadium	10	U	100	107		ug/L		107	75 - 125
Arsenic	2.5	U	100	107		ug/L		107	75 - 125

Lab Sample ID: 680-103417-17 MSD
Matrix: Water
Analysis Batch: 341574

Client Sample ID: FB-2
Prep Type: Total/NA
Prep Batch: 340237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	55	J	5000	5340		ug/L		106	75 - 125	3	20
Antimony	5.0		50.0	55.1		ug/L		110	75 - 125	2	20
Barium	5.0	U	100	110		ug/L		110	75 - 125	0	20
Beryllium	0.50		50.0	51.9		ug/L		104	75 - 125	0	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-103417-17 MSD
Matrix: Water
Analysis Batch: 341574

Client Sample ID: FB-2
Prep Type: Total/NA
Prep Batch: 340237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.50	U	50.0	54.5		ug/L		109	75 - 125	1	20
Chromium	5.0	U	100	111		ug/L		111	75 - 125	2	20
Cobalt	0.50	U	50.0	56.0		ug/L		112	75 - 125	3	20
Copper	5.0		100	111		ug/L		111	75 - 125	2	20
Iron	100	U	5000	5630		ug/L		113	75 - 125	3	20
Lead	1.5	U	50.0	56.3		ug/L		113	75 - 125	3	20
Manganese	5.0	U	500	559		ug/L		112	75 - 125	2	20
Mercury	0.80		5.00	5.02		ug/L		100	75 - 125	2	20
Nickel	5.0	U	100	112		ug/L		112	75 - 125	2	20
Selenium	2.5		100	103		ug/L		103	75 - 125	2	20
Vanadium	10	U	100	110		ug/L		110	75 - 125	2	20
Arsenic	2.5	U	100	108		ug/L		108	75 - 125	1	20

Lab Sample ID: MB 680-340113/1-A
Matrix: Water
Analysis Batch: 340893

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	100	U	100	33	ug/L		07/21/14 13:37	07/25/14 10:24	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		07/21/14 13:37	07/25/14 10:24	1
Sodium, Dissolved	500	U	500	250	ug/L		07/21/14 13:37	07/25/14 10:24	1
Potassium, Dissolved	500	U	500	170	ug/L		07/21/14 13:37	07/25/14 10:24	1
Magnesium, Dissolved	250	U	250	43	ug/L		07/21/14 13:37	07/25/14 10:24	1

Lab Sample ID: MB 680-340113/1-A
Matrix: Water
Analysis Batch: 341340

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	250	U	250	130	ug/L		07/21/14 13:37	07/28/14 19:47	1

Lab Sample ID: LCS 680-340113/2-A
Matrix: Water
Analysis Batch: 340893

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	5000	4960		ug/L		99	75 - 125
Manganese, Dissolved	500	508		ug/L		102	75 - 125
Sodium, Dissolved	5000	5490		ug/L		110	75 - 125
Potassium, Dissolved	5000	5050		ug/L		101	75 - 125
Magnesium, Dissolved	5000	5230		ug/L		105	75 - 125

Lab Sample ID: LCS 680-340113/2-A
Matrix: Water
Analysis Batch: 341340

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	5000	5750		ug/L		115	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-340255/1-A
Matrix: Water
Analysis Batch: 340538

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 340255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	100	U	100	33	ug/L		07/22/14 11:45	07/23/14 10:38	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		07/22/14 11:45	07/23/14 10:38	1
Sodium, Dissolved	500	U	500	250	ug/L		07/22/14 11:45	07/23/14 10:38	1
Potassium, Dissolved	500	U	500	170	ug/L		07/22/14 11:45	07/23/14 10:38	1
Calcium, Dissolved	250	U	250	130	ug/L		07/22/14 11:45	07/23/14 10:38	1
Magnesium, Dissolved	250	U	250	43	ug/L		07/22/14 11:45	07/23/14 10:38	1

Lab Sample ID: LCS 680-340255/2-A
Matrix: Water
Analysis Batch: 340538

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 340255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	5000	5530		ug/L		111	75 - 125
Manganese, Dissolved	500	479		ug/L		96	75 - 125
Sodium, Dissolved	5000	5330		ug/L		107	75 - 125
Potassium, Dissolved	5000	5240		ug/L		105	75 - 125
Calcium, Dissolved	5000	5660		ug/L		113	75 - 125
Magnesium, Dissolved	5000	5440		ug/L		109	75 - 125

Lab Sample ID: 680-103417-13 MS
Matrix: Water
Analysis Batch: 340538

Client Sample ID: MW-3
Prep Type: Dissolved
Prep Batch: 340255

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	11000		5000	18900	F1	ug/L		160	75 - 125
Manganese, Dissolved	410		500	928		ug/L		104	75 - 125
Sodium, Dissolved	20000		5000	29500	4	ug/L		183	75 - 125
Potassium, Dissolved	2900		5000	8220		ug/L		107	75 - 125
Calcium, Dissolved	40000		5000	52700	4	ug/L		249	75 - 125
Magnesium, Dissolved	4600		5000	11200	F1	ug/L		132	75 - 125

Lab Sample ID: 680-103417-13 MSD
Matrix: Water
Analysis Batch: 340538

Client Sample ID: MW-3
Prep Type: Dissolved
Prep Batch: 340255

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron, Dissolved	11000		5000	18800	F1	ug/L		157	75 - 125	1	20
Manganese, Dissolved	410		500	861		ug/L		91	75 - 125	8	20
Sodium, Dissolved	20000		5000	28700	4	ug/L		167	75 - 125	3	20
Potassium, Dissolved	2900		5000	7810		ug/L		99	75 - 125	5	20
Calcium, Dissolved	40000		5000	51800	4	ug/L		232	75 - 125	2	20
Magnesium, Dissolved	4600		5000	11000	F1	ug/L		129	75 - 125	1	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-340094/2
Matrix: Water
Analysis Batch: 340094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			07/21/14 10:49	1

Lab Sample ID: LCS 680-340094/1
Matrix: Water
Analysis Batch: 340094

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	1.00		mg/L		100	90 - 110

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-339831/2
Matrix: Water
Analysis Batch: 339831

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/18/14 13:40	1

Lab Sample ID: LCS 680-339831/1
Matrix: Water
Analysis Batch: 339831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.28		mg/L		107	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-340020/1
Matrix: Water
Analysis Batch: 340020

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Lab Sample ID: LCS 680-340020/2
Matrix: Water
Analysis Batch: 340020

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.50		mg/L		95	75 - 125

Lab Sample ID: LCSD 680-340020/3
Matrix: Water
Analysis Batch: 340020

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
Sulfide	10.0	9.68		mg/L		97	75 - 125	2	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-341085/3
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			07/25/14 04:52	1

Lab Sample ID: LCS 680-341085/4
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon			20.0	19.3		mg/L		96	80 - 120		

Lab Sample ID: LCSD 680-341085/5
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon			20.0	16.3		mg/L		82	80 - 120	17	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-340536/5
Matrix: Water
Analysis Batch: 340536

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			07/23/14 11:44	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 11:44	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 11:44	1

Lab Sample ID: LCS 680-340536/6
Matrix: Water
Analysis Batch: 340536

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	252		mg/L		101	80 - 120		

Lab Sample ID: LCSD 680-340536/22
Matrix: Water
Analysis Batch: 340536

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
Alkalinity			250	250		mg/L		100	80 - 120	1	30

Lab Sample ID: 680-103417-5 DU
Matrix: Water
Analysis Batch: 340536

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	120			120		mg/L				0.7	30
Bicarbonate Alkalinity as CaCO3	120			120		mg/L				0.7	30
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	30

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 680-340784/5
Matrix: Water
Analysis Batch: 340784

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			07/24/14 13:35	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/24/14 13:35	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/24/14 13:35	1

Lab Sample ID: LCS 680-340784/6
Matrix: Water
Analysis Batch: 340784

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	251		mg/L		100	80 - 120		

Lab Sample ID: LCSD 680-340784/32
Matrix: Water
Analysis Batch: 340784

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
Alkalinity			250	253		mg/L		101	80 - 120	1	30

GC/MS VOA

Analysis Batch: 339990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-6	LF-1	Total/NA	Water	8260B	
680-103417-7	LF-2	Total/NA	Water	8260B	
680-103417-9	LF-5	Total/NA	Water	8260B	
680-103417-12	MW-2	Total/NA	Water	8260B	
680-103417-12 MS	MW-2-MS	Total/NA	Water	8260B	
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	8260B	
680-103417-14	MW-8U	Total/NA	Water	8260B	
680-103417-20	MW-8LR	Total/NA	Water	8260B	
680-103417-21	Trip Blank	Total/NA	Water	8260B	
LCS 680-339990/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-339990/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-339990/10	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 340039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	3520C	
680-103417-12	MW-2	Total/NA	Water	3520C	
680-103417-12 MS	MW-2-MS	Total/NA	Water	3520C	
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	3520C	
680-103417-13	MW-3	Total/NA	Water	3520C	
680-103417-20	MW-8LR	Total/NA	Water	3520C	
LCS 680-340039/10-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 680-340039/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-340039/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 341364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	8270D LL	340039
680-103417-12	MW-2	Total/NA	Water	8270D LL	340039
680-103417-12 MS	MW-2-MS	Total/NA	Water	8270D LL	340039
680-103417-13	MW-3	Total/NA	Water	8270D LL	340039
680-103417-20	MW-8LR	Total/NA	Water	8270D LL	340039
LCS 680-340039/10-A	Lab Control Sample	Total/NA	Water	8270D LL	340039
LCS 680-340039/7-A	Lab Control Sample	Total/NA	Water	8270D LL	340039
MB 680-340039/6-A	Method Blank	Total/NA	Water	8270D LL	340039

Analysis Batch: 341577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	8270D LL	340039

GC VOA

Analysis Batch: 340462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-6	LF-1	Total/NA	Water	8015C	
680-103417-7	LF-2	Total/NA	Water	8015C	
680-103417-8	LF-3	Total/NA	Water	8015C	
680-103417-9	LF-5	Total/NA	Water	8015C	

GC VOA (Continued)

Analysis Batch: 340462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-10	WWL-2	Total/NA	Water	8015C	
LCS 680-340462/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-340462/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-340462/7	Method Blank	Total/NA	Water	8015C	

Analysis Batch: 340678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-12	MW-2	Total/NA	Water	8015C	
680-103417-12 MS	MW-2-MS	Total/NA	Water	8015C	
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	8015C	
LCS 680-340678/3	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-340678/4	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-340678/6	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 339708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	9056A	
680-103417-12	MW-2	Total/NA	Water	9056A	
680-103417-13	MW-3	Total/NA	Water	9056A	
680-103417-14	MW-8U	Total/NA	Water	9056A	
LCS 680-339708/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-339708/8	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-339708/6	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-12	MW-2	Total/NA	Water	9056A	
680-103417-12	MW-2	Total/NA	Water	9056A	
680-103417-13	MW-3	Total/NA	Water	9056A	
680-103417-14	MW-8U	Total/NA	Water	9056A	
LCS 680-340703/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340703/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340703/5	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	9056A	
680-103417-5	MW-1	Total/NA	Water	9056A	
LCS 680-340895/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340895/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340895/5	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 339886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	3010A	
680-103417-6	LF-1	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 339886 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-7	LF-2	Total/NA	Water	3010A	
680-103417-7 MS	LF-2-MS	Total/NA	Water	3010A	
680-103417-7 MSD	LF-2-MSD	Total/NA	Water	3010A	
680-103417-8	LF-3	Total/NA	Water	3010A	
680-103417-9	LF-5	Total/NA	Water	3010A	
680-103417-10	WWL-2	Total/NA	Water	3010A	
680-103417-11	WWL-3L	Total/NA	Water	3010A	
680-103417-12	MW-2	Total/NA	Water	3010A	
680-103417-12 MS	MW-2-MS	Total/NA	Water	3010A	
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	3010A	
680-103417-14	MW-8U	Total/NA	Water	3010A	
680-103417-18	EB-2	Total/NA	Water	3010A	
680-103417-19	MW-6	Total/NA	Water	3010A	
680-103417-20	MW-8LR	Total/NA	Water	3010A	
LCS 680-339886/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-339886/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 340113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	3005A	
680-103417-12	MW-2	Dissolved	Water	3005A	
680-103417-14	MW-8U	Dissolved	Water	3005A	
LCS 680-340113/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-340113/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 340237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-17	FB-2	Total/NA	Water	3010A	
680-103417-17 MS	FB-2	Total/NA	Water	3010A	
680-103417-17 MSD	FB-2	Total/NA	Water	3010A	
LCS 680-340237/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-340237/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 340255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-13	MW-3	Dissolved	Water	3005A	
680-103417-13 MS	MW-3	Dissolved	Water	3005A	
680-103417-13 MSD	MW-3	Dissolved	Water	3005A	
LCS 680-340255/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-340255/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 340538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-13	MW-3	Dissolved	Water	6020A	340255
680-103417-13 MS	MW-3	Dissolved	Water	6020A	340255
680-103417-13 MSD	MW-3	Dissolved	Water	6020A	340255
LCS 680-340255/2-A	Lab Control Sample	Total Recoverable	Water	6020A	340255
MB 680-340255/1-A	Method Blank	Total Recoverable	Water	6020A	340255

Metals (Continued)

Analysis Batch: 340872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	6020A	339886
680-103417-6	LF-1	Total/NA	Water	6020A	339886
680-103417-7	LF-2	Total/NA	Water	6020A	339886
680-103417-7 MS	LF-2-MS	Total/NA	Water	6020A	339886
680-103417-7 MSD	LF-2-MSD	Total/NA	Water	6020A	339886
680-103417-8	LF-3	Total/NA	Water	6020A	339886
680-103417-9	LF-5	Total/NA	Water	6020A	339886
680-103417-10	WWL-2	Total/NA	Water	6020A	339886
680-103417-11	WWL-3L	Total/NA	Water	6020A	339886
680-103417-12	MW-2	Total/NA	Water	6020A	339886
680-103417-12 MS	MW-2-MS	Total/NA	Water	6020A	339886
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	6020A	339886
680-103417-14	MW-8U	Total/NA	Water	6020A	339886
680-103417-18	EB-2	Total/NA	Water	6020A	339886
680-103417-19	MW-6	Total/NA	Water	6020A	339886
680-103417-20	MW-8LR	Total/NA	Water	6020A	339886
LCS 680-339886/2-A	Lab Control Sample	Total/NA	Water	6020A	339886
MB 680-339886/1-A	Method Blank	Total/NA	Water	6020A	339886

Analysis Batch: 340893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	6020A	340113
680-103417-12	MW-2	Dissolved	Water	6020A	340113
680-103417-14	MW-8U	Dissolved	Water	6020A	340113
LCS 680-340113/2-A	Lab Control Sample	Total Recoverable	Water	6020A	340113
MB 680-340113/1-A	Method Blank	Total Recoverable	Water	6020A	340113

Analysis Batch: 341340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	6020A	340113
680-103417-12	MW-2	Dissolved	Water	6020A	340113
680-103417-14	MW-8U	Dissolved	Water	6020A	340113
LCS 680-340113/2-A	Lab Control Sample	Total Recoverable	Water	6020A	340113
MB 680-340113/1-A	Method Blank	Total Recoverable	Water	6020A	340113

Analysis Batch: 341574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-17	FB-2	Total/NA	Water	6020A	340237
680-103417-17 MS	FB-2	Total/NA	Water	6020A	340237
680-103417-17 MSD	FB-2	Total/NA	Water	6020A	340237
LCS 680-340237/2-A	Lab Control Sample	Total/NA	Water	6020A	340237
MB 680-340237/1-A	Method Blank	Total/NA	Water	6020A	340237

Analysis Batch: 341801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-6	LF-1	Total/NA	Water	6020A	339886
680-103417-7	LF-2	Total/NA	Water	6020A	339886
680-103417-7 MS	LF-2-MS	Total/NA	Water	6020A	339886
680-103417-7 MSD	LF-2-MSD	Total/NA	Water	6020A	339886
680-103417-10	WWL-2	Total/NA	Water	6020A	339886
680-103417-11	WWL-3L	Total/NA	Water	6020A	339886

Metals (Continued)

Analysis Batch: 341801 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-12 MS	MW-2-MS	Total/NA	Water	6020A	339886
680-103417-12 MSD	MW-2-MSD	Total/NA	Water	6020A	339886
680-103417-18	EB-2	Total/NA	Water	6020A	339886
LCS 680-339886/2-A	Lab Control Sample	Total/NA	Water	6020A	339886
MB 680-339886/1-A	Method Blank	Total/NA	Water	6020A	339886

General Chemistry

Analysis Batch: 339831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	365.1	
680-103417-12	MW-2	Dissolved	Water	365.1	
680-103417-13	MW-3	Dissolved	Water	365.1	
680-103417-14	MW-8U	Dissolved	Water	365.1	
LCS 680-339831/1	Lab Control Sample	Total/NA	Water	365.1	
MB 680-339831/2	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 340020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	9034	
680-103417-5	MW-1	Total/NA	Water	9034	
680-103417-12	MW-2	Dissolved	Water	9034	
680-103417-12	MW-2	Total/NA	Water	9034	
680-103417-13	MW-3	Dissolved	Water	9034	
680-103417-13	MW-3	Total/NA	Water	9034	
680-103417-14	MW-8U	Dissolved	Water	9034	
680-103417-14	MW-8U	Total/NA	Water	9034	
LCS 680-340020/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-340020/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-340020/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 340094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	350.1	
680-103417-12	MW-2	Dissolved	Water	350.1	
680-103417-13	MW-3	Dissolved	Water	350.1	
680-103417-14	MW-8U	Dissolved	Water	350.1	
LCS 680-340094/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-340094/2	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 340536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	SM 2320B	
680-103417-5 DU	MW-1	Total/NA	Water	SM 2320B	
680-103417-12	MW-2	Total/NA	Water	SM 2320B	
680-103417-13	MW-3	Total/NA	Water	SM 2320B	
LCS 680-340536/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-340536/22	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-340536/5	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 340720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Total/NA	Water	UnionizedNH3	
680-103417-12	MW-2	Total/NA	Water	UnionizedNH3	
680-103417-13	MW-3	Total/NA	Water	UnionizedNH3	
680-103417-14	MW-8U	Total/NA	Water	UnionizedNH3	

Analysis Batch: 340784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-14	MW-8U	Total/NA	Water	SM 2320B	
LCS 680-340784/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-340784/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-340784/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 341085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-5	MW-1	Dissolved	Water	9060	
680-103417-12	MW-2	Dissolved	Water	9060	
680-103417-13	MW-3	Dissolved	Water	9060	
680-103417-14	MW-8U	Dissolved	Water	9060	
LCS 680-341085/4	Lab Control Sample	Dissolved	Water	9060	
LCSD 680-341085/5	Lab Control Sample Dup	Dissolved	Water	9060	
MB 680-341085/3	Method Blank	Dissolved	Water	9060	

Client Sample ID: MW-1

Lab Sample ID: 680-103417-5

Date Collected: 07/17/14 08:50

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			340039	07/21/14 15:50	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341364	07/29/14 18:41	SMC	TAL SAV
Total/NA	Analysis	9056A		1	339708	07/18/14 16:28	VAS	TAL SAV
Total/NA	Analysis	9056A		10	340895	07/25/14 16:50	PAT	TAL SAV
Total/NA	Analysis	9056A		20	340895	07/25/14 17:06	PAT	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340893	07/25/14 11:07	CME	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	341340	07/28/14 20:24	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 01:24	CME	TAL SAV
Dissolved	Analysis	350.1		1	340094	07/21/14 11:30	JME	TAL SAV
Dissolved	Analysis	365.1		1	339831	07/18/14 15:42	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 11:52	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340536	07/23/14 12:36	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: LF-1

Lab Sample ID: 680-103417-6

Date Collected: 07/17/14 09:50

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339990	07/21/14 13:40	MMT	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 15:42	AJMC	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	341801	07/30/14 20:47	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 01:29	CME	TAL SAV

Client Sample ID: LF-2

Lab Sample ID: 680-103417-7

Date Collected: 07/17/14 10:10

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339990	07/21/14 14:01	MMT	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 16:06	AJMC	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	341801	07/30/14 20:54	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 01:35	CME	TAL SAV

Client Sample ID: LF-3

Lab Sample ID: 680-103417-8

Date Collected: 07/17/14 10:50

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	340462	07/23/14 16:31	AJMC	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 02:01	CME	TAL SAV

Client Sample ID: LF-5

Lab Sample ID: 680-103417-9

Date Collected: 07/17/14 11:35

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339990	07/21/14 14:22	MMT	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 16:55	AJMC	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 02:17	CME	TAL SAV

Client Sample ID: WWL-2

Lab Sample ID: 680-103417-10

Date Collected: 07/17/14 14:15

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	340462	07/23/14 20:33	AJMC	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	341801	07/30/14 22:00	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 02:22	CME	TAL SAV

Client Sample ID: WWL-3L

Lab Sample ID: 680-103417-11

Date Collected: 07/17/14 16:15

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	341801	07/30/14 22:07	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 02:28	CME	TAL SAV

Client Sample ID: MW-2

Lab Sample ID: 680-103417-12

Date Collected: 07/17/14 08:40

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	339990	07/21/14 14:43	MMT	TAL SAV
Total/NA	Prep	3520C			340039	07/21/14 15:50	RBS	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-2

Lab Sample ID: 680-103417-12

Date Collected: 07/17/14 08:40

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D LL		1	341364	07/29/14 19:07	SMC	TAL SAV
Total/NA	Analysis	8015C		1	340678	07/24/14 15:40	AJMC	TAL SAV
Total/NA	Analysis	9056A		2	339708	07/18/14 16:44	VAS	TAL SAV
Total/NA	Analysis	9056A		10	340703	07/24/14 18:17	PAT	TAL SAV
Total/NA	Analysis	9056A		25	340703	07/24/14 18:32	PAT	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340893	07/25/14 11:12	CME	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	341340	07/28/14 20:29	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 02:33	CME	TAL SAV
Dissolved	Analysis	350.1		1	340094	07/21/14 11:30	JME	TAL SAV
Dissolved	Analysis	365.1		1	339831	07/18/14 15:42	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 12:11	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340536	07/23/14 12:52	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: MW-3

Lab Sample ID: 680-103417-13

Date Collected: 07/17/14 10:30

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			340039	07/21/14 15:50	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341364	07/29/14 19:32	SMC	TAL SAV
Total/NA	Analysis	9056A		2	339708	07/18/14 16:59	VAS	TAL SAV
Total/NA	Analysis	9056A		2	340703	07/24/14 18:47	PAT	TAL SAV
Dissolved	Prep	3005A			340255	07/22/14 11:45	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340538	07/23/14 10:53	CME	TAL SAV
Dissolved	Analysis	350.1		2	340094	07/21/14 11:41	JME	TAL SAV
Dissolved	Analysis	365.1		1	339831	07/18/14 15:42	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 12:42	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340536	07/23/14 12:25	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: MW-8U

Lab Sample ID: 680-103417-14

Date Collected: 07/17/14 14:35

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	339990	07/21/14 15:04	MMT	TAL SAV
Total/NA	Analysis	9056A		5	339708	07/18/14 17:14	VAS	TAL SAV
Total/NA	Analysis	9056A		20	340703	07/24/14 19:03	PAT	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340893	07/25/14 11:28	CME	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	341340	07/28/14 20:34	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 02:54	CME	TAL SAV
Dissolved	Analysis	350.1		10	340094	07/21/14 11:41	JME	TAL SAV
Dissolved	Analysis	365.1		1	339831	07/18/14 15:42	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 13:01	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340784	07/24/14 15:28	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: FB-2

Lab Sample ID: 680-103417-17

Date Collected: 07/17/14 09:00

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			340237	07/22/14 10:17	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341574	07/29/14 23:30	BWR	TAL SAV

Client Sample ID: EB-2

Lab Sample ID: 680-103417-18

Date Collected: 07/17/14 09:05

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	341801	07/30/14 22:51	BWR	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 03:00	CME	TAL SAV

Client Sample ID: MW-6

Lab Sample ID: 680-103417-19

Date Collected: 07/17/14 13:33

Matrix: Water

Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 03:05	CME	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Client Sample ID: MW-8LR

Lab Sample ID: 680-103417-20

Date Collected: 07/17/14 15:35
Matrix: Water
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	339990	07/21/14 15:25	MMT	TAL SAV
Total/NA	Prep	3520C			340039	07/21/14 15:50	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341364	07/29/14 19:57	SMC	TAL SAV
Total/NA	Prep	3010A			339886	07/19/14 09:35	SP	TAL SAV
Total/NA	Analysis	6020A		1	340872	07/25/14 03:21	CME	TAL SAV

Client Sample ID: Trip Blank

Lab Sample ID: 680-103417-21

Date Collected: 07/17/14 00:00
Matrix: Water
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	339990	07/21/14 11:55	MMT	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-15
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-14
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	09-005r	04-16-15
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-14
Kentucky (UST)	State Program	4	18	06-30-15
Louisiana	NELAP	6	30690	06-30-14 *
Louisiana (DW)	NELAP	6	LA140023	12-31-14
Maine	State Program	1	GA00006	08-16-14 *
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-14 *
Mississippi	State Program	4	N/A	06-30-14 *
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14 *
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-14 *
New York	NELAP	2	10842	03-31-15
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-14
Oklahoma	State Program	6	9984	08-31-14
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-14
South Carolina	State Program	4	98001	06-30-14 *
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-14
West Virginia DEP	State Program	3	94	06-30-14 *
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103417-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 83763

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)
Ashland Agvalo		VA
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL	
CLIENT ADDRESS: 23 S 13th St Richmond VA 23219		
COMPANY CONTRACTING THIS WORK (if applicable): Ashland		

PAGE 1 OF

STANDARD REPORT DELIVERY (USE)
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) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260 VOCs	8270 SVOC	6020 Metals	8015 Ethanol + methane	PRESERVATIVE	REMARKS
7/16/14	9:40	RAB-MW1R	G	X				X					
	—	Field Duplicate						X					
	9:50	Field Blank						X					
	9:55	Equipment Blank 1						X					
7/17/14	8:50	MW-1							X	X			
	9:50	LF-1						X		X	X		
	10:10	LF-2 (~~MS/MSD~~)						X		X	X		
	10:10	~~LF-3~~ MS/MSD 2								X			
	10:50	LF-3								X	X		
	11:35	LF-5						X		X	X		
	14:15	MWL-2								X	X		
7/17/14	16:15	MWL-3L	G	X						X			

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	7-17-14	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	09:47	07/18/14	YES ( ) NO ( )		680-103417	3.0 a.c 0.8 a.c 3.6 a.c 1.8 a.c

TAL8240-680 (1008)

Serial Number 83765

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)
Aqueous Corrective Action		
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL: Ewright@gesonline.com	
CLIENT ADDRESS: 23 S 13th Street Suite 103 Richmond, VA 23223		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE ____ OF ____

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

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	Dissolved Methane/Ethane/Ethene (RSK-175)	Dissolved Gases (RSK-175)	Dissolved Other-Propane	Dis. Ammonia	Dis. Sulfide	Total Sulfide	DOC	Anions	Alkalinity	REMARKS
								PRESERVATIVE									
7-17-14	0840	MW-2	G	X				1	1	2	2	2	2	3	1	1	
	1030	MW-3															
	1435	MW-8U															
	0850	MW-1															

NUMBER OF CONTAINERS SUBMITTED

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Nicole A. Taylor	7-17-14	1800						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	09.47	7/18/14	YES ◯ NO ◯		680-103417	3.0°C 0.8°C 3.6°C 1.8°C

TAL8240-680 (1008)

Page 67 of 69

7/31/2014

Serial Number 83764

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: Ashland Aqualon	PROJECT NO.	PROJECT LOCATION (STATE)
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL	
CLIENT ADDRESS: 23 S. 13th St Richmond VA 23219		
COMPANY CONTRACTING THIS WORK (if applicable): Ashland		

PAGE ___ OF ___

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

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

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	8260 VOC	8270 SVOC	6020 Metals	8015 Ethanol + Methanol							REMARKS
7-17-14	0840	MW-2	G	x				3	2	1	3							
7-17-14	0850	MS-1 / MSD-1								2								
7-17-14	~~0855~~ NG 0900	FB2								1								
7-17-14	0905	EB2								1								
7-17-14	1030	MW-3							2									
7-17-14	1333	MW-6								1								
7-17-14	1435	MW-8U						3		1								
7-17-14	1535	MW-8L-R						3	2	1								

PRESERVATIVE

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	7-17-14	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	7/18/14	09:47	YES ○ NO ○		680-103417	3.0 °C 0.8 °C 3.6 °C 1.8 °C

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-103417-1

Login Number: 103417

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

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.	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	

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: 680-103465-1
Client Project/Site: Hercules Aqualon Corrective Action
Revision: 1

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

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
10/30/2014 1:45:09 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
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.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
H	Sample was prepped or analyzed beyond the specified holding time
F1	MS and/or MSD Recovery exceeds the control limits

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 Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-103465-1	MW-8D	Water	07/18/14 08:36	07/19/14 09:37
680-103465-2	MW-7U	Water	07/18/14 11:15	07/19/14 09:37
680-103465-3	FD2	Water	07/18/14 11:20	07/19/14 09:37
680-103465-4	MW-7L	Water	07/18/14 12:55	07/19/14 09:37
680-103465-5	WWL-3U	Water	07/18/14 09:00	07/19/14 09:37
680-103465-6	WWL-1	Water	07/18/14 10:50	07/19/14 09:37
680-103465-7	VFSP-MW1	Water	07/18/14 11:45	07/19/14 09:37
680-103465-8	MW-9	Water	07/18/14 14:30	07/19/14 09:37
680-103465-9	Trip Blank	Water	07/18/14 00:00	07/19/14 09:37

Job ID: 680-103465-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-103465-1

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

RECEIPT
The samples were received on 07/19/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.0 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples WWL-1 (680-103465-6) and Trip Blank (680-103465-9) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/23/2014.

Sample WWL-1 (680-103465-6)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL
Sample MW-7U (680-103465-2) was analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/21/2014 and analyzed on 07/29/2014.

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

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)
Samples MW-7L (680-103465-4) and WWL-3U (680-103465-5) were analyzed for organics by direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 07/23/2014.

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

METALS (ICPMS)
Sample MW-8D (680-103465-1) was analyzed for metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 07/21/2014 and analyzed on 07/25/2014 and 07/28/2014.

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

METALS (ICPMS)
Samples MW-8D (680-103465-1), MW-7U (680-103465-2), FD2 (680-103465-3), MW-7L (680-103465-4), WWL-3U (680-103465-5), WWL-1 (680-103465-6), VFSP-MW1 (680-103465-7) and MW-9 (680-103465-8) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 07/21/2014 and analyzed on 07/28/2014 and 07/29/2014.

Sample MW-7U (680-103465-2)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 680-103465-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

ALKALINITY
Sample MW-8D (680-103465-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 07/23/2014.

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

AMMONIA
Sample MW-8D (680-103465-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 07/28/2014.

Ammonia failed the recovery criteria high for the MS/MSD of sample MW-8DMS/MSD (680-103465-1) in batch 680-341228.

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

ORTHOPHOSPHATE
Sample MW-8D (680-103465-1) was analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 07/22/2014.

The following samples were analyzed outside of analytical holding time: MW-8D (680-103465-1).

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

SULFIDE
Sample MW-8D (680-103465-1) was analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 07/21/2014.

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

SULFIDE
Sample MW-8D (680-103465-1) was analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 07/21/2014.

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

9056 ANIONS
Sample MW-8D (680-103465-1) was analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 07/25/2014.

The following sample was analyzed outside of analytical holding time: MW-8D (680-103465-1).

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

ANIONS BY IC (NITRATE/NITRITE)
Sample MW-8D (680-103465-1) was analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 07/21/2014.

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

DISSOLVED ORGANIC CARBON
Sample MW-8D (680-103465-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 07/25/2014.

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

Job ID: 680-103465-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

UNIONIZED AMMONIA

Sample MW-8D (680-103465-1) was analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 07/24/2014.

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

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: MW-8D — Lab Sample ID: 680-103465-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.1		0.50	0.25	mg/L	1		9056A	Total/NA
Nitrate as N	0.075	H	0.050	0.025	mg/L	1		9056A	Total/NA
Sulfate	5.9		0.50	0.25	mg/L	1		9056A	Total/NA
Iron, Dissolved	490		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	170		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	10000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	3200		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	30000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	2400		250	43	ug/L	1		6020A	Dissolved
Cadmium	0.40	J	0.50	0.13	ug/L	1		6020A	Total/NA
Ammonia	0.097		0.050	0.026	mg/L	1		350.1	Dissolved
Orthophosphate, Dissolved	0.097	H	0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	130		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.12		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.8		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	21		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA

Client Sample ID: MW-7U — Lab Sample ID: 680-103465-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.17	J	0.20	0.099	ug/L	1		8270D LL	Total/NA
Aluminum	380		100	50	ug/L	1		6020A	Total/NA
Beryllium	3.4		0.50	0.15	ug/L	1		6020A	Total/NA
Cadmium	6.7		0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	540		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	65		5.0	1.1	ug/L	1		6020A	Total/NA
Lead	1.3	J	1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	62000		100	40	ug/L	20		6020A	Total/NA
Nickel	190		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: FD2 — Lab Sample ID: 680-103465-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	96	J	100	50	ug/L	1		6020A	Total/NA
Cadmium	0.15	J	0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	4.9		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	2.2	J	5.0	1.1	ug/L	1		6020A	Total/NA
Manganese	570		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	7.3		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: MW-7L — Lab Sample ID: 680-103465-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	470		100	50	ug/L	1		6020A	Total/NA
Chromium	24		5.0	2.5	ug/L	1		6020A	Total/NA
Lead	1.1	J	1.5	0.50	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: WWL-3U — Lab Sample ID: 680-103465-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	83	J	100	50	ug/L	1		6020A	Total/NA
Cadmium	0.14	J	0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: WWL-1 — Lab Sample ID: 680-103465-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	340		25	13	ug/L	5		8260B	Total/NA
Aluminum	150		100	50	ug/L	1		6020A	Total/NA
Cadmium	0.42	J	0.50	0.13	ug/L	1		6020A	Total/NA

Client Sample ID: VFSP-MW1 — Lab Sample ID: 680-103465-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	3.3		0.50	0.12	ug/L	1		6020A	Total/NA
Iron	1300		100	44	ug/L	1		6020A	Total/NA
Manganese	800		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 680-103465-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	590		100	50	ug/L	1		6020A	Total/NA
Iron	110000		100	44	ug/L	1		6020A	Total/NA
Lead	1.1	J	1.5	0.50	ug/L	1		6020A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-103465-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-8D
Date Collected: 07/18/14 08:36
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-1
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.1**		0.50	0.25	mg/L			07/25/14 03:16	1
Nitrate as N	**0.075**	**H**	0.050	0.025	mg/L			07/21/14 18:38	1
Nitrite as N	0.050	U H	0.050	0.025	mg/L			07/21/14 18:38	1
Sulfate	**5.9**		0.50	0.25	mg/L			07/25/14 03:16	1

Method: 6020A - Inductively Coupled Plasma - Mass Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**490**		100	33	ug/L		07/21/14 13:37	07/25/14 11:39	1
Manganese, Dissolved	**170**		5.0	1.0	ug/L		07/21/14 13:37	07/25/14 11:39	1
Sodium, Dissolved	**10000**		500	250	ug/L		07/21/14 13:37	07/25/14 11:39	1
Potassium, Dissolved	**3200**		500	170	ug/L		07/21/14 13:37	07/25/14 11:39	1
Calcium, Dissolved	**30000**		250	130	ug/L		07/21/14 13:37	07/28/14 20:50	1
Magnesium, Dissolved	**2400**		250	43	ug/L		07/21/14 13:37	07/25/14 11:39	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/21/14 14:00	07/28/14 22:42	1
Cadmium	**0.40**	**J**	0.50	0.13	ug/L		07/21/14 14:00	07/28/14 22:42	1
Lead	1.5	U	1.5	0.50	ug/L		07/21/14 14:00	07/28/14 22:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 13:05	1
Alkalinity	**130**		5.0	5.0	mg/L			07/23/14 13:10	1
Bicarbonate Alkalinity as CaCO3	**130**		5.0	5.0	mg/L			07/23/14 13:10	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 13:10	1
Ammonium ion as NH4	**0.12**		0.050	0.050	mg/L			07/24/14 12:45	1
pH	**6.8**		1.0	1.0	SU			07/24/14 12:45	1
Temperature	**21**		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.097**		0.050	0.026	mg/L			07/28/14 14:38	1
Orthophosphate, Dissolved	**0.097**	**H**	0.050	0.016	mg/L			07/22/14 10:43	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 13:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			07/25/14 13:20	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: MW-7U
Date Collected: 07/18/14 11:15
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.17	J	0.20	0.099	ug/L		07/21/14 15:50	07/29/14 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*80*		*30 - 130*	*07/21/14 15:50*	*07/29/14 20:22*	*1*
2-Fluorobiphenyl	*62*		*34 - 130*	*07/21/14 15:50*	*07/29/14 20:22*	*1*
2-Fluorophenol (Surr)	*65*		*25 - 130*	*07/21/14 15:50*	*07/29/14 20:22*	*1*
Terphenyl-d14 (Surr)	*62*		*36 - 130*	*07/21/14 15:50*	*07/29/14 20:22*	*1*
Phenol-d5 (Surr)	*46*		*27 - 130*	*07/21/14 15:50*	*07/29/14 20:22*	*1*
Nitrobenzene-d5 (Surr)	*52*		*32 - 130*	*07/21/14 15:50*	*07/29/14 20:22*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	380		100	50	ug/L		07/21/14 14:00	07/28/14 22:50	1
Beryllium	3.4		0.50	0.15	ug/L		07/21/14 14:00	07/29/14 19:28	1
Cadmium	6.7		0.50	0.13	ug/L		07/21/14 14:00	07/28/14 22:50	1
Cobalt	540		0.50	0.12	ug/L		07/21/14 14:00	07/29/14 19:28	1
Copper	65		5.0	1.1	ug/L		07/21/14 14:00	07/28/14 22:50	1
Lead	1.3	J	1.5	0.50	ug/L		07/21/14 14:00	07/28/14 22:50	1
Manganese	62000		100	40	ug/L		07/21/14 14:00	07/29/14 19:35	20
Mercury	0.80	U	0.80	0.40	ug/L		07/21/14 14:00	07/28/14 22:50	1
Nickel	190		5.0	2.0	ug/L		07/21/14 14:00	07/28/14 22:50	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: FD2
Date Collected: 07/18/14 11:20
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-3
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**96**	**J**	100	50	ug/L		07/21/14 14:00	07/28/14 23:04	1
Beryllium	0.50	U	0.50	0.15	ug/L		07/21/14 14:00	07/29/14 19:43	1
Cadmium	**0.15**	**J**	0.50	0.13	ug/L		07/21/14 14:00	07/28/14 23:04	1
Cobalt	**4.9**		0.50	0.12	ug/L		07/21/14 14:00	07/29/14 19:43	1
Copper	**2.2**	**J**	5.0	1.1	ug/L		07/21/14 14:00	07/28/14 23:04	1
Lead	1.5	U	1.5	0.50	ug/L		07/21/14 14:00	07/28/14 23:04	1
Manganese	**570**		5.0	2.0	ug/L		07/21/14 14:00	07/29/14 19:43	1
Mercury	0.80	U	0.80	0.40	ug/L		07/21/14 14:00	07/28/14 23:04	1
Nickel	**7.3**		5.0	2.0	ug/L		07/21/14 14:00	07/28/14 23:04	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: MW-7L
Date Collected: 07/18/14 12:55
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-4
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 14:30	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**470**		100	50	ug/L		07/21/14 14:00	07/28/14 23:12	1
Chromium	**24**		5.0	2.5	ug/L		07/21/14 14:00	07/28/14 23:12	1
Lead	**1.1**	**J**	1.5	0.50	ug/L		07/21/14 14:00	07/28/14 23:12	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: WWL-3U
Date Collected: 07/18/14 09:00
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-5
Matrix: Water

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 17:43	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**83**	**J**	100	50	ug/L		07/21/14 14:00	07/28/14 23:26	1
Cadmium	**0.14**	**J**	0.50	0.13	ug/L		07/21/14 14:00	07/28/14 23:26	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: WWL-1
Date Collected: 07/18/14 10:50
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	340		25	13	ug/L			07/23/14 17:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*70 - 130*		*07/23/14 17:48*	*5*
Dibromofluoromethane	*98*		*70 - 130*		*07/23/14 17:48*	*5*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/23/14 17:48*	*5*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	150		100	50	ug/L		07/21/14 14:00	07/28/14 23:34	1
Antimony	5.0	U	5.0	2.0	ug/L		07/21/14 14:00	07/28/14 23:34	1
Cadmium	0.42	J	0.50	0.13	ug/L		07/21/14 14:00	07/28/14 23:34	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: VFSP-MW1
Date Collected: 07/18/14 11:45
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-7
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**140**		5.0	1.4	ug/L		07/21/14 14:00	07/28/14 23:41	1
Cobalt	**3.3**		0.50	0.12	ug/L		07/21/14 14:00	07/29/14 20:19	1
Iron	**1300**		100	44	ug/L		07/21/14 14:00	07/28/14 23:41	1
Manganese	**800**		5.0	2.0	ug/L		07/21/14 14:00	07/29/14 20:19	1
Nickel	5.0	U	5.0	2.0	ug/L		07/21/14 14:00	07/28/14 23:41	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: MW-9
Date Collected: 07/18/14 14:30
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-8
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	590		100	50	ug/L		07/21/14 14:00	07/28/14 23:48	1
Iron	110000		100	44	ug/L		07/21/14 14:00	07/28/14 23:48	1
Lead	1.1	J	1.5	0.50	ug/L		07/21/14 14:00	07/28/14 23:48	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: Trip Blank
Date Collected: 07/18/14 00:00
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U	5.0	2.6	ug/L			07/23/14 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*70 - 130*		*07/23/14 17:25*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*07/23/14 17:25*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/23/14 17:25*	*1*

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB	DBFM	TOL						
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)						
680-103465-6	WWL-1	84	98	94						
680-103465-9	Trip Blank	75	101	91						
LCS 680-340434/5	Lab Control Sample	86	94	95						
LCSD 680-340434/6	Lab Control Sample Dup	86	92	92						
MB 680-340434/9	Method Blank	83	102	91						

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	TPH	PHL	NBZ		
Lab Sample ID	Client Sample ID	(30-130)	(34-130)	(25-130)	(36-130)	(27-130)	(32-130)		
680-103465-2	MW-7U	80	62	65	62	46	52		
LCS 680-340039/7-A	Lab Control Sample	75	59	63	70	57	62		
MB 680-340039/6-A	Method Blank	62	58	61	76	55	62		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-340434/9
Matrix: Water
Analysis Batch: 340434

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	5.0	U	5.0	2.6	ug/L			07/23/14 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*70 - 130*		*07/23/14 12:10*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*07/23/14 12:10*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/23/14 12:10*	*1*

Lab Sample ID: LCS 680-340434/5
Matrix: Water
Analysis Batch: 340434

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
t-Butanol			50.0	61.6		ug/L		123	49 - 148		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*70 - 130*
Dibromofluoromethane	*94*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 680-340434/6
Matrix: Water
Analysis Batch: 340434

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
t-Butanol			50.0	58.8		ug/L		118	49 - 148	5	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*70 - 130*
Dibromofluoromethane	*92*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-340039/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.20	U	0.20	0.10	ug/L		07/21/14 15:50	07/29/14 17:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*62*		*30 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
2-Fluorobiphenyl	*58*		*34 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
2-Fluorophenol (Surr)	*61*		*25 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Terphenyl-d14 (Surr)	*76*		*36 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*
Phenol-d5 (Surr)	*55*		*27 - 130*	*07/21/14 15:50*	*07/29/14 17:26*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-340039/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340039

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	62		32 - 130	07/21/14 15:50	07/29/14 17:26	1

Lab Sample ID: LCS 680-340039/7-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	10.0	5.72		ug/L		57	35 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	75		30 - 130
2-Fluorobiphenyl	59		34 - 130
2-Fluorophenol (Surr)	63		25 - 130
Terphenyl-d14 (Surr)	70		36 - 130
Phenol-d5 (Surr)	57		27 - 130
Nitrobenzene-d5 (Surr)	62		32 - 130

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-340462/7
Matrix: Water
Analysis Batch: 340462

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 14:05	1

Lab Sample ID: LCS 680-340462/4
Matrix: Water
Analysis Batch: 340462

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	20.0	16.8		mg/L		84	43 - 143

Lab Sample ID: LCSD 680-340462/5
Matrix: Water
Analysis Batch: 340462

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
Methanol	20.0	18.4		mg/L		92	43 - 143	9	50

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-340163/5
Matrix: Water
Analysis Batch: 340163

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			07/21/14 16:19	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 680-340163/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.050	U	0.050	0.025	mg/L			07/21/14 16:19	1

Lab Sample ID: LCS 680-340163/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.00		mg/L		100	90 - 110
Nitrite as N	0.997	1.05		mg/L		105	90 - 110

Lab Sample ID: LCSD 680-340163/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.999	1.01		mg/L		101	90 - 110	1	30
Nitrite as N	0.997	1.06		mg/L		106	90 - 110	1	30

Lab Sample ID: 680-103465-1 MS — **Client Sample ID: MW-8D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.075	H	0.999	1.10		mg/L		103	80 - 120
Nitrite as N	0.050	U H	0.997	1.09		mg/L		109	80 - 120

Lab Sample ID: 680-103465-1 MSD — **Client Sample ID: MW-8D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.075	H	0.999	1.10		mg/L		103	80 - 120	0	30
Nitrite as N	0.050	U H	0.997	1.09		mg/L		109	80 - 120	0	30

Lab Sample ID: MB 680-340704/38 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			07/24/14 19:34	1
Sulfate	0.50	U	0.50	0.25	mg/L			07/24/14 19:34	1

Lab Sample ID: LCS 680-340704/39 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.7		mg/L		107	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-340704/40
Matrix: Water
Analysis Batch: 340704

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
Chloride	10.0	10.5		mg/L		105	90 - 110	0	30
Sulfate	10.0	10.6		mg/L		106	90 - 110	0	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-340121/1-A
Matrix: Water
Analysis Batch: 341320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340121

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/21/14 14:00	07/28/14 21:14	1
Antimony	5.0	U	5.0	2.0	ug/L		07/21/14 14:00	07/28/14 21:14	1
Barium	5.0	U	5.0	1.4	ug/L		07/21/14 14:00	07/28/14 21:14	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/21/14 14:00	07/28/14 21:14	1
Chromium	5.0	U	5.0	2.5	ug/L		07/21/14 14:00	07/28/14 21:14	1
Copper	5.0	U	5.0	1.1	ug/L		07/21/14 14:00	07/28/14 21:14	1
Iron	100	U	100	44	ug/L		07/21/14 14:00	07/28/14 21:14	1
Lead	1.5	U	1.5	0.50	ug/L		07/21/14 14:00	07/28/14 21:14	1
Mercury	0.80	U	0.80	0.40	ug/L		07/21/14 14:00	07/28/14 21:14	1
Nickel	5.0	U	5.0	2.0	ug/L		07/21/14 14:00	07/28/14 21:14	1

Lab Sample ID: MB 680-340121/1-A
Matrix: Water
Analysis Batch: 341574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340121

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.50	U	0.50	0.15	ug/L		07/21/14 14:00	07/29/14 17:53	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/21/14 14:00	07/29/14 17:53	1
Manganese	5.0	U	5.0	2.0	ug/L		07/21/14 14:00	07/29/14 17:53	1

Lab Sample ID: LCS 680-340121/2-A
Matrix: Water
Analysis Batch: 341320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5150		ug/L		103	75 - 125
Antimony	50.0	53.3		ug/L		107	75 - 125
Barium	100	108		ug/L		108	75 - 125
Cadmium	50.0	52.2		ug/L		104	75 - 125
Chromium	100	107		ug/L		107	75 - 125
Copper	100	107		ug/L		107	75 - 125
Iron	5000	5270		ug/L		105	75 - 125
Lead	50.0	51.6		ug/L		103	75 - 125
Mercury	5.00	4.74		ug/L		95	75 - 125
Nickel	100	109		ug/L		109	75 - 125
Selenium	100	98.1		ug/L		98	75 - 125
Vanadium	100	108		ug/L		108	75 - 125
Arsenic	100	108		ug/L		108	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-340121/2-A
Matrix: Water
Analysis Batch: 341574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	50.0	48.5		ug/L		97	75 - 125
Cobalt	50.0	52.7		ug/L		105	75 - 125
Manganese	500	524		ug/L		105	75 - 125

Method: 6020A - Inductively Coupled Plasma - Mass Spectrometry

Lab Sample ID: MB 680-340113/1-A
Matrix: Water
Analysis Batch: 340893

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	100	U	100	33	ug/L		07/21/14 13:37	07/25/14 10:24	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		07/21/14 13:37	07/25/14 10:24	1
Sodium, Dissolved	500	U	500	250	ug/L		07/21/14 13:37	07/25/14 10:24	1
Potassium, Dissolved	500	U	500	170	ug/L		07/21/14 13:37	07/25/14 10:24	1
Magnesium, Dissolved	250	U	250	43	ug/L		07/21/14 13:37	07/25/14 10:24	1

Lab Sample ID: MB 680-340113/1-A
Matrix: Water
Analysis Batch: 341340

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	250	U	250	130	ug/L		07/21/14 13:37	07/28/14 19:47	1

Lab Sample ID: LCS 680-340113/2-A
Matrix: Water
Analysis Batch: 340893

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	5000	4960		ug/L		99	75 - 125
Manganese, Dissolved	500	508		ug/L		102	75 - 125
Sodium, Dissolved	5000	5490		ug/L		110	75 - 125
Potassium, Dissolved	5000	5050		ug/L		101	75 - 125
Magnesium, Dissolved	5000	5230		ug/L		105	75 - 125

Lab Sample ID: LCS 680-340113/2-A
Matrix: Water
Analysis Batch: 341340

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 340113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	5000	5750		ug/L		115	75 - 125

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-341228/2
Matrix: Water
Analysis Batch: 341228

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			07/28/14 14:37	1

Lab Sample ID: LCS 680-341228/1
Matrix: Water
Analysis Batch: 341228

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	0.994		mg/L		99	90 - 110

Lab Sample ID: 680-103465-1 MS
Matrix: Water
Analysis Batch: 341228

Client Sample ID: MW-8D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.097		1.00	1.32	F1	mg/L		122	90 - 110

Lab Sample ID: 680-103465-1 MSD
Matrix: Water
Analysis Batch: 341228

Client Sample ID: MW-8D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.097		1.00	1.32	F1	mg/L		122	90 - 110	0	30

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-340374/2
Matrix: Water
Analysis Batch: 340374

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/22/14 10:43	1

Lab Sample ID: LCS 680-340374/1
Matrix: Water
Analysis Batch: 340374

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.20		mg/L		100	90 - 110

Lab Sample ID: 680-103465-1 MS
Matrix: Water
Analysis Batch: 340374

Client Sample ID: MW-8D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	0.097	H	1.00	1.09		mg/L		99	90 - 110

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: 680-103465-1 MSD — **Client Sample ID: MW-8D**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 340374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Orthophosphate, Dissolved	0.097	H	1.00	1.09		mg/L		99	90 - 110	0	30

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-340101/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340101

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 13:05	1

Lab Sample ID: LCS 680-340101/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.27		mg/L		93	75 - 125

Lab Sample ID: LCSD 680-340101/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340101

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	9.27		mg/L		93	75 - 125	0	30

Lab Sample ID: 680-103465-1 DU — **Client Sample ID: MW-8D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340101

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-341085/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 341085

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			07/25/14 04:52	1

Method: 9060 - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCS 680-341085/4
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	20.0	19.3		mg/L		96	80 - 120

Lab Sample ID: LCSD 680-341085/5
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon	20.0	16.3		mg/L		82	80 - 120	17	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-340536/5
Matrix: Water
Analysis Batch: 340536

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			07/23/14 11:44	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 11:44	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/23/14 11:44	1

Lab Sample ID: LCS 680-340536/6
Matrix: Water
Analysis Batch: 340536

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	252		mg/L		101	80 - 120

Lab Sample ID: LCSD 680-340536/22
Matrix: Water
Analysis Batch: 340536

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
Alkalinity	250	250		mg/L		100	80 - 120	1	30

Lab Sample ID: 680-103465-1 DU
Matrix: Water
Analysis Batch: 340536

Client Sample ID: MW-8D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	130		111		mg/L		13	30
Bicarbonate Alkalinity as CaCO3	130		110		mg/L		13	30
Carbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	30

GC/MS VOA

Analysis Batch: 340434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-6	WWL-1	Total/NA	Water	8260B	
680-103465-9	Trip Blank	Total/NA	Water	8260B	
LCS 680-340434/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-340434/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-340434/9	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 340039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-2	MW-7U	Total/NA	Water	3520C	
LCS 680-340039/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-340039/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 341364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-2	MW-7U	Total/NA	Water	8270D LL	340039
LCS 680-340039/7-A	Lab Control Sample	Total/NA	Water	8270D LL	340039
MB 680-340039/6-A	Method Blank	Total/NA	Water	8270D LL	340039

GC VOA

Analysis Batch: 340462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-4	MW-7L	Total/NA	Water	8015C	
680-103465-5	WWL-3U	Total/NA	Water	8015C	
LCS 680-340462/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-340462/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-340462/7	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 340163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Total/NA	Water	9056A	
680-103465-1 MS	MW-8D	Total/NA	Water	9056A	
680-103465-1 MSD	MW-8D	Total/NA	Water	9056A	
LCS 680-340163/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340163/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340163/5	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Total/NA	Water	9056A	
LCS 680-340704/39	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340704/40	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340704/38	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 340113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	3005A	
LCS 680-340113/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-340113/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 340121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Total/NA	Water	3010A	
680-103465-2	MW-7U	Total/NA	Water	3010A	
680-103465-3	FD2	Total/NA	Water	3010A	
680-103465-4	MW-7L	Total/NA	Water	3010A	
680-103465-5	WWL-3U	Total/NA	Water	3010A	
680-103465-6	WWL-1	Total/NA	Water	3010A	
680-103465-7	VFSP-MW1	Total/NA	Water	3010A	
680-103465-8	MW-9	Total/NA	Water	3010A	
LCS 680-340121/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-340121/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 340893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	6020A	340113
LCS 680-340113/2-A	Lab Control Sample	Total Recoverable	Water	6020A	340113
MB 680-340113/1-A	Method Blank	Total Recoverable	Water	6020A	340113

Analysis Batch: 341320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Total/NA	Water	6020A	340121
680-103465-2	MW-7U	Total/NA	Water	6020A	340121
680-103465-3	FD2	Total/NA	Water	6020A	340121
680-103465-4	MW-7L	Total/NA	Water	6020A	340121
680-103465-5	WWL-3U	Total/NA	Water	6020A	340121
680-103465-6	WWL-1	Total/NA	Water	6020A	340121
680-103465-7	VFSP-MW1	Total/NA	Water	6020A	340121
680-103465-8	MW-9	Total/NA	Water	6020A	340121
LCS 680-340121/2-A	Lab Control Sample	Total/NA	Water	6020A	340121
MB 680-340121/1-A	Method Blank	Total/NA	Water	6020A	340121

Analysis Batch: 341340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	6020A	340113
LCS 680-340113/2-A	Lab Control Sample	Total Recoverable	Water	6020A	340113
MB 680-340113/1-A	Method Blank	Total Recoverable	Water	6020A	340113

Analysis Batch: 341574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-2	MW-7U	Total/NA	Water	6020A	340121
680-103465-2	MW-7U	Total/NA	Water	6020A	340121
680-103465-3	FD2	Total/NA	Water	6020A	340121
680-103465-7	VFSP-MW1	Total/NA	Water	6020A	340121
LCS 680-340121/2-A	Lab Control Sample	Total/NA	Water	6020A	340121
MB 680-340121/1-A	Method Blank	Total/NA	Water	6020A	340121

General Chemistry

Analysis Batch: 340101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	9034	
680-103465-1	MW-8D	Total/NA	Water	9034	
680-103465-1 DU	MW-8D	Total/NA	Water	9034	
LCS 680-340101/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-340101/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-340101/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 340374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	365.1	
680-103465-1 MS	MW-8D	Dissolved	Water	365.1	
680-103465-1 MSD	MW-8D	Dissolved	Water	365.1	
LCS 680-340374/1	Lab Control Sample	Total/NA	Water	365.1	
MB 680-340374/2	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 340536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Total/NA	Water	SM 2320B	
680-103465-1 DU	MW-8D	Total/NA	Water	SM 2320B	
LCS 680-340536/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-340536/22	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-340536/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 340720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Total/NA	Water	UnionizedNH3	

Analysis Batch: 341085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	9060	
LCS 680-341085/4	Lab Control Sample	Dissolved	Water	9060	
LCSD 680-341085/5	Lab Control Sample Dup	Dissolved	Water	9060	
MB 680-341085/3	Method Blank	Dissolved	Water	9060	

Analysis Batch: 341228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103465-1	MW-8D	Dissolved	Water	350.1	
680-103465-1 MS	MW-8D	Dissolved	Water	350.1	
680-103465-1 MSD	MW-8D	Dissolved	Water	350.1	
LCS 680-341228/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-341228/2	Method Blank	Total/NA	Water	350.1	

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: MW-8D

Lab Sample ID: 680-103465-1

Date Collected: 07/18/14 08:36

Matrix: Water

Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	340163	07/21/14 18:38	VAS	TAL SAV
Total/NA	Analysis	9056A		1	340704	07/25/14 03:16	PAT	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340893	07/25/14 11:39	CME	TAL SAV
Dissolved	Prep	3005A			340113	07/21/14 13:37	BJB	TAL SAV
Dissolved	Analysis	6020A		1	341340	07/28/14 20:50	BWR	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 22:42	BWR	TAL SAV
Dissolved	Analysis	350.1		1	341228	07/28/14 14:38	JME	TAL SAV
Dissolved	Analysis	365.1		1	340374	07/22/14 10:43	GRX	TAL SAV
Dissolved	Analysis	9034		1	340101	07/21/14 13:05	ANH	TAL SAV
Total/NA	Analysis	9034		1	340101	07/21/14 13:05	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 13:20	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340536	07/23/14 13:10	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: MW-7U

Lab Sample ID: 680-103465-2

Date Collected: 07/18/14 11:15

Matrix: Water

Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			340039	07/21/14 15:50	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341364	07/29/14 20:22	SMC	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 22:50	BWR	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341574	07/29/14 19:28	BWR	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		20	341574	07/29/14 19:35	BWR	TAL SAV

Client Sample ID: FD2

Lab Sample ID: 680-103465-3

Date Collected: 07/18/14 11:20

Matrix: Water

Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 23:04	BWR	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341574	07/29/14 19:43	BWR	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: MW-7L
Lab Sample ID: 680-103465-4
Date Collected: 07/18/14 12:55
Matrix: Water
Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	340462	07/23/14 14:30	AJMC	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 23:12	BWR	TAL SAV

Client Sample ID: WWL-3U
Lab Sample ID: 680-103465-5
Date Collected: 07/18/14 09:00
Matrix: Water
Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	340462	07/23/14 17:43	AJMC	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 23:26	BWR	TAL SAV

Client Sample ID: WWL-1
Lab Sample ID: 680-103465-6
Date Collected: 07/18/14 10:50
Matrix: Water
Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	340434	07/23/14 17:48	MMT	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 23:34	BWR	TAL SAV

Client Sample ID: VFSP-MW1
Lab Sample ID: 680-103465-7
Date Collected: 07/18/14 11:45
Matrix: Water
Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 23:41	BWR	TAL SAV
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341574	07/29/14 20:19	BWR	TAL SAV

Client Sample ID: MW-9
Lab Sample ID: 680-103465-8
Date Collected: 07/18/14 14:30
Matrix: Water
Date Received: 07/19/14 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			340121	07/21/14 14:00	BJB	TAL SAV
Total/NA	Analysis	6020A		1	341320	07/28/14 23:48	BWR	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Client Sample ID: Trip Blank
Date Collected: 07/18/14 00:00
Date Received: 07/19/14 09:37

Lab Sample ID: 680-103465-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	340434	07/23/14 17:25	MMT	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-15
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-14
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	09-005r	04-16-15
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-14 *
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-14
Kentucky (UST)	State Program	4	18	06-30-15
Louisiana	NELAP	6	30690	06-30-14 *
Louisiana (DW)	NELAP	6	LA140023	12-31-14
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-15
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-14
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-14
South Carolina	State Program	4	98001	06-30-15
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-08-TX	11-30-14 *
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-14
West Virginia DEP	State Program	3	94	06-30-15
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103465-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
6020A	Inductively Coupled Plasma - Mass Spectrometry	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 83766

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: Ashland- Aquadon	PROJECT NO.	PROJECT LOCATION (STATE): VA	PAGE 1 1 OF 2
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.	STANDARD REPORT DELIVERY ✓
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX	DATE DUE
CLIENT NAME: GES	CLIENT E-MAIL		EXPEDITED REPORT DELIVERY (SURCHARGE)
CLIENT ADDRESS: 23 S. 13th St Richmond VA 23219			DATE DUE
COMPANY CONTRACTING THIS WORK (if applicable): Ashland			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260 VOC	8270 SVOC	6020 Metals	8015 Ethanol & Methanol	6020 Field Filtered Metals	REMARKS
~~7-18-14~~	~~MW-8~~	~~NC~~											
7-18-14	0836	MW-8D	G	X						1			Please hold field filtered sample until we receive the results from unfiltered sample
	1115	MW-7U							2	1			
	1120	FD2								1			
	1255	MW-7D								1	3		
	9:00	WWL-3								1	3		
	10:50	WWL-1						3		1			
	11:45	VFSP-MW1								1			
	14:30	MW-9								1		1	
—	—	Trip Blank						2					

PRESERVATIVE

NUMBER OF CONTAINERS SUBMITTED

680-103465 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RE (SIGNATURE)	DATE	TIME
	7/18/14	15:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
M. Kirkpatrick	7/19/14	09:37	YES ○ NO ○		680-103465	3.0 °C

TAL8240-680 (1008)

Serial Number 83767

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)
Aqualon Corrective Action		
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Erin Wright	866 222 7786	
CLIENT NAME	CLIENT E-MAIL	
CES	ewright@gesonline.com	
CLIENT ADDRESS		
23 S 13th Street Suite 103 Richmond VA 23219		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 2

STANDARD REPORT DELIVERY ◉

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ○

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: Dissolved metals (6020)	Dissolved cations (6020	Dissolved anions - phosphat	Dissolved Ammonia	DOC	Dissolved Silica	total sulfide	Alkalinity	Anions	REMARKS
		PRESERVATIVE															
								NUMBER OF CONTAINERS SUBMITTED									
7-18-14	0836	MW-8D	G	X				1	1	2	2	3	2	2	1	1	21.00°C, pH 6.80

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	7-18-14	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	7/19/14	09:37	YES ○ NO ○		680-103465	3.0 n.c

TAL8240-680 (1008)

Page 96 of 97

10/30/2014

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-103465-1

Login Number: 103465

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

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	Sample -4, bottles read "MW-7L"
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
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: 680-103376-1
Client Project/Site: Hercules Aqualon Corrective Action
Revision: 2

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

Attn: Mr. Steven Roach

Kathryn Smith

Authorized for release by:
11/18/2014 3:40:19 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or 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.
*	RPD of the LCS and LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the control limits
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

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.
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
A	The tentatively identified compound is a suspected aldol-condensation product.
N	This flag indicates the presumptive evidence of a compound.

GC 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.

HPLC/IC

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.
H	Sample was prepped or analyzed beyond the specified holding time

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.
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.
F1	MS and/or MSD Recovery exceeds the control limits

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 Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-103376-1	RAB-MW1R	Water	07/16/14 09:40	07/17/14 10:26
680-103376-2	Field Duplicate	Water	07/16/14 00:00	07/17/14 10:26
680-103376-3	Field Blank	Water	07/16/14 09:50	07/17/14 10:26
680-103376-4	Equipment Blank	Water	07/16/14 09:55	07/17/14 10:26
680-103376-5	RAB MW-3	Water	07/16/14 11:40	07/17/14 10:26
680-103376-6	RAB MW-2	Water	07/16/14 12:30	07/17/14 10:26
680-103376-7	SDB-MW1	Water	07/16/14 14:20	07/17/14 10:26
680-103376-8	SDB-MW2	Water	07/16/14 14:50	07/17/14 10:26
680-103376-9	SDB-MW3	Water	07/16/14 15:40	07/17/14 10:26
680-103376-10	NAT-4	Water	07/16/14 14:25	07/17/14 10:26
680-103376-11	MW-4	Water	07/16/14 11:30	07/17/14 10:26
680-103376-12	MW-4U	Water	07/16/14 13:40	07/17/14 10:26
680-103376-13	Trip Blank	Water	07/16/14 00:00	07/17/14 10:26
680-103417-1	RAB-MW1R	Water	07/16/14 09:40	07/18/14 09:47
680-103417-2	Field Duplicate	Water	07/16/14 00:00	07/18/14 09:47
680-103417-3	Field Blank	Water	07/16/14 09:50	07/18/14 09:47
680-103417-4	Equipment Blank 1	Water	07/16/14 09:55	07/18/14 09:47
680-103417-22	Trip Blank	Water	07/16/14 00:00	07/18/14 09:47

Job ID: 680-103376-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Ashland Inc

Project: Hercules Aqualon Corrective Action

Report Number: 680-103376-1

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.

Report revised on 11/28/2014 to add additional metals to sample Field Duplicate (680-103376-2).

RECEIPT

The samples were received on 07/17/2014 and 07/18/2014; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.8º C, 1.4º C, 1.8º C, 1.8º C, 3.0º C, 3.6º C and 3.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples RAB-MW1R (680-103417-1), Field Duplicate (680-103417-2), Field Blank (680-103417-3), Equipment Blank 1 (680-103417-4), RAB MW-2 (680-103376-6), SDB-MW1 (680-103376-7), SDB-MW3 (680-103376-9), NAT-4 (680-103376-10), MW-4 (680-103376-11), MW-4U (680-103376-12), Trip Blank (680-103376-13) and Trip Blank (680-103417-22) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/22/2014, 07/23/2014, 07/25/2014, 07/28/2014 and 07/30/2014.

Samples RAB-MW1R (680-103376-1)[500X], Field Duplicate (680-103376-2)[500X], RAB MW-2 (680-103376-6)[5X], NAT-4 (680-103376-10)[10X], MW-4 (680-103376-11)[50X] and MW-4U (680-103376-12)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Sample, Trip Blank (680-103376-13) was analyzed in batch 340832 and had high internal standard recoveries. The samples was reanalyzed with concurring internal standard recoveries, no detections were found in the sample.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples RAB-MW1R (680-103376-1), Field Duplicate (680-103376-2), Field Blank (680-103376-3) and Equipment Blank (680-103376-4) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/18/2014 and analyzed on 07/29/2014.

Acetophenone and Bis(2-ethylhexyl) phthalate were detected in method blank MB 680-339694/6-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have 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.

3-Methylcholanthrene and Aramite, Total recovered high for LCS 680-339694/10-A. 3-Methylcholanthrene, Aramite, Total and Isosafrole recovered high for LCSD 680-339694/11-A. p-Phenylene diamine exceeded the RPD limit.

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

ORGANICS BY DIRECT AQUEOUS INJECTION (DAI)

Samples RAB-MW1R (680-103376-1), Field Duplicate (680-103376-2), Field Blank (680-103376-3), Equipment Blank (680-103376-4), RAB MW-2 (680-103376-6), NAT-4 (680-103376-10), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for organics by

Job ID: 680-103376-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

direct aqueous injection (DAI) in accordance with EPA SW-846 Method 8015C. The samples were analyzed on 07/23/2014.

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

METALS (ICPMS)
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 07/18/2014 and analyzed on 07/23/2014 and 07/31/2014.

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

METALS (ICPMS)
Samples RAB-MW1R (680-103376-1), Field Duplicate (680-103376-2), Field Blank (680-103376-3), Equipment Blank (680-103376-4), RAB MW-3 (680-103376-5), RAB MW-2 (680-103376-6), SDB-MW1 (680-103376-7), SDB-MW3 (680-103376-9), NAT-4 (680-103376-10), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 07/18/2014 and analyzed on 07/21/2014 and 07/22/2014.

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

ALKALINITY
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 07/21/2014.

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

AMMONIA
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 07/21/2014.

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

ORTHOPHOSPHATE
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for orthophosphate in accordance with EPA Method 365.1. The samples were analyzed on 07/17/2014.

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

SULFIDE
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were analyzed on 07/21/2014.

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

SULFIDE
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 07/21/2014.

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

9056 ANIONS
Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for 9056 Anions in accordance with SW 846 9056. The samples were analyzed on 07/24/2014 and 07/25/2014.

Samples SDB-MW2 (680-103376-8)[5X], SDB-MW2 (680-103376-8)[50X], MW-4 (680-103376-11)[20X], MW-4 (680-103376-11)[5X], MW-4U (680-103376-12)[20X] and MW-4U (680-103376-12)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 680-103376-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

ANIONS BY IC (NITRATE/NITRITE)

Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for Anions by IC (Nitrate/Nitrite) in accordance with EPA SW-846 Method 9056A. The samples were analyzed on 07/17/2014 and 07/21/2014.

Samples SDB-MW2 (680-103376-8)[2X], MW-4 (680-103376-11)[2X] and MW-4U (680-103376-12)[2X] 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.

DISSOLVED ORGANIC CARBON

Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 07/25/2014.

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

UNIONIZED AMMONIA

Samples SDB-MW2 (680-103376-8), MW-4 (680-103376-11) and MW-4U (680-103376-12) were analyzed for unionized ammonia in accordance with FL DEP SOP. The samples were analyzed on 07/24/2014.

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

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: RAB-MW1R — Lab Sample ID: 680-103376-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetophenone	0.51	J B	0.99	0.099	ug/L	1		8270D LL	Total/NA
1,4-Dioxane	2.1		2.0	0.31	ug/L	1		8270D LL	Total/NA
Aluminum	820		100	50	ug/L	1		6020A	Total/NA
Arsenic	2.7		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	240		5.0	1.4	ug/L	1		6020A	Total/NA
Beryllium	0.32	J	0.50	0.15	ug/L	1		6020A	Total/NA
Chromium	10		5.0	2.5	ug/L	1		6020A	Total/NA
Cobalt	140		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	4.7	J	5.0	1.1	ug/L	1		6020A	Total/NA
Iron	82000		100	44	ug/L	1		6020A	Total/NA
Lead	4.2		1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	9900		5.0	2.0	ug/L	1		6020A	Total/NA
Mercury	0.54	J	0.80	0.40	ug/L	1		6020A	Total/NA
Nickel	32		5.0	2.0	ug/L	1		6020A	Total/NA
Sodium	230000		500	170	ug/L	1		6020A	Total/NA
Vanadium	4.5	J	10	3.2	ug/L	1		6020A	Total/NA
Zinc	18	J	20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: Field Duplicate — Lab Sample ID: 680-103376-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	2.0	B	1.9	0.61	ug/L	1		8270D LL	Total/NA
Aluminum	1500		100	50	ug/L	1		6020A	Total/NA
Arsenic	2.9		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	240		5.0	1.4	ug/L	1		6020A	Total/NA
Beryllium	0.31	J	0.50	0.15	ug/L	1		6020A	Total/NA
Chromium	15		5.0	2.5	ug/L	1		6020A	Total/NA
Cobalt	140		0.50	0.12	ug/L	1		6020A	Total/NA
Copper	5.7		5.0	1.1	ug/L	1		6020A	Total/NA
Iron	95000		100	44	ug/L	1		6020A	Total/NA
Lead	4.7		1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	10000		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	35		5.0	2.0	ug/L	1		6020A	Total/NA
Sodium	250000		500	170	ug/L	1		6020A	Total/NA
Vanadium	6.2	J	10	3.2	ug/L	1		6020A	Total/NA
Zinc	18	J	20	8.4	ug/L	1		6020A	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 680-103376-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.13	J	0.96	0.11	ug/L	1		8270D LL	Total/NA
Barium	6.6		5.0	1.4	ug/L	1		6020A	Total/NA

Client Sample ID: Equipment Blank — Lab Sample ID: 680-103376-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.13	J	0.96	0.11	ug/L	1		8270D LL	Total/NA
Barium	8.4		5.0	1.4	ug/L	1		6020A	Total/NA
Cobalt	0.25	J	0.50	0.12	ug/L	1		6020A	Total/NA
Copper	15		5.0	1.1	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank (Continued) — Lab Sample ID: 680-103376-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	74	J	100	44	ug/L	1		6020A	Total/NA
Lead	0.87	J	1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	6.5		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: RAB MW-3 — Lab Sample ID: 680-103376-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	15		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	1200		100	44	ug/L	1		6020A	Total/NA

Client Sample ID: RAB MW-2 — Lab Sample ID: 680-103376-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl ether	5.4	J	50	5.0	ug/L	5		8260B	Total/NA
Cadmium	1.2		0.50	0.13	ug/L	1		6020A	Total/NA
Cobalt	160		0.50	0.12	ug/L	1		6020A	Total/NA
Manganese	12000		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	82		5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: SDB-MW1 — Lab Sample ID: 680-103376-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	11		5.0	2.6	ug/L	1		8260B	Total/NA
Aluminum	500		100	50	ug/L	1		6020A	Total/NA
Arsenic	6.0		2.5	1.3	ug/L	1		6020A	Total/NA
Chromium	3.1	J	5.0	2.5	ug/L	1		6020A	Total/NA
Iron	170000		100	44	ug/L	1		6020A	Total/NA
Lead	0.87	J	1.5	0.50	ug/L	1		6020A	Total/NA
Manganese	1900		5.0	2.0	ug/L	1		6020A	Total/NA
Nickel	2.7	J	5.0	2.0	ug/L	1		6020A	Total/NA

Client Sample ID: SDB-MW2 — Lab Sample ID: 680-103376-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	120		2.5	1.3	mg/L	5		9056A	Total/NA
Sulfate	1400		25	13	mg/L	50		9056A	Total/NA
Iron, Dissolved	570		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	1300		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	250000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	1500		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	410000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	94000		250	43	ug/L	1		6020A	Dissolved
Ammonia	0.059		0.050	0.026	mg/L	1		350.1	Dissolved
Orthophosphate, Dissolved	0.071		0.050	0.016	mg/L	1		365.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	350		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	350		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	0.076		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.5		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	18		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SDB-MW2 (Continued) — Lab Sample ID: 680-103376-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon	5.1		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: SDB-MW3 — Lab Sample ID: 680-103376-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.66		0.50	0.13	ug/L	1		6020A	Total/NA
Nickel	28		5.0	2.0	ug/L	1		6020A	Total/NA
Selenium	9.1		2.5	1.1	ug/L	1		6020A	Total/NA

Client Sample ID: NAT-4 — Lab Sample ID: 680-103376-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	3300		100	50	ug/L	1		6020A	Total/NA
Arsenic	3.8		2.5	1.3	ug/L	1		6020A	Total/NA
Barium	160		5.0	1.4	ug/L	1		6020A	Total/NA
Beryllium	0.75		0.50	0.15	ug/L	1		6020A	Total/NA
Cadmium	0.22	J	0.50	0.13	ug/L	1		6020A	Total/NA
Chromium	13		5.0	2.5	ug/L	1		6020A	Total/NA
Iron	25000		100	44	ug/L	1		6020A	Total/NA
Lead	9.5		1.5	0.50	ug/L	1		6020A	Total/NA
Vanadium	37		10	3.2	ug/L	1		6020A	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 680-103376-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	2300		250	130	ug/L	50		8260B	Total/NA
Methanol	1.3	J	5.0	1.0	mg/L	1		8015C	Total/NA
Chloride	510		10	5.0	mg/L	20		9056A	Total/NA
Sulfate	1.3	J	2.5	1.3	mg/L	5		9056A	Total/NA
Aluminum	580		100	50	ug/L	1		6020A	Total/NA
Barium	820		5.0	1.4	ug/L	1		6020A	Total/NA
Lead	0.69	J	1.5	0.50	ug/L	1		6020A	Total/NA
Iron, Dissolved	55000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	2100		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	370000		500	250	ug/L	1		6020A	Dissolved
Potassium, Dissolved	4500		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	110000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	33000		250	43	ug/L	1		6020A	Dissolved
Ammonia	2.7		0.10	0.052	mg/L	2		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	600		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	600		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	3.5		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.1		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	19		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	31		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: MW-4U — Lab Sample ID: 680-103376-12

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4U (Continued) — Lab Sample ID: 680-103376-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	3100		250	130	ug/L	50		8260B	Total/NA
Chloride	690		10	5.0	mg/L	20		9056A	Total/NA
Barium	940		5.0	1.4	ug/L	1		6020A	Total/NA
Iron	81000		100	44	ug/L	1		6020A	Total/NA
Iron, Dissolved	71000		100	33	ug/L	1		6020A	Dissolved
Manganese, Dissolved	1400		5.0	1.0	ug/L	1		6020A	Dissolved
Sodium, Dissolved	590000		5000	2500	ug/L	10		6020A	Dissolved
Potassium, Dissolved	10000		500	170	ug/L	1		6020A	Dissolved
Calcium, Dissolved	98000		250	130	ug/L	1		6020A	Dissolved
Magnesium, Dissolved	41000		250	43	ug/L	1		6020A	Dissolved
Ammonia	13		0.50	0.26	mg/L	10		350.1	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	790		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	790		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ammonium ion as NH4	17		0.050	0.050	mg/L	1		UnionizedNH3	Total/NA
pH	6.1		1.0	1.0	SU	1		UnionizedNH3	Total/NA
Temperature	21		1.0	1.0	Degrees C	1		UnionizedNH3	Total/NA
Dissolved Organic Carbon	44		1.0	1.0	mg/L	1		9060	Dissolved

Client Sample ID: Trip Blank — Lab Sample ID: 680-103376-13

No Detections.

Client Sample ID: RAB-MW1R — Lab Sample ID: 680-103417-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	40000		2500	1300	ug/L	500		8260B	Total/NA

Client Sample ID: Field Duplicate — Lab Sample ID: 680-103417-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
t-Butanol	25000		2500	1300	ug/L	500		8260B	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 680-103417-3

No Detections.

Client Sample ID: Equipment Blank 1 — Lab Sample ID: 680-103417-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	25	5.0	ug/L	1		8260B	Total/NA
t-Butanol	12		5.0	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-103417-22

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: RAB-MW1R
Date Collected: 07/16/14 09:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-1
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Acenaphthylene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Acetophenone	**0.51**	**J B**	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Acetylaminofluorene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
alpha,alpha-Dimethyl phenethylamine	9.9	U	9.9	3.4	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		07/18/14 15:19	07/29/14 22:29	1
Aniline	2.0	U	2.0	0.96	ug/L		07/18/14 15:19	07/29/14 22:29	1
Anthracene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Aramite, Total	1.5	U *	1.5	0.11	ug/L		07/18/14 15:19	07/29/14 22:29	1
Benzo[a]anthracene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Benzo[a]pyrene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Benzo[b]fluoranthene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Benzo[k]fluoranthene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Benzyl alcohol	0.99	U	0.99	0.14	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,1'-Biphenyl	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Bis(2-chloroethoxy)methane	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Bis(2-chloroethyl)ether	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.64	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Bromophenyl phenyl ether	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
Butyl benzyl phthalate	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Chloro-3-methylphenol	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Chloronaphthalene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Chlorophenol	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Chlorophenyl phenyl ether	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Chrysene	0.20	U	0.20	0.045	ug/L		07/18/14 15:19	07/29/14 22:29	1
Diallate	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Dibenzofuran	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,2-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,3-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,4-Dichlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,4-Dichlorophenol	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,6-Dichlorophenol	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Diethyl phthalate	0.99	U	0.99	0.11	ug/L		07/18/14 15:19	07/29/14 22:29	1
Dimethoate	2.0	U	2.0	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
7,12-Dimethylbenz(a)anthracene	0.99	U	0.99	0.20	ug/L		07/18/14 15:19	07/29/14 22:29	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		07/18/14 15:19	07/29/14 22:29	1
Dimethyl phthalate	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Di-n-butyl phthalate	0.99	U	0.99	0.39	ug/L		07/18/14 15:19	07/29/14 22:29	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,4-Dinitrophenol	9.9	U	9.9	1.1	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,4-Dinitrotoluene	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,6-Dinitrotoluene	0.99	U	0.99	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
Di-n-octyl phthalate	0.99	U	0.99	0.17	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,4-Dioxane	**2.1**		2.0	0.31	ug/L		07/18/14 15:19	07/29/14 22:29	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: RAB-MW1R
Date Collected: 07/16/14 09:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-1
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Ethyl methanesulfonate	2.0	U	2.0	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Ethyl Parathion	2.0	U	2.0	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Famphur	0.99	U	0.99	0.16	ug/L		07/18/14 15:19	07/29/14 22:29	1
Fluoranthene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Fluorene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Hexachlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Hexachlorobutadiene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
Hexachloroethane	0.99	U	0.99	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
Hexachlorophene	500	U	500	25	ug/L		07/18/14 15:19	07/29/14 22:29	1
Hexachloropropene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Isophorone	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Isosafrole	0.99	U *	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
m-Dinitrobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Methapyrilene	200	U	200	1.3	ug/L		07/18/14 15:19	07/29/14 22:29	1
3-Methylcholanthrene	0.99	U *	0.99	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
Methyl methanesulfonate	2.0	U	2.0	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Methylnaphthalene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Methyl parathion	0.99	U	0.99	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Methylphenol	2.0	U	2.0	0.73	ug/L		07/18/14 15:19	07/29/14 22:29	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		07/18/14 15:19	07/29/14 22:29	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		07/18/14 15:19	07/29/14 22:29	1
Naphthalene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,4-Naphthoquinone	0.99	U	0.99	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Nitroaniline	0.99	U	0.99	0.16	ug/L		07/18/14 15:19	07/29/14 22:29	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
Nitrobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
5-Nitro-o-toluidine	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Nitrophenol	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosodiethylamine	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosodimethylamine	0.99	U	0.99	0.25	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosodi-n-butylamine	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosodi-n-propylamine	0.99	U	0.99	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosodiphenylamine	0.99	U	0.99	0.37	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosomorpholine	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosopiperidine	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
N-Nitrosopyrrolidine	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
o,o',o''-Triethylphosphorothioate	0.99	U	0.99	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
o-Toluidine	0.99	U	0.99	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,2'-oxybis[1-chloropropane]	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		07/18/14 15:19	07/29/14 22:29	1
Pentachlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1

Client Sample ID: RAB-MW1R
Date Collected: 07/16/14 09:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-1
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	0.99	U	0.99	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		07/18/14 15:19	07/29/14 22:29	1
Phenacetin	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Phenanthrene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Phenol	0.99	U	0.99	0.13	ug/L		07/18/14 15:19	07/29/14 22:29	1
Phenyl ether	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Phorate	0.99	U	0.99	0.20	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-Picoline	2.0	U	2.0	0.15	ug/L		07/18/14 15:19	07/29/14 22:29	1
p-Phenylene diamine	200	U *	200	16	ug/L		07/18/14 15:19	07/29/14 22:29	1
Pronamide	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
Pyrene	0.20	U	0.20	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Pyridine	5.0	U	5.0	0.72	ug/L		07/18/14 15:19	07/29/14 22:29	1
Safrole, Total	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		07/18/14 15:19	07/29/14 22:29	1
Sulfotepp	0.99	U	0.99	0.14	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,2,4,5-Tetrachlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,3,4,6-Tetrachlorophenol	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
Thionazin	0.99	U	0.99	0.20	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,2,4-Trichlorobenzene	0.99	U	0.99	0.099	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,4,5-Trichlorophenol	0.99	U	0.99	0.12	ug/L		07/18/14 15:19	07/29/14 22:29	1
2,4,6-Trichlorophenol	0.99	U	0.99	0.17	ug/L		07/18/14 15:19	07/29/14 22:29	1
1,3,5-Trinitrobenzene	0.99	U	0.99	0.50	ug/L		07/18/14 15:19	07/29/14 22:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzaldehyde	*0.14*	*J*	*ug/L*		*3.91*	*100-52-7*	*07/18/14 15:19*	*07/29/14 22:29*	*1*
Tentatively Identified Compound	*None*		*ug/L*				*07/18/14 15:19*	*07/29/14 22:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*41*		*34 - 130*	*07/18/14 15:19*	*07/29/14 22:29*	*1*
2-Fluorophenol	*38*		*25 - 130*	*07/18/14 15:19*	*07/29/14 22:29*	*1*
Nitrobenzene-d5	*39*		*32 - 130*	*07/18/14 15:19*	*07/29/14 22:29*	*1*
Phenol-d5	*33*		*27 - 130*	*07/18/14 15:19*	*07/29/14 22:29*	*1*
Terphenyl-d14	*38*		*36 - 130*	*07/18/14 15:19*	*07/29/14 22:29*	*1*
2,4,6-Tribromophenol	*55*		*30 - 130*	*07/18/14 15:19*	*07/29/14 22:29*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			07/23/14 18:56	1
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 18:56	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**820**		100	50	ug/L		07/18/14 08:49	07/21/14 19:39	1
Antimony	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 19:39	1
Arsenic	**2.7**		2.5	1.3	ug/L		07/18/14 08:49	07/21/14 19:39	1
Barium	**240**		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 19:39	1
Beryllium	**0.32**	**J**	0.50	0.15	ug/L		07/18/14 08:49	07/21/14 19:39	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/18/14 08:49	07/21/14 19:39	1
Chromium	**10**		5.0	2.5	ug/L		07/18/14 08:49	07/21/14 19:39	1
Cobalt	**140**		0.50	0.12	ug/L		07/18/14 08:49	07/21/14 19:39	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: RAB-MW1R
Date Collected: 07/16/14 09:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**4.7**	**J**	5.0	1.1	ug/L		07/18/14 08:49	07/21/14 19:39	1
Iron	**82000**		100	44	ug/L		07/18/14 08:49	07/21/14 19:39	1
Lead	**4.2**		1.5	0.50	ug/L		07/18/14 08:49	07/21/14 19:39	1
Manganese	**9900**		5.0	2.0	ug/L		07/18/14 08:49	07/21/14 19:39	1
Mercury	**0.54**	**J**	0.80	0.40	ug/L		07/18/14 08:49	07/21/14 19:39	1
Nickel	**32**		5.0	2.0	ug/L		07/18/14 08:49	07/22/14 19:22	1
Selenium	2.5	U	2.5	1.1	ug/L		07/18/14 08:49	07/21/14 19:39	1
Silver	1.0	U	1.0	0.18	ug/L		07/18/14 08:49	07/21/14 19:39	1
Sodium	**230000**		500	170	ug/L		07/18/14 08:49	07/21/14 19:39	1
Thallium	1.0	U	1.0	0.25	ug/L		07/18/14 08:49	07/21/14 19:39	1
Vanadium	**4.5**	**J**	10	3.2	ug/L		07/18/14 08:49	07/21/14 19:39	1
Zinc	**18**	**J**	20	8.4	ug/L		07/18/14 08:49	07/21/14 19:39	1

Client Sample ID: Field Duplicate
Date Collected: 07/16/14 00:00
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Acenaphthylene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Acetophenone	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Acetylaminofluorene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
alpha,alpha-Dimethyl phenethylamine	9.5	U	9.5	3.2	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Aminobiphenyl	4.8	U	4.8	0.30	ug/L		07/18/14 15:19	07/29/14 17:41	1
Aniline	1.9	U	1.9	0.93	ug/L		07/18/14 15:19	07/29/14 17:41	1
Anthracene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Aramite, Total	1.4	U *	1.4	0.10	ug/L		07/18/14 15:19	07/29/14 17:41	1
Benzo[a]anthracene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Benzo[a]pyrene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Benzo[b]fluoranthene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Benzo[k]fluoranthene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Benzyl alcohol	0.95	U	0.95	0.13	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,1'-Biphenyl	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Bis(2-chloroethoxy)methane	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Bis(2-ethylhexyl) phthalate	**2.0**	**B**	1.9	0.61	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Bromophenyl phenyl ether	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
Butyl benzyl phthalate	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Chloroaniline	1.9	U	1.9	0.34	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Chloro-3-methylphenol	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Chloronaphthalene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Chlorophenol	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Chlorophenyl phenyl ether	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Chrysene	0.19	U	0.19	0.043	ug/L		07/18/14 15:19	07/29/14 17:41	1
Diallate	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Dibenzofuran	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,2-Dichlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,3-Dichlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,4-Dichlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
3,3'-Dichlorobenzidine	19	U	19	1.9	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,4-Dichlorophenol	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,6-Dichlorophenol	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Diethyl phthalate	0.95	U	0.95	0.10	ug/L		07/18/14 15:19	07/29/14 17:41	1
Dimethoate	1.9	U	1.9	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
7,12-Dimethylbenz(a)anthracene	0.95	U	0.95	0.19	ug/L		07/18/14 15:19	07/29/14 17:41	1
3,3'-Dimethylbenzidine	19	U	19	4.8	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,4-Dimethylphenol	1.9	U	1.9	0.66	ug/L		07/18/14 15:19	07/29/14 17:41	1
Dimethyl phthalate	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Di-n-butyl phthalate	0.95	U	0.95	0.37	ug/L		07/18/14 15:19	07/29/14 17:41	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,4-Dinitrophenol	9.5	U	9.5	1.0	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,4-Dinitrotoluene	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,6-Dinitrotoluene	0.95	U	0.95	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
Di-n-octyl phthalate	0.95	U	0.95	0.16	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,4-Dioxane	1.9	U	1.9	0.30	ug/L		07/18/14 15:19	07/29/14 17:41	1

Client Sample ID: Field Duplicate
Date Collected: 07/16/14 00:00
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Ethyl methanesulfonate	1.9	U	1.9	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Ethyl Parathion	1.9	U	1.9	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Famphur	0.95	U	0.95	0.15	ug/L		07/18/14 15:19	07/29/14 17:41	1
Fluoranthene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Fluorene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Hexachlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Hexachlorobutadiene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Hexachlorocyclopentadiene	1.9	U	1.9	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
Hexachloroethane	0.95	U	0.95	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
Hexachlorophene	480	U	480	24	ug/L		07/18/14 15:19	07/29/14 17:41	1
Hexachloropropene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Isophorone	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Isosafrole	0.95	U *	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
m-Dinitrobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Methapyrilene	190	U	190	1.2	ug/L		07/18/14 15:19	07/29/14 17:41	1
3-Methylcholanthrene	0.95	U *	0.95	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
Methyl methanesulfonate	1.9	U	1.9	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Methylnaphthalene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Methyl parathion	0.95	U	0.95	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Methylphenol	1.9	U	1.9	0.71	ug/L		07/18/14 15:19	07/29/14 17:41	1
3 & 4 Methylphenol	1.9	U	1.9	0.63	ug/L		07/18/14 15:19	07/29/14 17:41	1
1-Naphthalenamine	4.8	U	4.8	1.2	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Naphthalenamine	4.8	U	4.8	1.2	ug/L		07/18/14 15:19	07/29/14 17:41	1
Naphthalene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,4-Naphthoquinone	0.95	U	0.95	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Nitroaniline	0.95	U	0.95	0.15	ug/L		07/18/14 15:19	07/29/14 17:41	1
3-Nitroaniline	4.8	U	4.8	0.15	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Nitroaniline	4.8	U	4.8	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
Nitrobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
5-Nitro-o-toluidine	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Nitrophenol	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Nitrophenol	4.8	U	4.8	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
4-Nitroquinoline-1-oxide	1.9	U	1.9	1.0	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosodiethylamine	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosodimethylamine	0.95	U	0.95	0.24	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosodi-n-butylamine	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosodi-n-propylamine	0.95	U	0.95	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosodiphenylamine	0.95	U	0.95	0.35	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosomethylethylamine	1.9	U	1.9	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosomorpholine	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosopiperidine	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
N-Nitrosopyrrolidine	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
o,o',o''-Triethylphosphorothioate	0.95	U	0.95	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
o-Toluidine	0.95	U	0.95	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,2'-oxybis[1-chloropropane]	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
p-Dimethylamino azobenzene	4.8	U	4.8	0.14	ug/L		07/18/14 15:19	07/29/14 17:41	1
Pentachlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1

Client Sample ID: Field Duplicate

Date Collected: 07/16/14 00:00
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	0.95	U	0.95	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1
Pentachlorophenol	4.8	U	4.8	0.38	ug/L		07/18/14 15:19	07/29/14 17:41	1
Phenacetin	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Phenanthrene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Phenol	0.95	U	0.95	0.12	ug/L		07/18/14 15:19	07/29/14 17:41	1
Phenyl ether	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Phorate	0.95	U	0.95	0.19	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-Picoline	1.9	U	1.9	0.14	ug/L		07/18/14 15:19	07/29/14 17:41	1
p-Phenylene diamine	190	U *	190	15	ug/L		07/18/14 15:19	07/29/14 17:41	1
Pronamide	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
Pyrene	0.19	U	0.19	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Pyridine	4.8	U	4.8	0.70	ug/L		07/18/14 15:19	07/29/14 17:41	1
Safrole, Total	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2-sec-Butyl-4,6-dinitrophenol	1.9	U	1.9	0.14	ug/L		07/18/14 15:19	07/29/14 17:41	1
Sulfotepp	0.95	U	0.95	0.13	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,2,4,5-Tetrachlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,3,4,6-Tetrachlorophenol	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
Thionazin	0.95	U	0.95	0.19	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,2,4-Trichlorobenzene	0.95	U	0.95	0.095	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,4,5-Trichlorophenol	0.95	U	0.95	0.11	ug/L		07/18/14 15:19	07/29/14 17:41	1
2,4,6-Trichlorophenol	0.95	U	0.95	0.16	ug/L		07/18/14 15:19	07/29/14 17:41	1
1,3,5-Trinitrobenzene	0.95	U	0.95	0.48	ug/L		07/18/14 15:19	07/29/14 17:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*12*	*T J*	*ug/L*		*4.92*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*24*	*T J*	*ug/L*		*5.08*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*11*	*T J*	*ug/L*		*5.18*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*100*	*T J*	*ug/L*		*5.57*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*9.4*	*T J*	*ug/L*		*7.03*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*10*	*T J*	*ug/L*		*7.04*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*13*	*T J*	*ug/L*		*8.81*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*17*	*T J*	*ug/L*		*8.83*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*13*	*T J*	*ug/L*		*8.93*		*07/18/14 15:19*	*07/29/14 17:41*	*1*
Unknown	*9.3*	*T J*	*ug/L*		*9.70*		*07/18/14 15:19*	*07/29/14 17:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 130*	*07/18/14 15:19*	*07/29/14 17:41*	*1*
2-Fluorophenol	*58*		*25 - 130*	*07/18/14 15:19*	*07/29/14 17:41*	*1*
Nitrobenzene-d5	*61*		*32 - 130*	*07/18/14 15:19*	*07/29/14 17:41*	*1*
Phenol-d5	*59*		*27 - 130*	*07/18/14 15:19*	*07/29/14 17:41*	*1*
Terphenyl-d14	*51*		*36 - 130*	*07/18/14 15:19*	*07/29/14 17:41*	*1*
2,4,6-Tribromophenol	*66*		*30 - 130*	*07/18/14 15:19*	*07/29/14 17:41*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			07/23/14 19:20	1
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 19:20	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Field Duplicate
Date Collected: 07/16/14 00:00
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-2
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1500**		100	50	ug/L		07/18/14 08:49	07/21/14 20:15	1
Antimony	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:15	1
Arsenic	**2.9**		2.5	1.3	ug/L		07/18/14 08:49	07/21/14 20:15	1
Barium	**240**		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 20:15	1
Beryllium	**0.31**	**J**	0.50	0.15	ug/L		07/18/14 08:49	07/21/14 20:15	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/18/14 08:49	07/21/14 20:15	1
Chromium	**15**		5.0	2.5	ug/L		07/18/14 08:49	07/21/14 20:15	1
Cobalt	**140**		0.50	0.12	ug/L		07/18/14 08:49	07/21/14 20:15	1
Copper	**5.7**		5.0	1.1	ug/L		07/18/14 08:49	07/21/14 20:15	1
Iron	**95000**		100	44	ug/L		07/18/14 08:49	07/21/14 20:15	1
Lead	**4.7**		1.5	0.50	ug/L		07/18/14 08:49	07/21/14 20:15	1
Manganese	**10000**		5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:15	1
Mercury	0.80	U	0.80	0.40	ug/L		07/18/14 08:49	07/21/14 20:15	1
Nickel	**35**		5.0	2.0	ug/L		07/18/14 08:49	07/22/14 19:58	1
Selenium	2.5	U	2.5	1.1	ug/L		07/18/14 08:49	07/21/14 20:15	1
Silver	1.0	U	1.0	0.18	ug/L		07/18/14 08:49	07/21/14 20:15	1
Sodium	**250000**		500	170	ug/L		07/18/14 08:49	07/21/14 20:15	1
Thallium	1.0	U	1.0	0.25	ug/L		07/18/14 08:49	07/21/14 20:15	1
Vanadium	**6.2**	**J**	10	3.2	ug/L		07/18/14 08:49	07/21/14 20:15	1
Zinc	**18**	**J**	20	8.4	ug/L		07/18/14 08:49	07/21/14 20:15	1

Client Sample ID: Field Blank — **Lab Sample ID: 680-103376-3**

Date Collected: 07/16/14 09:50 — **Matrix: Water**

Date Received: 07/17/14 10:26

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Acenaphthylene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Acetophenone	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Acetylaminofluorene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
alpha,alpha-Dimethyl phenethylamine	9.6	U	9.6	3.3	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Aminobiphenyl	4.8	U	4.8	0.30	ug/L		07/18/14 15:19	07/29/14 18:06	1
Aniline	1.9	U	1.9	0.93	ug/L		07/18/14 15:19	07/29/14 18:06	1
Anthracene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Aramite, Total	1.4	U *	1.4	0.11	ug/L		07/18/14 15:19	07/29/14 18:06	1
Benzo[a]anthracene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Benzo[a]pyrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Benzo[b]fluoranthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Benzo[k]fluoranthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Benzyl alcohol	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,1'-Biphenyl	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	0.62	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Bromophenyl phenyl ether	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
Butyl benzyl phthalate	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Chloroaniline	1.9	U	1.9	0.35	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Chloro-3-methylphenol	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Chloronaphthalene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Chlorophenol	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Chlorophenyl phenyl ether	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Chrysene	0.19	U	0.19	0.043	ug/L		07/18/14 15:19	07/29/14 18:06	1
Diallate	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Dibenzofuran	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,2-Dichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,3-Dichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,4-Dichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
3,3'-Dichlorobenzidine	19	U	19	1.9	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,4-Dichlorophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,6-Dichlorophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Diethyl phthalate	**0.13**	**J**	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:06	1
Dimethoate	1.9	U	1.9	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
7,12-Dimethylbenz(a)anthracene	0.96	U	0.96	0.19	ug/L		07/18/14 15:19	07/29/14 18:06	1
3,3'-Dimethylbenzidine	19	U	19	4.8	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,4-Dimethylphenol	1.9	U	1.9	0.66	ug/L		07/18/14 15:19	07/29/14 18:06	1
Dimethyl phthalate	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Di-n-butyl phthalate	0.96	U	0.96	0.38	ug/L		07/18/14 15:19	07/29/14 18:06	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,4-Dinitrophenol	9.6	U	9.6	1.1	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,4-Dinitrotoluene	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,6-Dinitrotoluene	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
Di-n-octyl phthalate	0.96	U	0.96	0.16	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,4-Dioxane	1.9	U	1.9	0.30	ug/L		07/18/14 15:19	07/29/14 18:06	1

Client Sample ID: Field Blank
Date Collected: 07/16/14 09:50
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Ethyl methanesulfonate	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Ethyl Parathion	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Famphur	0.96	U	0.96	0.15	ug/L		07/18/14 15:19	07/29/14 18:06	1
Fluoranthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Fluorene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Hexachlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Hexachlorobutadiene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Hexachlorocyclopentadiene	1.9	U	1.9	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
Hexachloroethane	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
Hexachlorophene	480	U	480	24	ug/L		07/18/14 15:19	07/29/14 18:06	1
Hexachloropropene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Isophorone	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Isosafrole	0.96	U *	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
m-Dinitrobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Methapyrilene	190	U	190	1.3	ug/L		07/18/14 15:19	07/29/14 18:06	1
3-Methylcholanthrene	0.96	U *	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
Methyl methanesulfonate	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Methylnaphthalene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Methyl parathion	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Methylphenol	1.9	U	1.9	0.71	ug/L		07/18/14 15:19	07/29/14 18:06	1
3 & 4 Methylphenol	1.9	U	1.9	0.63	ug/L		07/18/14 15:19	07/29/14 18:06	1
1-Naphthalenamine	4.8	U	4.8	1.3	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Naphthalenamine	4.8	U	4.8	1.3	ug/L		07/18/14 15:19	07/29/14 18:06	1
Naphthalene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,4-Naphthoquinone	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Nitroaniline	0.96	U	0.96	0.15	ug/L		07/18/14 15:19	07/29/14 18:06	1
3-Nitroaniline	4.8	U	4.8	0.15	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Nitroaniline	4.8	U	4.8	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
Nitrobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
5-Nitro-o-toluidine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Nitrophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Nitrophenol	4.8	U	4.8	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
4-Nitroquinoline-1-oxide	1.9	U	1.9	1.1	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosodiethylamine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosodimethylamine	0.96	U	0.96	0.24	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosodi-n-butylamine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.36	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosomethylethylamine	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosomorpholine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosopiperidine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
N-Nitrosopyrrolidine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
o,o',o''-Triethylphosphorothioate	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
o-Toluidine	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,2'-oxybis[1-chloropropane]	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
p-Dimethylamino azobenzene	4.8	U	4.8	0.14	ug/L		07/18/14 15:19	07/29/14 18:06	1
Pentachlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1

Client Sample ID: Field Blank
Date Collected: 07/16/14 09:50
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1
Pentachlorophenol	4.8	U	4.8	0.38	ug/L		07/18/14 15:19	07/29/14 18:06	1
Phenacetin	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Phenanthrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Phenol	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
Phenyl ether	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Phorate	0.96	U	0.96	0.19	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-Picoline	1.9	U	1.9	0.14	ug/L		07/18/14 15:19	07/29/14 18:06	1
p-Phenylene diamine	190	U *	190	15	ug/L		07/18/14 15:19	07/29/14 18:06	1
Pronamide	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
Pyrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Pyridine	4.8	U	4.8	0.70	ug/L		07/18/14 15:19	07/29/14 18:06	1
Safrole, Total	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2-sec-Butyl-4,6-dinitrophenol	1.9	U	1.9	0.14	ug/L		07/18/14 15:19	07/29/14 18:06	1
Sulfotepp	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,2,4,5-Tetrachlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,3,4,6-Tetrachlorophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
Thionazin	0.96	U	0.96	0.19	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,2,4-Trichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,4,5-Trichlorophenol	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:06	1
2,4,6-Trichlorophenol	0.96	U	0.96	0.16	ug/L		07/18/14 15:19	07/29/14 18:06	1
1,3,5-Trinitrobenzene	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.5*	*T J*	*ug/L*		*1.96*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Unknown	*1.2*	*T J*	*ug/L*		*2.07*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Unknown	*1.2*	*T J*	*ug/L*		*2.09*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Unknown	*6.9*	*T J*	*ug/L*		*2.18*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Unknown	*1.3*	*T J*	*ug/L*		*2.43*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Unknown	*2.8*	*T J*	*ug/L*		*2.44*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Unknown	*16*	*T J*	*ug/L*		*3.37*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
Aldol condensation product	*17*	*T A J*	*ug/L*		*3.88*		*07/18/14 15:19*	*07/29/14 18:06*	*1*
o-Terphenyl	*1.8*	*T J N*	*ug/L*		*10.50*	*84-15-1*	*07/18/14 15:19*	*07/29/14 18:06*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*3.0*	*T J N*	*ug/L*		*10.53*	*82304-66-3*	*07/18/14 15:19*	*07/29/14 18:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 130*	*07/18/14 15:19*	*07/29/14 18:06*	*1*
2-Fluorophenol	*58*		*25 - 130*	*07/18/14 15:19*	*07/29/14 18:06*	*1*
Nitrobenzene-d5	*63*		*32 - 130*	*07/18/14 15:19*	*07/29/14 18:06*	*1*
Phenol-d5	*57*		*27 - 130*	*07/18/14 15:19*	*07/29/14 18:06*	*1*
Terphenyl-d14	*82*		*36 - 130*	*07/18/14 15:19*	*07/29/14 18:06*	*1*
2,4,6-Tribromophenol	*60*		*30 - 130*	*07/18/14 15:19*	*07/29/14 18:06*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			07/23/14 14:54	1
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 14:54	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Field Blank
Date Collected: 07/16/14 09:50
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-3
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/18/14 08:49	07/21/14 20:23	1
Antimony	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:23	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/18/14 08:49	07/21/14 20:23	1
Barium	**6.6**		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 20:23	1
Beryllium	0.50	U	0.50	0.15	ug/L		07/18/14 08:49	07/21/14 20:23	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/18/14 08:49	07/21/14 20:23	1
Chromium	5.0	U	5.0	2.5	ug/L		07/18/14 08:49	07/21/14 20:23	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/18/14 08:49	07/21/14 20:23	1
Copper	5.0	U	5.0	1.1	ug/L		07/18/14 08:49	07/21/14 20:23	1
Iron	100	U	100	44	ug/L		07/18/14 08:49	07/21/14 20:23	1
Lead	1.5	U	1.5	0.50	ug/L		07/18/14 08:49	07/21/14 20:23	1
Manganese	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:23	1
Mercury	0.80	U	0.80	0.40	ug/L		07/18/14 08:49	07/21/14 20:23	1
Nickel	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/22/14 20:05	1
Selenium	2.5	U	2.5	1.1	ug/L		07/18/14 08:49	07/21/14 20:23	1
Vanadium	10	U	10	3.2	ug/L		07/18/14 08:49	07/21/14 20:23	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank
Date Collected: 07/16/14 09:55
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Acenaphthylene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Acetophenone	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Acetylaminofluorene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
alpha,alpha-Dimethyl phenethylamine	9.6	U	9.6	3.3	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Aminobiphenyl	4.8	U	4.8	0.30	ug/L		07/18/14 15:19	07/29/14 18:31	1
Aniline	1.9	U	1.9	0.93	ug/L		07/18/14 15:19	07/29/14 18:31	1
Anthracene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Aramite, Total	1.4	U *	1.4	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
Benzo[a]anthracene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Benzo[a]pyrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Benzo[b]fluoranthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Benzo[k]fluoranthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Benzyl alcohol	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,1'-Biphenyl	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	0.61	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Bromophenyl phenyl ether	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
Butyl benzyl phthalate	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Chloroaniline	1.9	U	1.9	0.34	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Chloro-3-methylphenol	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Chloronaphthalene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Chlorophenol	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Chlorophenyl phenyl ether	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Chrysene	0.19	U	0.19	0.043	ug/L		07/18/14 15:19	07/29/14 18:31	1
Diallate	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Dibenzofuran	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,2-Dichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,3-Dichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,4-Dichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
3,3'-Dichlorobenzidine	19	U	19	1.9	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,4-Dichlorophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,6-Dichlorophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Diethyl phthalate	**0.13**	**J**	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
Dimethoate	1.9	U	1.9	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
7,12-Dimethylbenz(a)anthracene	0.96	U	0.96	0.19	ug/L		07/18/14 15:19	07/29/14 18:31	1
3,3'-Dimethylbenzidine	19	U	19	4.8	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,4-Dimethylphenol	1.9	U	1.9	0.66	ug/L		07/18/14 15:19	07/29/14 18:31	1
Dimethyl phthalate	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Di-n-butyl phthalate	0.96	U	0.96	0.37	ug/L		07/18/14 15:19	07/29/14 18:31	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,4-Dinitrophenol	9.6	U	9.6	1.1	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,4-Dinitrotoluene	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,6-Dinitrotoluene	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
Di-n-octyl phthalate	0.96	U	0.96	0.16	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,4-Dioxane	1.9	U	1.9	0.30	ug/L		07/18/14 15:19	07/29/14 18:31	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank
Date Collected: 07/16/14 09:55
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Ethyl methanesulfonate	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Ethyl Parathion	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Famphur	0.96	U	0.96	0.15	ug/L		07/18/14 15:19	07/29/14 18:31	1
Fluoranthene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Fluorene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Hexachlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Hexachlorobutadiene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Hexachlorocyclopentadiene	1.9	U	1.9	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
Hexachloroethane	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
Hexachlorophene	480	U	480	24	ug/L		07/18/14 15:19	07/29/14 18:31	1
Hexachloropropene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Isophorone	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Isosafrole	0.96	U *	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
m-Dinitrobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Methapyrilene	190	U	190	1.2	ug/L		07/18/14 15:19	07/29/14 18:31	1
3-Methylcholanthrene	0.96	U *	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
Methyl methanesulfonate	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Methylnaphthalene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Methyl parathion	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Methylphenol	1.9	U	1.9	0.71	ug/L		07/18/14 15:19	07/29/14 18:31	1
3 & 4 Methylphenol	1.9	U	1.9	0.63	ug/L		07/18/14 15:19	07/29/14 18:31	1
1-Naphthalenamine	4.8	U	4.8	1.2	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Naphthalenamine	4.8	U	4.8	1.2	ug/L		07/18/14 15:19	07/29/14 18:31	1
Naphthalene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,4-Naphthoquinone	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Nitroaniline	0.96	U	0.96	0.15	ug/L		07/18/14 15:19	07/29/14 18:31	1
3-Nitroaniline	4.8	U	4.8	0.15	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Nitroaniline	4.8	U	4.8	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
Nitrobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
5-Nitro-o-toluidine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Nitrophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Nitrophenol	4.8	U	4.8	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
4-Nitroquinoline-1-oxide	1.9	U	1.9	1.1	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosodiethylamine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosodimethylamine	0.96	U	0.96	0.24	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosodi-n-butylamine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.35	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosomethylethylamine	1.9	U	1.9	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosomorpholine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosopiperidine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
N-Nitrosopyrrolidine	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
o,o',o''-Triethylphosphorothioate	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
o-Toluidine	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,2'-oxybis[1-chloropropane]	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
p-Dimethylamino azobenzene	4.8	U	4.8	0.14	ug/L		07/18/14 15:19	07/29/14 18:31	1
Pentachlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1

Client Sample ID: Equipment Blank
Date Collected: 07/16/14 09:55
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1
Pentachlorophenol	4.8	U	4.8	0.38	ug/L		07/18/14 15:19	07/29/14 18:31	1
Phenacetin	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Phenanthrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Phenol	0.96	U	0.96	0.12	ug/L		07/18/14 15:19	07/29/14 18:31	1
Phenyl ether	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Phorate	0.96	U	0.96	0.19	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-Picoline	1.9	U	1.9	0.14	ug/L		07/18/14 15:19	07/29/14 18:31	1
p-Phenylene diamine	190	U *	190	15	ug/L		07/18/14 15:19	07/29/14 18:31	1
Pronamide	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
Pyrene	0.19	U	0.19	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Pyridine	4.8	U	4.8	0.70	ug/L		07/18/14 15:19	07/29/14 18:31	1
Safrole, Total	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2-sec-Butyl-4,6-dinitrophenol	1.9	U	1.9	0.14	ug/L		07/18/14 15:19	07/29/14 18:31	1
Sulfotepp	0.96	U	0.96	0.13	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,2,4,5-Tetrachlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,3,4,6-Tetrachlorophenol	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
Thionazin	0.96	U	0.96	0.19	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,2,4-Trichlorobenzene	0.96	U	0.96	0.096	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,4,5-Trichlorophenol	0.96	U	0.96	0.11	ug/L		07/18/14 15:19	07/29/14 18:31	1
2,4,6-Trichlorophenol	0.96	U	0.96	0.16	ug/L		07/18/14 15:19	07/29/14 18:31	1
1,3,5-Trinitrobenzene	0.96	U	0.96	0.48	ug/L		07/18/14 15:19	07/29/14 18:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.4*	*T J*	*ug/L*		*1.97*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Unknown	*0.98*	*T J*	*ug/L*		*2.07*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Unknown	*0.92*	*T J*	*ug/L*		*2.10*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Unknown	*3.8*	*T J*	*ug/L*		*2.19*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Unknown	*0.88*	*T J*	*ug/L*		*2.24*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Unknown	*0.88*	*T J*	*ug/L*		*2.44*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Unknown	*2.1*	*T J*	*ug/L*		*2.45*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
Aldol condensation product	*16*	*T A J*	*ug/L*		*3.89*		*07/18/14 15:19*	*07/29/14 18:31*	*1*
o-Terphenyl	*1.7*	*T J N*	*ug/L*		*10.50*	*84-15-1*	*07/18/14 15:19*	*07/29/14 18:31*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,	*3.1*	*T J N*	*ug/L*		*10.53*	*82304-66-3*	*07/18/14 15:19*	*07/29/14 18:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 130*	*07/18/14 15:19*	*07/29/14 18:31*	*1*
2-Fluorophenol	*54*		*25 - 130*	*07/18/14 15:19*	*07/29/14 18:31*	*1*
Nitrobenzene-d5	*61*		*32 - 130*	*07/18/14 15:19*	*07/29/14 18:31*	*1*
Phenol-d5	*55*		*27 - 130*	*07/18/14 15:19*	*07/29/14 18:31*	*1*
Terphenyl-d14	*86*		*36 - 130*	*07/18/14 15:19*	*07/29/14 18:31*	*1*
2,4,6-Tribromophenol	*59*		*30 - 130*	*07/18/14 15:19*	*07/29/14 18:31*	*1*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			07/23/14 15:18	1
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 15:18	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank
Date Collected: 07/16/14 09:55
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-4
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/18/14 08:49	07/21/14 20:45	1
Antimony	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:45	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/18/14 08:49	07/21/14 20:45	1
Barium	**8.4**		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 20:45	1
Beryllium	0.50	U	0.50	0.15	ug/L		07/18/14 08:49	07/21/14 20:45	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/18/14 08:49	07/21/14 20:45	1
Chromium	5.0	U	5.0	2.5	ug/L		07/18/14 08:49	07/21/14 20:45	1
Cobalt	**0.25**	**J**	0.50	0.12	ug/L		07/18/14 08:49	07/21/14 20:45	1
Copper	**15**		5.0	1.1	ug/L		07/18/14 08:49	07/21/14 20:45	1
Iron	**74**	**J**	100	44	ug/L		07/18/14 08:49	07/21/14 20:45	1
Lead	**0.87**	**J**	1.5	0.50	ug/L		07/18/14 08:49	07/21/14 20:45	1
Manganese	**6.5**		5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:45	1
Mercury	0.80	U	0.80	0.40	ug/L		07/18/14 08:49	07/21/14 20:45	1
Nickel	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/22/14 20:12	1
Selenium	2.5	U	2.5	1.1	ug/L		07/18/14 08:49	07/21/14 20:45	1
Vanadium	10	U	10	3.2	ug/L		07/18/14 08:49	07/21/14 20:45	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: RAB MW-3
Date Collected: 07/16/14 11:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-5
Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	15		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 20:52	1
Iron	1200		100	44	ug/L		07/18/14 08:49	07/21/14 20:52	1

Client Sample ID: RAB MW-2

Lab Sample ID: 680-103376-6

Date Collected: 07/16/14 12:30

Matrix: Water

Date Received: 07/17/14 10:26

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	5.4	J	50	5.0	ug/L			07/30/14 16:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*07/30/14 16:54*	*5*
Dibromofluoromethane	*98*		*70 - 130*		*07/30/14 16:54*	*5*
Toluene-d8 (Surr)	*103*		*70 - 130*		*07/30/14 16:54*	*5*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 19:44	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.2		0.50	0.13	ug/L		07/18/14 08:49	07/21/14 20:59	1
Cobalt	160		0.50	0.12	ug/L		07/18/14 08:49	07/21/14 20:59	1
Manganese	12000		5.0	2.0	ug/L		07/18/14 08:49	07/21/14 20:59	1
Nickel	82		5.0	2.0	ug/L		07/18/14 08:49	07/22/14 20:41	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: SDB-MW1
Date Collected: 07/16/14 14:20
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	11		5.0	2.6	ug/L			07/28/14 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*07/28/14 19:03*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*07/28/14 19:03*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*07/28/14 19:03*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	500		100	50	ug/L		07/18/14 08:49	07/21/14 21:07	1
Arsenic	6.0		2.5	1.3	ug/L		07/18/14 08:49	07/21/14 21:07	1
Chromium	3.1	J	5.0	2.5	ug/L		07/18/14 08:49	07/21/14 21:07	1
Iron	170000		100	44	ug/L		07/18/14 08:49	07/21/14 21:07	1
Lead	0.87	J	1.5	0.50	ug/L		07/18/14 08:49	07/21/14 21:07	1
Manganese	1900		5.0	2.0	ug/L		07/18/14 08:49	07/21/14 21:07	1
Nickel	2.7	J	5.0	2.0	ug/L		07/18/14 08:49	07/22/14 20:49	1

Client Sample ID: SDB-MW2

Lab Sample ID: 680-103376-8

Date Collected: 07/16/14 14:50

Matrix: Water

Date Received: 07/17/14 10:26

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		2.5	1.3	mg/L			07/24/14 12:53	5
Nitrate as N	0.050	U	0.050	0.025	mg/L			07/17/14 18:51	1
Nitrite as N	0.10	U H	0.10	0.050	mg/L			07/21/14 17:51	2
Sulfate	**1400**		25	13	mg/L			07/24/14 13:08	50

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**570**		100	33	ug/L		07/18/14 10:06	07/23/14 13:04	1
Manganese, Dissolved	**1300**		5.0	1.0	ug/L		07/18/14 10:06	07/23/14 13:04	1
Sodium, Dissolved	**250000**		500	250	ug/L		07/18/14 10:06	07/23/14 13:04	1
Potassium, Dissolved	**1500**		500	170	ug/L		07/18/14 10:06	07/23/14 13:04	1
Calcium, Dissolved	**410000**		250	130	ug/L		07/18/14 10:06	07/23/14 13:04	1
Magnesium, Dissolved	**94000**		250	43	ug/L		07/18/14 10:06	07/23/14 13:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	**350**		5.0	5.0	mg/L			07/21/14 14:10	1
Bicarbonate Alkalinity as CaCO3	**350**		5.0	5.0	mg/L			07/21/14 14:10	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/21/14 14:10	1
Ammonium ion as NH4	**0.076**		0.050	0.050	mg/L			07/24/14 12:45	1
pH	**6.5**		1.0	1.0	SU			07/24/14 12:45	1
Temperature	**18**		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.059**		0.050	0.026	mg/L			07/21/14 10:49	1
Orthophosphate, Dissolved	**0.071**		0.050	0.016	mg/L			07/17/14 15:50	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**5.1**		1.0	1.0	mg/L			07/25/14 06:43	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: SDB-MW3
Date Collected: 07/16/14 15:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	10	U	10	1.0	ug/L			07/28/14 19:27	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/28/14 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*07/28/14 19:27*	*1*
Dibromofluoromethane	*105*		*70 - 130*		*07/28/14 19:27*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/28/14 19:27*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.66**		0.50	0.13	ug/L		07/18/14 08:49	07/21/14 21:21	1
Nickel	**28**		5.0	2.0	ug/L		07/18/14 08:49	07/22/14 21:03	1
Selenium	**9.1**		2.5	1.1	ug/L		07/18/14 08:49	07/21/14 21:21	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: NAT-4
Date Collected: 07/16/14 14:25
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	100	U	100	10	ug/L			07/25/14 14:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*07/25/14 14:14*	*10*
Dibromofluoromethane	*97*		*70 - 130*		*07/25/14 14:14*	*10*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/25/14 14:14*	*10*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 21:21	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3300**		100	50	ug/L		07/18/14 08:49	07/21/14 21:29	1
Arsenic	**3.8**		2.5	1.3	ug/L		07/18/14 08:49	07/21/14 21:29	1
Barium	**160**		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 21:29	1
Beryllium	**0.75**		0.50	0.15	ug/L		07/18/14 08:49	07/21/14 21:29	1
Cadmium	**0.22**	**J**	0.50	0.13	ug/L		07/18/14 08:49	07/21/14 21:29	1
Chromium	**13**		5.0	2.5	ug/L		07/18/14 08:49	07/21/14 21:29	1
Iron	**25000**		100	44	ug/L		07/18/14 08:49	07/21/14 21:29	1
Lead	**9.5**		1.5	0.50	ug/L		07/18/14 08:49	07/21/14 21:29	1
Vanadium	**37**		10	3.2	ug/L		07/18/14 08:49	07/21/14 21:29	1

Client Sample ID: MW-4

Date Collected: 07/16/14 11:30
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	2300		250	130	ug/L			07/25/14 14:44	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*07/25/14 14:44*	*50*
Dibromofluoromethane	*98*		*70 - 130*		*07/25/14 14:44*	*50*
Toluene-d8 (Surr)	*101*		*70 - 130*		*07/25/14 14:44*	*50*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	1.3	J	5.0	1.0	mg/L			07/23/14 20:57	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	510		10	5.0	mg/L			07/25/14 16:20	20
Nitrate as N	0.10	U	0.10	0.050	mg/L			07/17/14 19:06	2
Nitrite as N	0.10	U	0.10	0.050	mg/L			07/17/14 19:06	2
Sulfate	1.3	J	2.5	1.3	mg/L			07/24/14 13:24	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	580		100	50	ug/L		07/18/14 08:49	07/21/14 21:36	1
Barium	820		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 21:36	1
Lead	0.69	J	1.5	0.50	ug/L		07/18/14 08:49	07/21/14 21:36	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	55000		100	33	ug/L		07/18/14 10:06	07/23/14 13:26	1
Manganese, Dissolved	2100		5.0	1.0	ug/L		07/18/14 10:06	07/23/14 13:26	1
Sodium, Dissolved	370000		500	250	ug/L		07/18/14 10:06	07/23/14 13:26	1
Potassium, Dissolved	4500		500	170	ug/L		07/18/14 10:06	07/23/14 13:26	1
Calcium, Dissolved	110000		250	130	ug/L		07/18/14 10:06	07/23/14 13:26	1
Magnesium, Dissolved	33000		250	43	ug/L		07/18/14 10:06	07/23/14 13:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	600		5.0	5.0	mg/L			07/21/14 14:01	1
Bicarbonate Alkalinity as CaCO3	600		5.0	5.0	mg/L			07/21/14 14:01	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/21/14 14:01	1
Ammonium ion as NH4	3.5		0.050	0.050	mg/L			07/24/14 12:45	1
pH	6.1		1.0	1.0	SU			07/24/14 12:45	1
Temperature	19		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	2.7		0.10	0.052	mg/L			07/21/14 11:41	2
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/17/14 15:50	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	31		1.0	1.0	mg/L			07/25/14 06:59	1

Client Sample ID: MW-4U

Date Collected: 07/16/14 13:40
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
t-Butanol	**3100**		250	130	ug/L			07/25/14 15:13	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*07/25/14 15:13*	*50*
Dibromofluoromethane	*97*		*70 - 130*		*07/25/14 15:13*	*50*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/25/14 15:13*	*50*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 20:08	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**690**		10	5.0	mg/L			07/25/14 16:35	20
Nitrate as N	0.10	U	0.10	0.050	mg/L			07/17/14 19:22	2
Nitrite as N	0.10	U	0.10	0.050	mg/L			07/17/14 19:22	2
Sulfate	2.5	U	2.5	1.3	mg/L			07/24/14 13:39	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/18/14 08:49	07/21/14 21:43	1
Barium	**940**		5.0	1.4	ug/L		07/18/14 08:49	07/21/14 21:43	1
Iron	**81000**		100	44	ug/L		07/18/14 08:49	07/21/14 21:43	1
Lead	1.5	U	1.5	0.50	ug/L		07/18/14 08:49	07/21/14 21:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**71000**		100	33	ug/L		07/18/14 10:06	07/23/14 13:33	1
Manganese, Dissolved	**1400**		5.0	1.0	ug/L		07/18/14 10:06	07/23/14 13:33	1
Sodium, Dissolved	**590000**		5000	2500	ug/L		07/18/14 10:06	07/31/14 15:00	10
Potassium, Dissolved	**10000**		500	170	ug/L		07/18/14 10:06	07/23/14 13:33	1
Calcium, Dissolved	**98000**		250	130	ug/L		07/18/14 10:06	07/23/14 13:33	1
Magnesium, Dissolved	**41000**		250	43	ug/L		07/18/14 10:06	07/23/14 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1
Alkalinity	**790**		5.0	5.0	mg/L			07/21/14 14:33	1
Bicarbonate Alkalinity as CaCO3	**790**		5.0	5.0	mg/L			07/21/14 14:33	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/21/14 14:33	1
Ammonium ion as NH4	**17**		0.050	0.050	mg/L			07/24/14 12:45	1
pH	**6.1**		1.0	1.0	SU			07/24/14 12:45	1
Temperature	**21**		1.0	1.0	Degrees C			07/24/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**13**		0.50	0.26	mg/L			07/21/14 11:45	10
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/17/14 15:50	1
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**44**		1.0	1.0	mg/L			07/25/14 07:18	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Trip Blank
Date Collected: 07/16/14 00:00
Date Received: 07/17/14 10:26

Lab Sample ID: 680-103376-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl ether	10	U *	10	1.0	ug/L			07/25/14 12:17	1
t-Butanol	5.0	U *	5.0	2.6	ug/L			07/25/14 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*	*	*70 - 130*		*07/25/14 12:17*	*1*
Dibromofluoromethane	*105*	*	*70 - 130*		*07/25/14 12:17*	*1*
Toluene-d8 (Surr)	*99*	*	*70 - 130*		*07/25/14 12:17*	*1*

Client Sample ID: RAB-MW1R
Date Collected: 07/16/14 09:40
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	13000	U	13000	2500	ug/L			07/22/14 14:11	500
Acetonitrile	20000	U	20000	5000	ug/L			07/22/14 14:11	500
Acrolein	10000	U	10000	3700	ug/L			07/22/14 14:11	500
Acrylonitrile	10000	U	10000	3600	ug/L			07/22/14 14:11	500
Allyl chloride	500	U	500	100	ug/L			07/22/14 14:11	500
Benzene	500	U	500	130	ug/L			07/22/14 14:11	500
Bromodichloromethane	500	U	500	130	ug/L			07/22/14 14:11	500
Bromoform	500	U	500	250	ug/L			07/22/14 14:11	500
Bromomethane	2500	U	2500	1000	ug/L			07/22/14 14:11	500
2-Butanone	5000	U	5000	500	ug/L			07/22/14 14:11	500
Carbon disulfide	1000	U	1000	300	ug/L			07/22/14 14:11	500
Carbon tetrachloride	500	U	500	250	ug/L			07/22/14 14:11	500
Chlorobenzene	500	U	500	130	ug/L			07/22/14 14:11	500
Chloroethane	2500	U	2500	1000	ug/L			07/22/14 14:11	500
Chloroform	500	U	500	70	ug/L			07/22/14 14:11	500
Chloromethane	500	U	500	170	ug/L			07/22/14 14:11	500
Chloroprene	500	U	500	150	ug/L			07/22/14 14:11	500
cis-1,2-Dichloroethene	500	U	500	75	ug/L			07/22/14 14:11	500
cis-1,3-Dichloropropene	500	U	500	55	ug/L			07/22/14 14:11	500
Dibromochloromethane	500	U	500	50	ug/L			07/22/14 14:11	500
1,2-Dibromo-3-Chloropropane	500	U	500	220	ug/L			07/22/14 14:11	500
1,2-Dibromoethane	500	U	500	130	ug/L			07/22/14 14:11	500
Dibromomethane	500	U	500	100	ug/L			07/22/14 14:11	500
Dichlorodifluoromethane	500	U	500	130	ug/L			07/22/14 14:11	500
1,1-Dichloroethane	500	U	500	130	ug/L			07/22/14 14:11	500
1,2-Dichloroethane	500	U	500	50	ug/L			07/22/14 14:11	500
1,1-Dichloroethene	500	U	500	55	ug/L			07/22/14 14:11	500
1,2-Dichloropropane	500	U	500	65	ug/L			07/22/14 14:11	500
Diethyl ether	5000	U	5000	500	ug/L			07/22/14 14:11	500
Ethylbenzene	500	U	500	55	ug/L			07/22/14 14:11	500
Ethyl methacrylate	500	U	500	130	ug/L			07/22/14 14:11	500
2-Hexanone	5000	U	5000	500	ug/L			07/22/14 14:11	500
Iodomethane	2500	U	2500	500	ug/L			07/22/14 14:11	500
Isobutyl alcohol	20000	U	20000	5500	ug/L			07/22/14 14:11	500
Methacrylonitrile	10000	U	10000	1700	ug/L			07/22/14 14:11	500
Methylene Chloride	2500	U	2500	500	ug/L			07/22/14 14:11	500
Methyl methacrylate	500	U	500	240	ug/L			07/22/14 14:11	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	ug/L			07/22/14 14:11	500
Methyl tert-butyl ether	5000	U	5000	100	ug/L			07/22/14 14:11	500
m-Xylene & p-Xylene	1000	U	1000	100	ug/L			07/22/14 14:11	500
n-Heptane	500	U	500	210	ug/L			07/22/14 14:11	500
o-Xylene	500	U	500	130	ug/L			07/22/14 14:11	500
Pentachloroethane	2500	U	2500	600	ug/L			07/22/14 14:11	500
Propionitrile	10000	U	10000	2300	ug/L			07/22/14 14:11	500
Styrene	500	U	500	55	ug/L			07/22/14 14:11	500
t-Butanol	**40000**		2500	1300	ug/L			07/22/14 14:11	500
1,1,1,2-Tetrachloroethane	500	U	500	170	ug/L			07/22/14 14:11	500
1,1,2,2-Tetrachloroethane	500	U	500	90	ug/L			07/22/14 14:11	500
Tetrachloroethene	500	U	500	75	ug/L			07/22/14 14:11	500

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: RAB-MW1R
Date Collected: 07/16/14 09:40
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	500	U	500	170	ug/L			07/22/14 14:11	500
trans-1,4-Dichloro-2-butene	1000	U	1000	250	ug/L			07/22/14 14:11	500
trans-1,2-Dichloroethene	500	U	500	100	ug/L			07/22/14 14:11	500
trans-1,3-Dichloropropene	500	U	500	110	ug/L			07/22/14 14:11	500
1,2,3-Trichlorobenzene	500	U	500	180	ug/L			07/22/14 14:11	500
1,1,1-Trichloroethane	500	U	500	250	ug/L			07/22/14 14:11	500
1,1,2-Trichloroethane	500	U	500	65	ug/L			07/22/14 14:11	500
Trichloroethylene	500	U	500	65	ug/L			07/22/14 14:11	500
Trichlorofluoromethane	500	U	500	130	ug/L			07/22/14 14:11	500
1,2,3-Trichloropropane	500	U	500	210	ug/L			07/22/14 14:11	500
Vinyl acetate	1000	U	1000	140	ug/L			07/22/14 14:11	500
Vinyl chloride	500	U	500	90	ug/L			07/22/14 14:11	500
Xylenes, Total	1000	U	1000	100	ug/L			07/22/14 14:11	500

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/22/14 14:11*	*500*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*07/22/14 14:11*	*500*
Dibromofluoromethane	*115*		*70 - 130*		*07/22/14 14:11*	*500*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/22/14 14:11*	*500*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Field Duplicate
Date Collected: 07/16/14 00:00
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	13000	U	13000	2500	ug/L			07/23/14 13:19	500
Acetonitrile	20000	U	20000	5000	ug/L			07/23/14 13:19	500
Acrolein	10000	U	10000	3700	ug/L			07/23/14 13:19	500
Acrylonitrile	10000	U	10000	3600	ug/L			07/23/14 13:19	500
Allyl chloride	500	U	500	100	ug/L			07/23/14 13:19	500
Benzene	500	U	500	130	ug/L			07/23/14 13:19	500
Bromodichloromethane	500	U	500	130	ug/L			07/23/14 13:19	500
Bromoform	500	U	500	250	ug/L			07/23/14 13:19	500
Bromomethane	2500	U	2500	1000	ug/L			07/23/14 13:19	500
2-Butanone	5000	U	5000	500	ug/L			07/23/14 13:19	500
Carbon disulfide	1000	U	1000	300	ug/L			07/23/14 13:19	500
Carbon tetrachloride	500	U	500	250	ug/L			07/23/14 13:19	500
Chlorobenzene	500	U	500	130	ug/L			07/23/14 13:19	500
Chloroethane	2500	U	2500	1000	ug/L			07/23/14 13:19	500
Chloroform	500	U	500	70	ug/L			07/23/14 13:19	500
Chloromethane	500	U	500	170	ug/L			07/23/14 13:19	500
Chloroprene	500	U	500	150	ug/L			07/23/14 13:19	500
cis-1,2-Dichloroethene	500	U	500	75	ug/L			07/23/14 13:19	500
cis-1,3-Dichloropropene	500	U	500	55	ug/L			07/23/14 13:19	500
Dibromochloromethane	500	U	500	50	ug/L			07/23/14 13:19	500
1,2-Dibromo-3-Chloropropane	500	U	500	220	ug/L			07/23/14 13:19	500
1,2-Dibromoethane	500	U	500	130	ug/L			07/23/14 13:19	500
Dibromomethane	500	U	500	100	ug/L			07/23/14 13:19	500
Dichlorodifluoromethane	500	U	500	130	ug/L			07/23/14 13:19	500
1,1-Dichloroethane	500	U	500	130	ug/L			07/23/14 13:19	500
1,2-Dichloroethane	500	U	500	50	ug/L			07/23/14 13:19	500
1,1-Dichloroethene	500	U	500	55	ug/L			07/23/14 13:19	500
1,2-Dichloropropane	500	U	500	65	ug/L			07/23/14 13:19	500
Diethyl ether	5000	U	5000	500	ug/L			07/23/14 13:19	500
Ethylbenzene	500	U	500	55	ug/L			07/23/14 13:19	500
Ethyl methacrylate	500	U	500	130	ug/L			07/23/14 13:19	500
2-Hexanone	5000	U	5000	500	ug/L			07/23/14 13:19	500
Iodomethane	2500	U	2500	500	ug/L			07/23/14 13:19	500
Isobutyl alcohol	20000	U	20000	5500	ug/L			07/23/14 13:19	500
Methacrylonitrile	10000	U	10000	1700	ug/L			07/23/14 13:19	500
Methylene Chloride	2500	U	2500	500	ug/L			07/23/14 13:19	500
Methyl methacrylate	500	U	500	240	ug/L			07/23/14 13:19	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	ug/L			07/23/14 13:19	500
Methyl tert-butyl ether	5000	U	5000	100	ug/L			07/23/14 13:19	500
m-Xylene & p-Xylene	1000	U	1000	100	ug/L			07/23/14 13:19	500
n-Heptane	500	U	500	210	ug/L			07/23/14 13:19	500
o-Xylene	500	U	500	130	ug/L			07/23/14 13:19	500
Pentachloroethane	2500	U	2500	600	ug/L			07/23/14 13:19	500
Propionitrile	10000	U	10000	2300	ug/L			07/23/14 13:19	500
Styrene	500	U	500	55	ug/L			07/23/14 13:19	500
t-Butanol	**25000**		2500	1300	ug/L			07/23/14 13:19	500
1,1,1,2-Tetrachloroethane	500	U	500	170	ug/L			07/23/14 13:19	500
1,1,2,2-Tetrachloroethane	500	U	500	90	ug/L			07/23/14 13:19	500
Tetrachloroethene	500	U	500	75	ug/L			07/23/14 13:19	500

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Field Duplicate
Date Collected: 07/16/14 00:00
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	500	U	500	170	ug/L			07/23/14 13:19	500
trans-1,4-Dichloro-2-butene	1000	U	1000	250	ug/L			07/23/14 13:19	500
trans-1,2-Dichloroethene	500	U	500	100	ug/L			07/23/14 13:19	500
trans-1,3-Dichloropropene	500	U	500	110	ug/L			07/23/14 13:19	500
1,2,3-Trichlorobenzene	500	U	500	180	ug/L			07/23/14 13:19	500
1,1,1-Trichloroethane	500	U	500	250	ug/L			07/23/14 13:19	500
1,1,2-Trichloroethane	500	U	500	65	ug/L			07/23/14 13:19	500
Trichloroethylene	500	U	500	65	ug/L			07/23/14 13:19	500
Trichlorofluoromethane	500	U	500	130	ug/L			07/23/14 13:19	500
1,2,3-Trichloropropane	500	U	500	210	ug/L			07/23/14 13:19	500
Vinyl acetate	1000	U	1000	140	ug/L			07/23/14 13:19	500
Vinyl chloride	500	U	500	90	ug/L			07/23/14 13:19	500
Xylenes, Total	1000	U	1000	100	ug/L			07/23/14 13:19	500

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*59000*	*T J*	*ug/L*		*1.12*			*07/23/14 13:19*	*500*
Unknown	*4500*	*T J*	*ug/L*		*1.32*			*07/23/14 13:19*	*500*
1,4-Dichlorobenzene-D4	*29000*	*T J N*	*ug/L*		*8.74*	*3855-82-1*		*07/23/14 13:19*	*500*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*07/23/14 13:19*	*500*
Dibromofluoromethane	*100*		*70 - 130*		*07/23/14 13:19*	*500*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/23/14 13:19*	*500*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Field Blank
Date Collected: 07/16/14 09:50
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			07/22/14 12:04	1
Acetonitrile	40	U	40	10	ug/L			07/22/14 12:04	1
Acrolein	20	U	20	7.4	ug/L			07/22/14 12:04	1
Acrylonitrile	20	U	20	7.2	ug/L			07/22/14 12:04	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			07/22/14 12:04	1
Benzene	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
Bromoform	1.0	U	1.0	0.50	ug/L			07/22/14 12:04	1
Bromomethane	5.0	U	5.0	2.0	ug/L			07/22/14 12:04	1
2-Butanone	10	U	10	1.0	ug/L			07/22/14 12:04	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			07/22/14 12:04	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			07/22/14 12:04	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
Chloroethane	5.0	U	5.0	2.0	ug/L			07/22/14 12:04	1
Chloroform	1.0	U	1.0	0.14	ug/L			07/22/14 12:04	1
Chloromethane	1.0	U	1.0	0.33	ug/L			07/22/14 12:04	1
Chloroprene	1.0	U	1.0	0.30	ug/L			07/22/14 12:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			07/22/14 12:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			07/22/14 12:04	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			07/22/14 12:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			07/22/14 12:04	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			07/22/14 12:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/22/14 12:04	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			07/22/14 12:04	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			07/22/14 12:04	1
Diethyl ether	10	U	10	1.0	ug/L			07/22/14 12:04	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			07/22/14 12:04	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
2-Hexanone	10	U	10	1.0	ug/L			07/22/14 12:04	1
Iodomethane	5.0	U	5.0	1.0	ug/L			07/22/14 12:04	1
Isobutyl alcohol	40	U	40	11	ug/L			07/22/14 12:04	1
Methacrylonitrile	20	U	20	3.3	ug/L			07/22/14 12:04	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			07/22/14 12:04	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			07/22/14 12:04	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			07/22/14 12:04	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			07/22/14 12:04	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			07/22/14 12:04	1
n-Heptane	1.0	U	1.0	0.42	ug/L			07/22/14 12:04	1
o-Xylene	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			07/22/14 12:04	1
Propionitrile	20	U	20	4.6	ug/L			07/22/14 12:04	1
Styrene	1.0	U	1.0	0.11	ug/L			07/22/14 12:04	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/22/14 12:04	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			07/22/14 12:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			07/22/14 12:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/22/14 12:04	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Field Blank
Date Collected: 07/16/14 09:50
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.0	U	1.0	0.33	ug/L			07/22/14 12:04	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			07/22/14 12:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			07/22/14 12:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			07/22/14 12:04	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			07/22/14 12:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			07/22/14 12:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			07/22/14 12:04	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			07/22/14 12:04	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:04	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			07/22/14 12:04	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			07/22/14 12:04	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			07/22/14 12:04	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			07/22/14 12:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/22/14 12:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*07/22/14 12:04*	*1*
Dibromofluoromethane	*119*		*70 - 130*		*07/22/14 12:04*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/22/14 12:04*	*1*

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank 1
Date Collected: 07/16/14 09:55
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11	J	25	5.0	ug/L			07/22/14 12:29	1
Acetonitrile	40	U	40	10	ug/L			07/22/14 12:29	1
Acrolein	20	U	20	7.4	ug/L			07/22/14 12:29	1
Acrylonitrile	20	U	20	7.2	ug/L			07/22/14 12:29	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			07/22/14 12:29	1
Benzene	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
Bromoform	1.0	U	1.0	0.50	ug/L			07/22/14 12:29	1
Bromomethane	5.0	U	5.0	2.0	ug/L			07/22/14 12:29	1
2-Butanone	10	U	10	1.0	ug/L			07/22/14 12:29	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			07/22/14 12:29	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			07/22/14 12:29	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
Chloroethane	5.0	U	5.0	2.0	ug/L			07/22/14 12:29	1
Chloroform	1.0	U	1.0	0.14	ug/L			07/22/14 12:29	1
Chloromethane	1.0	U	1.0	0.33	ug/L			07/22/14 12:29	1
Chloroprene	1.0	U	1.0	0.30	ug/L			07/22/14 12:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			07/22/14 12:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			07/22/14 12:29	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			07/22/14 12:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			07/22/14 12:29	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			07/22/14 12:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/22/14 12:29	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			07/22/14 12:29	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			07/22/14 12:29	1
Diethyl ether	10	U	10	1.0	ug/L			07/22/14 12:29	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			07/22/14 12:29	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
2-Hexanone	10	U	10	1.0	ug/L			07/22/14 12:29	1
Iodomethane	5.0	U	5.0	1.0	ug/L			07/22/14 12:29	1
Isobutyl alcohol	40	U	40	11	ug/L			07/22/14 12:29	1
Methacrylonitrile	20	U	20	3.3	ug/L			07/22/14 12:29	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			07/22/14 12:29	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			07/22/14 12:29	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			07/22/14 12:29	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			07/22/14 12:29	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			07/22/14 12:29	1
n-Heptane	1.0	U	1.0	0.42	ug/L			07/22/14 12:29	1
o-Xylene	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			07/22/14 12:29	1
Propionitrile	20	U	20	4.6	ug/L			07/22/14 12:29	1
Styrene	1.0	U	1.0	0.11	ug/L			07/22/14 12:29	1
t-Butanol	12		5.0	2.6	ug/L			07/22/14 12:29	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			07/22/14 12:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			07/22/14 12:29	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/22/14 12:29	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank 1
Date Collected: 07/16/14 09:55
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.0	U	1.0	0.33	ug/L			07/22/14 12:29	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			07/22/14 12:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			07/22/14 12:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			07/22/14 12:29	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			07/22/14 12:29	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			07/22/14 12:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			07/22/14 12:29	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			07/22/14 12:29	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			07/22/14 12:29	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			07/22/14 12:29	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			07/22/14 12:29	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			07/22/14 12:29	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			07/22/14 12:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/22/14 12:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*07/22/14 12:29*	*1*
Dibromofluoromethane	*119*		*70 - 130*		*07/22/14 12:29*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/22/14 12:29*	*1*

Client Sample ID: Trip Blank
Date Collected: 07/16/14 00:00
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			07/23/14 11:52	1
Acetonitrile	40	U	40	10	ug/L			07/23/14 11:52	1
Acrolein	20	U	20	7.4	ug/L			07/23/14 11:52	1
Acrylonitrile	20	U	20	7.2	ug/L			07/23/14 11:52	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			07/23/14 11:52	1
Benzene	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
Bromoform	1.0	U	1.0	0.50	ug/L			07/23/14 11:52	1
Bromomethane	5.0	U	5.0	2.0	ug/L			07/23/14 11:52	1
2-Butanone	10	U	10	1.0	ug/L			07/23/14 11:52	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			07/23/14 11:52	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			07/23/14 11:52	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
Chloroethane	5.0	U	5.0	2.0	ug/L			07/23/14 11:52	1
Chloroform	1.0	U	1.0	0.14	ug/L			07/23/14 11:52	1
Chloromethane	1.0	U	1.0	0.33	ug/L			07/23/14 11:52	1
Chloroprene	1.0	U	1.0	0.30	ug/L			07/23/14 11:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			07/23/14 11:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			07/23/14 11:52	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			07/23/14 11:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			07/23/14 11:52	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			07/23/14 11:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/23/14 11:52	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			07/23/14 11:52	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			07/23/14 11:52	1
Diethyl ether	10	U	10	1.0	ug/L			07/23/14 11:52	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			07/23/14 11:52	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
2-Hexanone	10	U	10	1.0	ug/L			07/23/14 11:52	1
Iodomethane	5.0	U	5.0	1.0	ug/L			07/23/14 11:52	1
Isobutyl alcohol	40	U	40	11	ug/L			07/23/14 11:52	1
Methacrylonitrile	20	U	20	3.3	ug/L			07/23/14 11:52	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			07/23/14 11:52	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			07/23/14 11:52	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			07/23/14 11:52	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			07/23/14 11:52	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			07/23/14 11:52	1
n-Heptane	1.0	U	1.0	0.42	ug/L			07/23/14 11:52	1
o-Xylene	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			07/23/14 11:52	1
Propionitrile	20	U	20	4.6	ug/L			07/23/14 11:52	1
Styrene	1.0	U	1.0	0.11	ug/L			07/23/14 11:52	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/23/14 11:52	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			07/23/14 11:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			07/23/14 11:52	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/23/14 11:52	1

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Trip Blank
Date Collected: 07/16/14 00:00
Date Received: 07/18/14 09:47

Lab Sample ID: 680-103417-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.0	U	1.0	0.33	ug/L			07/23/14 11:52	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			07/23/14 11:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			07/23/14 11:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			07/23/14 11:52	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			07/23/14 11:52	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			07/23/14 11:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			07/23/14 11:52	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			07/23/14 11:52	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:52	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			07/23/14 11:52	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			07/23/14 11:52	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			07/23/14 11:52	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			07/23/14 11:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/23/14 11:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*07/23/14 11:52*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*07/23/14 11:52*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/23/14 11:52*	*1*

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
680-103376-6	RAB MW-2	102	98	103
680-103376-7	SDB-MW1	98	101	102
680-103376-9	SDB-MW3	98	105	99
680-103376-10	NAT-4	96	97	99
680-103376-11	MW-4	95	98	101
680-103376-12	MW-4U	97	97	100
680-103376-13	Trip Blank	93 *	105 *	99 *
680-103417-1	RAB-MW1R	99	115	98
680-103417-2	Field Duplicate	99	100	98
680-103417-3	Field Blank	96	119	96
680-103417-4	Equipment Blank 1	97	119	97
680-103417-22	Trip Blank	98	102	99
LCS 680-340195/4	Lab Control Sample	105	106	103
LCS 680-340433/4	Lab Control Sample	97	94	100
LCS 680-340832/4	Lab Control Sample	100	97	107
LCS 680-341019/4	Lab Control Sample	100	106	105
LCS 680-341499/4	Lab Control Sample	104	96	101
LCSD 680-340195/5	Lab Control Sample Dup	102	100	98
LCSD 680-340433/5	Lab Control Sample Dup	99	100	102
LCSD 680-340832/5	Lab Control Sample Dup	98	100	106
LCSD 680-341019/5	Lab Control Sample Dup	102	107	104
LCSD 680-341499/5	Lab Control Sample Dup	101	106	103
MB 680-340195/8	Method Blank	96	122	97
MB 680-340433/8	Method Blank	98	105	98
MB 680-340832/8	Method Blank	95	102	98
MB 680-341019/8	Method Blank	98	107	104
MB 680-341499/8	Method Blank	98	111	105

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(34-130)	(25-130)	(32-130)	(27-130)	(36-130)	(30-130)
680-103376-1	RAB-MW1R	41	38	39	33	38	55
680-103376-1 MS	RAB-MW1R	47	49	48	45	33 X	65
680-103376-1 MSD	RAB-MW1R	49	50	46	45	43	71
680-103376-2	Field Duplicate	55	58	61	59	51	66
680-103376-3	Field Blank	57	58	63	57	82	60
680-103376-4	Equipment Blank	56	54	61	55	86	59
LCS 680-339694/10-A	Lab Control Sample	61	59	63	54	58	71
LCS 680-339694/7-A	Lab Control Sample	59	65	62	57	61	73
LCSD 680-339694/11-A	Lab Control Sample Dup	53	53	58	50	56	69
MB 680-339694/6-A	Method Blank	66	67	64	66	80	65

Surrogate Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-340195/8
Matrix: Water
Analysis Batch: 340195

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			07/22/14 11:08	1
Acetonitrile	40	U	40	10	ug/L			07/22/14 11:08	1
Acrolein	20	U	20	7.4	ug/L			07/22/14 11:08	1
Acrylonitrile	20	U	20	7.2	ug/L			07/22/14 11:08	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			07/22/14 11:08	1
Benzene	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
Bromoform	1.0	U	1.0	0.50	ug/L			07/22/14 11:08	1
Bromomethane	5.0	U	5.0	2.0	ug/L			07/22/14 11:08	1
2-Butanone	10	U	10	1.0	ug/L			07/22/14 11:08	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			07/22/14 11:08	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			07/22/14 11:08	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
Chloroethane	5.0	U	5.0	2.0	ug/L			07/22/14 11:08	1
Chloroform	1.0	U	1.0	0.14	ug/L			07/22/14 11:08	1
Chloromethane	1.0	U	1.0	0.33	ug/L			07/22/14 11:08	1
Chloroprene	1.0	U	1.0	0.30	ug/L			07/22/14 11:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			07/22/14 11:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			07/22/14 11:08	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			07/22/14 11:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			07/22/14 11:08	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			07/22/14 11:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/22/14 11:08	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			07/22/14 11:08	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			07/22/14 11:08	1
Diethyl ether	10	U	10	1.0	ug/L			07/22/14 11:08	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			07/22/14 11:08	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
2-Hexanone	10	U	10	1.0	ug/L			07/22/14 11:08	1
Iodomethane	5.0	U	5.0	1.0	ug/L			07/22/14 11:08	1
Isobutyl alcohol	40	U	40	11	ug/L			07/22/14 11:08	1
Methacrylonitrile	20	U	20	3.3	ug/L			07/22/14 11:08	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			07/22/14 11:08	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			07/22/14 11:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			07/22/14 11:08	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			07/22/14 11:08	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			07/22/14 11:08	1
n-Heptane	1.0	U	1.0	0.42	ug/L			07/22/14 11:08	1
o-Xylene	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			07/22/14 11:08	1
Propionitrile	20	U	20	4.6	ug/L			07/22/14 11:08	1
Styrene	1.0	U	1.0	0.11	ug/L			07/22/14 11:08	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/22/14 11:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			07/22/14 11:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			07/22/14 11:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-340195/8
Matrix: Water
Analysis Batch: 340195

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/22/14 11:08	1
Toluene	1.0	U	1.0	0.33	ug/L			07/22/14 11:08	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			07/22/14 11:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			07/22/14 11:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			07/22/14 11:08	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			07/22/14 11:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			07/22/14 11:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			07/22/14 11:08	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			07/22/14 11:08	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			07/22/14 11:08	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			07/22/14 11:08	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			07/22/14 11:08	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			07/22/14 11:08	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			07/22/14 11:08	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*07/22/14 11:08*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*07/22/14 11:08*	*1*
Dibromofluoromethane	*122*		*70 - 130*		*07/22/14 11:08*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/22/14 11:08*	*1*

Lab Sample ID: LCS 680-340195/4
Matrix: Water
Analysis Batch: 340195

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	102		ug/L		102	39 - 162
Benzene	50.0	53.6		ug/L		107	74 - 123
Bromodichloromethane	50.0	52.8		ug/L		106	72 - 129
Bromoform	50.0	65.7		ug/L		131	60 - 134
Bromomethane	50.0	53.5		ug/L		107	10 - 171
2-Butanone	100	106		ug/L		106	55 - 142
Carbon disulfide	50.0	48.0		ug/L		96	63 - 142
Carbon tetrachloride	50.0	52.1		ug/L		104	70 - 131
Chlorobenzene	50.0	55.3		ug/L		111	79 - 120
Chloroethane	50.0	49.4		ug/L		99	47 - 148
Chloroform	50.0	52.4		ug/L		105	76 - 128
Chloromethane	50.0	50.0		ug/L		100	47 - 151
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	78 - 127
cis-1,3-Dichloropropene	50.0	46.5		ug/L		93	73 - 128
Dibromochloromethane	50.0	59.3		ug/L		119	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	52.9		ug/L		106	57 - 126
1,2-Dibromoethane	50.0	56.8		ug/L		114	75 - 127
Dibromomethane	50.0	57.5		ug/L		115	75 - 122
Dichlorodifluoromethane	50.0	50.0		ug/L		100	41 - 165

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-340195/4
Matrix: Water
Analysis Batch: 340195

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	49.0		ug/L		98	69 - 132
1,2-Dichloroethane	50.0	54.4		ug/L		109	75 - 120
1,1-Dichloroethene	50.0	48.8		ug/L		98	73 - 134
1,2-Dichloropropane	50.0	49.7		ug/L		99	71 - 126
Diethyl ether	50.0	52.2		ug/L		104	40 - 160
Ethylbenzene	50.0	54.5		ug/L		109	78 - 125
2-Hexanone	100	107		ug/L		107	52 - 149
Methylene Chloride	50.0	50.1		ug/L		100	79 - 124
4-Methyl-2-pentanone (MIBK)	100	105		ug/L		105	51 - 143
Methyl tert-butyl ether	100	90.6		ug/L		91	76 - 126
m-Xylene & p-Xylene	100	109		ug/L		109	79 - 126
o-Xylene	50.0	56.5		ug/L		113	78 - 126
Styrene	50.0	56.7		ug/L		113	75 - 129
t-Butanol	50.0	38.4		ug/L		77	49 - 148
1,1,1,2-Tetrachloroethane	50.0	58.8		ug/L		118	68 - 132
1,1,2,2-Tetrachloroethane	50.0	56.6		ug/L		113	71 - 127
Tetrachloroethene	50.0	51.5		ug/L		103	77 - 128
Toluene	50.0	51.6		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	78 - 130
trans-1,3-Dichloropropene	50.0	51.0		ug/L		102	72 - 127
1,2,3-Trichlorobenzene	50.0	53.0		ug/L		106	63 - 136
1,1,1-Trichloroethane	50.0	56.3		ug/L		113	76 - 126
1,1,2-Trichloroethane	50.0	57.9		ug/L		116	69 - 127
Trichloroethylene	50.0	48.9		ug/L		98	80 - 120
Trichlorofluoromethane	50.0	50.5		ug/L		101	66 - 144
1,2,3-Trichloropropane	50.0	55.9		ug/L		112	74 - 126
Vinyl acetate	100	101		ug/L		101	10 - 200
Vinyl chloride	50.0	49.1		ug/L		98	58 - 141
Xylenes, Total	150	166		ug/L		111	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane	*106*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 680-340195/5
Matrix: Water
Analysis Batch: 340195

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
Acetone	100	90.9		ug/L		91	39 - 162	12	50
Benzene	50.0	52.4		ug/L		105	74 - 123	2	30
Bromodichloromethane	50.0	49.6		ug/L		99	72 - 129	6	30
Bromoform	50.0	63.1		ug/L		126	60 - 134	4	30
Bromomethane	50.0	47.5		ug/L		95	10 - 171	12	50
2-Butanone	100	89.4		ug/L		89	55 - 142	17	30
Carbon disulfide	50.0	43.4		ug/L		87	63 - 142	10	30
Carbon tetrachloride	50.0	49.5		ug/L		99	70 - 131	5	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-340195/5
Matrix: Water
Analysis Batch: 340195

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
Chlorobenzene	50.0	53.0		ug/L		106	79 - 120	4	30
Chloroethane	50.0	44.0		ug/L		88	47 - 148	12	40
Chloroform	50.0	49.7		ug/L		99	76 - 128	5	30
Chloromethane	50.0	41.5		ug/L		83	47 - 151	19	30
cis-1,2-Dichloroethene	50.0	51.3		ug/L		103	78 - 127	3	30
cis-1,3-Dichloropropene	50.0	45.3		ug/L		91	73 - 128	3	30
Dibromochloromethane	50.0	57.6		ug/L		115	63 - 134	3	50
1,2-Dibromo-3-Chloropropane	50.0	51.1		ug/L		102	57 - 126	3	50
1,2-Dibromoethane	50.0	53.6		ug/L		107	75 - 127	6	30
Dibromomethane	50.0	53.7		ug/L		107	75 - 122	7	30
Dichlorodifluoromethane	50.0	40.3		ug/L		81	41 - 165	21	50
1,1-Dichloroethane	50.0	45.9		ug/L		92	69 - 132	6	30
1,2-Dichloroethane	50.0	51.0		ug/L		102	75 - 120	6	30
1,1-Dichloroethene	50.0	44.7		ug/L		89	73 - 134	9	30
1,2-Dichloropropane	50.0	48.0		ug/L		96	71 - 126	4	30
Diethyl ether	50.0	48.6		ug/L		97	40 - 160	7	50
Ethylbenzene	50.0	52.2		ug/L		104	78 - 125	4	30
2-Hexanone	100	97.3		ug/L		97	52 - 149	10	30
Methylene Chloride	50.0	47.7		ug/L		95	79 - 124	5	30
4-Methyl-2-pentanone (MIBK)	100	93.7		ug/L		94	51 - 143	11	30
Methyl tert-butyl ether	100	89.7		ug/L		90	76 - 126	1	30
m-Xylene & p-Xylene	100	106		ug/L		106	79 - 126	3	30
o-Xylene	50.0	54.5		ug/L		109	78 - 126	4	30
Styrene	50.0	55.8		ug/L		112	75 - 129	2	30
t-Butanol	50.0	43.5		ug/L		87	49 - 148	12	50
1,1,1,2-Tetrachloroethane	50.0	56.5		ug/L		113	68 - 132	4	30
1,1,2,2-Tetrachloroethane	50.0	54.1		ug/L		108	71 - 127	5	30
Tetrachloroethene	50.0	50.7		ug/L		101	77 - 128	2	30
Toluene	50.0	49.9		ug/L		100	77 - 125	3	30
trans-1,2-Dichloroethene	50.0	48.5		ug/L		97	78 - 130	6	30
trans-1,3-Dichloropropene	50.0	49.5		ug/L		99	72 - 127	3	50
1,2,3-Trichlorobenzene	50.0	51.1		ug/L		102	63 - 136	4	30
1,1,1-Trichloroethane	50.0	52.8		ug/L		106	76 - 126	6	30
1,1,2-Trichloroethane	50.0	54.3		ug/L		109	69 - 127	6	30
Trichloroethylene	50.0	48.0		ug/L		96	80 - 120	2	30
Trichlorofluoromethane	50.0	45.1		ug/L		90	66 - 144	11	30
1,2,3-Trichloropropane	50.0	52.4		ug/L		105	74 - 126	6	30
Vinyl acetate	100	102		ug/L		102	10 - 200	0	30
Vinyl chloride	50.0	43.8		ug/L		88	58 - 141	11	30
Xylenes, Total	150	161		ug/L		107	80 - 124	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-340433/8
Matrix: Water
Analysis Batch: 340433

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	5.0	ug/L			07/23/14 11:23	1
Acetonitrile	40	U	40	10	ug/L			07/23/14 11:23	1
Acrolein	20	U	20	7.4	ug/L			07/23/14 11:23	1
Acrylonitrile	20	U	20	7.2	ug/L			07/23/14 11:23	1
Allyl chloride	1.0	U	1.0	0.20	ug/L			07/23/14 11:23	1
Benzene	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
Bromodichloromethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
Bromoform	1.0	U	1.0	0.50	ug/L			07/23/14 11:23	1
Bromomethane	5.0	U	5.0	2.0	ug/L			07/23/14 11:23	1
2-Butanone	10	U	10	1.0	ug/L			07/23/14 11:23	1
Carbon disulfide	2.0	U	2.0	0.60	ug/L			07/23/14 11:23	1
Carbon tetrachloride	1.0	U	1.0	0.50	ug/L			07/23/14 11:23	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
Chloroethane	5.0	U	5.0	2.0	ug/L			07/23/14 11:23	1
Chloroform	1.0	U	1.0	0.14	ug/L			07/23/14 11:23	1
Chloromethane	1.0	U	1.0	0.33	ug/L			07/23/14 11:23	1
Chloroprene	1.0	U	1.0	0.30	ug/L			07/23/14 11:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.15	ug/L			07/23/14 11:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			07/23/14 11:23	1
Dibromochloromethane	1.0	U	1.0	0.10	ug/L			07/23/14 11:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			07/23/14 11:23	1
1,2-Dibromoethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
Dibromomethane	1.0	U	1.0	0.20	ug/L			07/23/14 11:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/23/14 11:23	1
1,1-Dichloroethene	1.0	U	1.0	0.11	ug/L			07/23/14 11:23	1
1,2-Dichloropropane	1.0	U	1.0	0.13	ug/L			07/23/14 11:23	1
Diethyl ether	10	U	10	1.0	ug/L			07/23/14 11:23	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			07/23/14 11:23	1
Ethyl methacrylate	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
2-Hexanone	10	U	10	1.0	ug/L			07/23/14 11:23	1
Iodomethane	5.0	U	5.0	1.0	ug/L			07/23/14 11:23	1
Isobutyl alcohol	40	U	40	11	ug/L			07/23/14 11:23	1
Methacrylonitrile	20	U	20	3.3	ug/L			07/23/14 11:23	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			07/23/14 11:23	1
Methyl methacrylate	1.0	U	1.0	0.48	ug/L			07/23/14 11:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	1.0	ug/L			07/23/14 11:23	1
Methyl tert-butyl ether	10	U	10	0.20	ug/L			07/23/14 11:23	1
m-Xylene & p-Xylene	2.0	U	2.0	0.20	ug/L			07/23/14 11:23	1
n-Heptane	1.0	U	1.0	0.42	ug/L			07/23/14 11:23	1
o-Xylene	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
Pentachloroethane	5.0	U	5.0	1.2	ug/L			07/23/14 11:23	1
Propionitrile	20	U	20	4.6	ug/L			07/23/14 11:23	1
Styrene	1.0	U	1.0	0.11	ug/L			07/23/14 11:23	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/23/14 11:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.33	ug/L			07/23/14 11:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			07/23/14 11:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-340433/8
Matrix: Water
Analysis Batch: 340433

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/23/14 11:23	1
Toluene	1.0	U	1.0	0.33	ug/L			07/23/14 11:23	1
trans-1,4-Dichloro-2-butene	2.0	U	2.0	0.50	ug/L			07/23/14 11:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			07/23/14 11:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			07/23/14 11:23	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.35	ug/L			07/23/14 11:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.50	ug/L			07/23/14 11:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.13	ug/L			07/23/14 11:23	1
Trichloroethylene	1.0	U	1.0	0.13	ug/L			07/23/14 11:23	1
Trichlorofluoromethane	1.0	U	1.0	0.25	ug/L			07/23/14 11:23	1
1,2,3-Trichloropropane	1.0	U	1.0	0.41	ug/L			07/23/14 11:23	1
Vinyl acetate	2.0	U	2.0	0.28	ug/L			07/23/14 11:23	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			07/23/14 11:23	1
Xylenes, Total	2.0	U	2.0	0.20	ug/L			07/23/14 11:23	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*69.9*	*T J*	*ug/L*		*1.12*			*07/23/14 11:23*	*1*
Sulfur dioxide	*6.41*	*T J N*	*ug/L*		*1.32*	*7446-09-5*		*07/23/14 11:23*	*1*
Unknown	*5.93*	*T J*	*ug/L*		*1.60*			*07/23/14 11:23*	*1*
1,4-Dichlorobenzene-D4	*55.1*	*T J N*	*ug/L*		*8.74*	*3855-82-1*		*07/23/14 11:23*	*1*

Surrogate	*%Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*07/23/14 11:23*	*1*
Dibromofluoromethane	*105*		*70 - 130*		*07/23/14 11:23*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/23/14 11:23*	*1*

Lab Sample ID: LCS 680-340433/4
Matrix: Water
Analysis Batch: 340433

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	94.8		ug/L		95	39 - 162
Benzene	50.0	52.6		ug/L		105	74 - 123
Bromodichloromethane	50.0	51.7		ug/L		103	72 - 129
Bromoform	50.0	48.4		ug/L		97	60 - 134
Bromomethane	50.0	42.5		ug/L		85	10 - 171
2-Butanone	100	98.1		ug/L		98	55 - 142
Carbon disulfide	50.0	44.2		ug/L		88	63 - 142
Carbon tetrachloride	50.0	52.1		ug/L		104	70 - 131
Chlorobenzene	50.0	52.4		ug/L		105	79 - 120
Chloroethane	50.0	56.9		ug/L		114	47 - 148
Chloroform	50.0	49.2		ug/L		98	76 - 128
Chloromethane	50.0	56.5		ug/L		113	47 - 151
cis-1,2-Dichloroethene	50.0	48.2		ug/L		96	78 - 127
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	73 - 128
Dibromochloromethane	50.0	51.4		ug/L		103	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	47.9		ug/L		96	57 - 126

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-340433/4
Matrix: Water
Analysis Batch: 340433

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	50.0	50.7		ug/L		101	75 - 127
Dibromomethane	50.0	52.3		ug/L		105	75 - 122
Dichlorodifluoromethane	50.0	40.5		ug/L		81	41 - 165
1,1-Dichloroethane	50.0	46.4		ug/L		93	69 - 132
1,2-Dichloroethane	50.0	53.0		ug/L		106	75 - 120
1,1-Dichloroethene	50.0	44.1		ug/L		88	73 - 134
1,2-Dichloropropane	50.0	51.9		ug/L		104	71 - 126
Diethyl ether	50.0	53.7		ug/L		107	40 - 160
Ethylbenzene	50.0	52.7		ug/L		105	78 - 125
2-Hexanone	100	106		ug/L		106	52 - 149
Methylene Chloride	50.0	46.7		ug/L		93	79 - 124
4-Methyl-2-pentanone (MIBK)	100	106		ug/L		106	51 - 143
Methyl tert-butyl ether	100	94.7		ug/L		95	76 - 126
m-Xylene & p-Xylene	100	106		ug/L		106	79 - 126
o-Xylene	50.0	52.2		ug/L		104	78 - 126
Styrene	50.0	51.3		ug/L		103	75 - 129
t-Butanol	50.0	57.8		ug/L		116	49 - 148
1,1,1,2-Tetrachloroethane	50.0	51.3		ug/L		103	68 - 132
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	71 - 127
Tetrachloroethene	50.0	49.4		ug/L		99	77 - 128
Toluene	50.0	52.2		ug/L		104	77 - 125
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	78 - 130
trans-1,3-Dichloropropene	50.0	51.0		ug/L		102	72 - 127
1,2,3-Trichlorobenzene	50.0	54.0		ug/L		108	63 - 136
1,1,1-Trichloroethane	50.0	51.2		ug/L		102	76 - 126
1,1,2-Trichloroethane	50.0	53.5		ug/L		107	69 - 127
Trichloroethylene	50.0	51.1		ug/L		102	80 - 120
Trichlorofluoromethane	50.0	50.0		ug/L		100	66 - 144
1,2,3-Trichloropropane	50.0	50.6		ug/L		101	74 - 126
Vinyl acetate	100	173		ug/L		173	10 - 200
Vinyl chloride	50.0	52.1		ug/L		104	58 - 141
Xylenes, Total	150	158		ug/L		105	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*70 - 130*
Dibromofluoromethane	*94*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 680-340433/5
Matrix: Water
Analysis Batch: 340433

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
Acetone	100	102		ug/L		102	39 - 162	7	50
Benzene	50.0	53.6		ug/L		107	74 - 123	2	30
Bromodichloromethane	50.0	53.1		ug/L		106	72 - 129	3	30
Bromoform	50.0	48.5		ug/L		97	60 - 134	0	30
Bromomethane	50.0	49.0		ug/L		98	10 - 171	14	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-340433/5
Matrix: Water
Analysis Batch: 340433

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
2-Butanone	100	105		ug/L		105	55 - 142	7	30
Carbon disulfide	50.0	48.4		ug/L		97	63 - 142	9	30
Carbon tetrachloride	50.0	55.0		ug/L		110	70 - 131	6	30
Chlorobenzene	50.0	53.5		ug/L		107	79 - 120	2	30
Chloroethane	50.0	62.7		ug/L		125	47 - 148	10	40
Chloroform	50.0	52.7		ug/L		105	76 - 128	7	30
Chloromethane	50.0	64.0		ug/L		128	47 - 151	12	30
cis-1,2-Dichloroethene	50.0	52.5		ug/L		105	78 - 127	9	30
cis-1,3-Dichloropropene	50.0	51.8		ug/L		104	73 - 128	2	30
Dibromochloromethane	50.0	52.5		ug/L		105	63 - 134	2	50
1,2-Dibromo-3-Chloropropane	50.0	47.0		ug/L		94	57 - 126	2	50
1,2-Dibromoethane	50.0	51.7		ug/L		103	75 - 127	2	30
Dibromomethane	50.0	53.1		ug/L		106	75 - 122	1	30
Dichlorodifluoromethane	50.0	45.6		ug/L		91	41 - 165	12	50
1,1-Dichloroethane	50.0	50.1		ug/L		100	69 - 132	8	30
1,2-Dichloroethane	50.0	54.3		ug/L		109	75 - 120	3	30
1,1-Dichloroethene	50.0	48.4		ug/L		97	73 - 134	9	30
1,2-Dichloropropane	50.0	52.3		ug/L		105	71 - 126	1	30
Diethyl ether	50.0	57.8		ug/L		116	40 - 160	7	50
Ethylbenzene	50.0	53.8		ug/L		108	78 - 125	2	30
2-Hexanone	100	107		ug/L		107	52 - 149	1	30
Methylene Chloride	50.0	50.1		ug/L		100	79 - 124	7	30
4-Methyl-2-pentanone (MIBK)	100	109		ug/L		109	51 - 143	2	30
Methyl tert-butyl ether	100	101		ug/L		101	76 - 126	6	30
m-Xylene & p-Xylene	100	108		ug/L		108	79 - 126	2	30
o-Xylene	50.0	53.5		ug/L		107	78 - 126	2	30
Styrene	50.0	52.1		ug/L		104	75 - 129	2	30
t-Butanol	50.0	66.2		ug/L		132	49 - 148	13	50
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/L		105	68 - 132	2	30
1,1,2,2-Tetrachloroethane	50.0	52.6		ug/L		105	71 - 127	0	30
Tetrachloroethene	50.0	50.8		ug/L		102	77 - 128	3	30
Toluene	50.0	53.6		ug/L		107	77 - 125	3	30
trans-1,2-Dichloroethene	50.0	51.2		ug/L		102	78 - 130	7	30
trans-1,3-Dichloropropene	50.0	51.8		ug/L		104	72 - 127	2	50
1,2,3-Trichlorobenzene	50.0	54.4		ug/L		109	63 - 136	1	30
1,1,1-Trichloroethane	50.0	52.8		ug/L		106	76 - 126	3	30
1,1,2-Trichloroethane	50.0	54.2		ug/L		108	69 - 127	1	30
Trichloroethylene	50.0	52.9		ug/L		106	80 - 120	3	30
Trichlorofluoromethane	50.0	56.6		ug/L		113	66 - 144	12	30
1,2,3-Trichloropropane	50.0	51.7		ug/L		103	74 - 126	2	30
Vinyl acetate	100	182		ug/L		182	10 - 200	5	30
Vinyl chloride	50.0	57.0		ug/L		114	58 - 141	9	30
Xylenes, Total	150	162		ug/L		108	80 - 124	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-340832/8
Matrix: Water
Analysis Batch: 340832

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			07/25/14 11:07	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/25/14 11:07	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/25/14 11:07	1
Diethyl ether	10	U	10	1.0	ug/L			07/25/14 11:07	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/25/14 11:07	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/25/14 11:07	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/25/14 11:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*07/25/14 11:07*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*07/25/14 11:07*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/25/14 11:07*	*1*

Lab Sample ID: LCS 680-340832/4
Matrix: Water
Analysis Batch: 340832

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	53.0		ug/L		106	76 - 128		
1,1-Dichloroethane			50.0	52.3		ug/L		105	69 - 132		
1,2-Dichloroethane			50.0	57.1		ug/L		114	75 - 120		
Diethyl ether			50.0	54.3		ug/L		109	40 - 160		
t-Butanol			50.0	62.7		ug/L		125	49 - 148		
Tetrachloroethene			50.0	51.1		ug/L		102	77 - 128		
Trichloroethene			50.0	54.4		ug/L		109	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*97*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 680-340832/5
Matrix: Water
Analysis Batch: 340832

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
Chloroform			50.0	52.3		ug/L		105	76 - 128	1	30
1,1-Dichloroethane			50.0	54.5		ug/L		109	69 - 132	4	30
1,2-Dichloroethane			50.0	54.5		ug/L		109	75 - 120	5	30
Diethyl ether			50.0	48.1		ug/L		96	40 - 160	12	50
t-Butanol			50.0	56.3		ug/L		113	49 - 148	11	50
Tetrachloroethene			50.0	51.6		ug/L		103	77 - 128	1	30
Trichloroethene			50.0	55.0		ug/L		110	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-340832/5
Matrix: Water
Analysis Batch: 340832

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	106		70 - 130

Lab Sample ID: MB 680-341019/8
Matrix: Water
Analysis Batch: 341019

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			07/28/14 15:15	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/28/14 15:15	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/28/14 15:15	1
Diethyl ether	10	U	10	1.0	ug/L			07/28/14 15:15	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/28/14 15:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/28/14 15:15	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/28/14 15:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130		07/28/14 15:15	1
Dibromofluoromethane	107		70 - 130		07/28/14 15:15	1
Toluene-d8 (Surr)	104		70 - 130		07/28/14 15:15	1

Lab Sample ID: LCS 680-341019/4
Matrix: Water
Analysis Batch: 341019

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	50.7		ug/L		101	76 - 128
1,1-Dichloroethane	50.0	54.7		ug/L		109	69 - 132
1,2-Dichloroethane	50.0	51.1		ug/L		102	75 - 120
Tetrachloroethene	50.0	48.8		ug/L		98	77 - 128
Trichloroethene	50.0	52.4		ug/L		105	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	100		70 - 130
Dibromofluoromethane	106		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: LCSD 680-341019/5
Matrix: Water
Analysis Batch: 341019

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
Chloroform	50.0	51.9		ug/L		104	76 - 128	2	30
1,1-Dichloroethane	50.0	55.3		ug/L		111	69 - 132	1	30
1,2-Dichloroethane	50.0	50.2		ug/L		100	75 - 120	2	30
Tetrachloroethene	50.0	48.1		ug/L		96	77 - 128	2	30
Trichloroethene	50.0	53.4		ug/L		107	80 - 120	2	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-341019/5
Matrix: Water
Analysis Batch: 341019

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	102		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8 (Surr)	104		70 - 130

Lab Sample ID: MB 680-341499/8
Matrix: Water
Analysis Batch: 341499

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	0.14	ug/L			07/30/14 12:37	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			07/30/14 12:37	1
1,2-Dichloroethane	1.0	U	1.0	0.10	ug/L			07/30/14 12:37	1
Diethyl ether	10	U	10	1.0	ug/L			07/30/14 12:37	1
t-Butanol	5.0	U	5.0	2.6	ug/L			07/30/14 12:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			07/30/14 12:37	1
Trichloroethene	1.0	U	1.0	0.13	ug/L			07/30/14 12:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130		07/30/14 12:37	1
Dibromofluoromethane	111		70 - 130		07/30/14 12:37	1
Toluene-d8 (Surr)	105		70 - 130		07/30/14 12:37	1

Lab Sample ID: LCS 680-341499/4
Matrix: Water
Analysis Batch: 341499

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	45.7		ug/L		91	76 - 128
1,1-Dichloroethane	50.0	44.9		ug/L		90	69 - 132
1,2-Dichloroethane	50.0	48.0		ug/L		96	75 - 120
Diethyl ether	50.0	41.1		ug/L		82	40 - 160
t-Butanol	50.0	35.9		ug/L		72	49 - 148
Tetrachloroethene	50.0	48.9		ug/L		98	77 - 128
Trichloroethene	50.0	50.1		ug/L		100	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		70 - 130
Dibromofluoromethane	96		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 680-341499/5
Matrix: Water
Analysis Batch: 341499

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
Chloroform	50.0	48.8		ug/L		98	76 - 128	7	30
1,1-Dichloroethane	50.0	48.8		ug/L		98	69 - 132	8	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-341499/5
Matrix: Water
Analysis Batch: 341499

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
1,2-Dichloroethane			50.0	48.5		ug/L		97	75 - 120	1	30
Diethyl ether			50.0	45.2		ug/L		90	40 - 160	10	50
t-Butanol			50.0	46.1		ug/L		92	49 - 148	25	50
Tetrachloroethene			50.0	46.3		ug/L		93	77 - 128	5	30
Trichloroethene			50.0	49.5		ug/L		99	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*106*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-339694/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Acetophenone	0.432	J	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Acetylaminofluorene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
alpha,alpha-Dimethyl phenethylamine	10	U	10	3.4	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Aminobiphenyl	5.0	U	5.0	0.31	ug/L		07/18/14 15:19	07/29/14 15:20	1
Aniline	2.0	U	2.0	0.97	ug/L		07/18/14 15:19	07/29/14 15:20	1
Anthracene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Aramite, Total	1.5	U	1.5	0.11	ug/L		07/18/14 15:19	07/29/14 15:20	1
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Benzyl alcohol	1.0	U	1.0	0.14	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,1'-Biphenyl	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Bis(2-ethylhexyl) phthalate	1.57	J	2.0	0.64	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Bromophenyl phenyl ether	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
Butyl benzyl phthalate	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Chloroaniline	2.0	U	2.0	0.36	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Chloro-3-methylphenol	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Chlorophenol	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Chlorophenyl phenyl ether	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Chrysene	0.20	U	0.20	0.045	ug/L		07/18/14 15:19	07/29/14 15:20	1
Diallate	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Dibenzofuran	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-339694/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
3,3'-Dichlorobenzidine	20	U	20	2.0	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,4-Dichlorophenol	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,6-Dichlorophenol	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Diethyl phthalate	1.0	U	1.0	0.11	ug/L		07/18/14 15:19	07/29/14 15:20	1
Dimethoate	2.0	U	2.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
7,12-Dimethylbenz(a)anthracene	1.0	U	1.0	0.20	ug/L		07/18/14 15:19	07/29/14 15:20	1
3,3'-Dimethylbenzidine	20	U	20	5.0	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,4-Dimethylphenol	2.0	U	2.0	0.69	ug/L		07/18/14 15:19	07/29/14 15:20	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Di-n-butyl phthalate	1.0	U	1.0	0.39	ug/L		07/18/14 15:19	07/29/14 15:20	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,4-Dinitrophenol	10	U	10	1.1	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,4-Dinitrotoluene	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,6-Dinitrotoluene	1.0	U	1.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
Di-n-octyl phthalate	1.0	U	1.0	0.17	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,4-Dioxane	2.0	U	2.0	0.31	ug/L		07/18/14 15:19	07/29/14 15:20	1
Disulfoton	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Ethyl methanesulfonate	2.0	U	2.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Ethyl Parathion	2.0	U	2.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Famphur	1.0	U	1.0	0.16	ug/L		07/18/14 15:19	07/29/14 15:20	1
Fluoranthene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Fluorene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Hexachlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Hexachlorobutadiene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Hexachlorocyclopentadiene	2.0	U	2.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
Hexachloroethane	1.0	U	1.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
Hexachlorophene	500	U	500	25	ug/L		07/18/14 15:19	07/29/14 15:20	1
Hexachloropropene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Isophorone	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Isosafrole	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
m-Dinitrobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Methapyrilene	200	U	200	1.3	ug/L		07/18/14 15:19	07/29/14 15:20	1
3-Methylcholanthrene	1.0	U	1.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
Methyl methanesulfonate	2.0	U	2.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Methyl parathion	1.0	U	1.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Methylphenol	2.0	U	2.0	0.74	ug/L		07/18/14 15:19	07/29/14 15:20	1
3 & 4 Methylphenol	2.0	U	2.0	0.66	ug/L		07/18/14 15:19	07/29/14 15:20	1
1-Naphthalenamine	5.0	U	5.0	1.3	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Naphthalenamine	5.0	U	5.0	1.3	ug/L		07/18/14 15:19	07/29/14 15:20	1
Naphthalene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,4-Naphthoquinone	1.0	U	1.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Nitroaniline	1.0	U	1.0	0.16	ug/L		07/18/14 15:19	07/29/14 15:20	1
3-Nitroaniline	5.0	U	5.0	0.16	ug/L		07/18/14 15:19	07/29/14 15:20	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-339694/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	5.0	U	5.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
Nitrobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
5-Nitro-o-toluidine	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Nitrophenol	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Nitrophenol	5.0	U	5.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
4-Nitroquinoline-1-oxide	2.0	U	2.0	1.1	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosodiethylamine	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosodimethylamine	1.0	U	1.0	0.25	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosodi-n-butylamine	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.37	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosomethylethylamine	2.0	U	2.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosomorpholine	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosopiperidine	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
N-Nitrosopyrrolidine	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
o,o',o''-Triethylphosphorothioate	1.0	U	1.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
o-Toluidine	1.0	U	1.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
p-Dimethylamino azobenzene	5.0	U	5.0	0.15	ug/L		07/18/14 15:19	07/29/14 15:20	1
Pentachlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Pentachloronitrobenzene	1.0	U	1.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1
Pentachlorophenol	5.0	U	5.0	0.40	ug/L		07/18/14 15:19	07/29/14 15:20	1
Phenacetin	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Phenanthrene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Phenol	1.0	U	1.0	0.13	ug/L		07/18/14 15:19	07/29/14 15:20	1
Phenyl ether	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Phorate	1.0	U	1.0	0.20	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-Picoline	2.0	U	2.0	0.15	ug/L		07/18/14 15:19	07/29/14 15:20	1
p-Phenylene diamine	200	U	200	16	ug/L		07/18/14 15:19	07/29/14 15:20	1
Pronamide	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
Pyrene	0.20	U	0.20	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Pyridine	5.0	U	5.0	0.73	ug/L		07/18/14 15:19	07/29/14 15:20	1
Safrole, Total	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2-sec-Butyl-4,6-dinitrophenol	2.0	U	2.0	0.15	ug/L		07/18/14 15:19	07/29/14 15:20	1
Sulfotepp	1.0	U	1.0	0.14	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,2,4,5-Tetrachlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,3,4,6-Tetrachlorophenol	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
Thionazin	1.0	U	1.0	0.20	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.10	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,4,5-Trichlorophenol	1.0	U	1.0	0.12	ug/L		07/18/14 15:19	07/29/14 15:20	1
2,4,6-Trichlorophenol	1.0	U	1.0	0.17	ug/L		07/18/14 15:19	07/29/14 15:20	1
1,3,5-Trinitrobenzene	1.0	U	1.0	0.50	ug/L		07/18/14 15:19	07/29/14 15:20	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Aldol condensation product	*20.7*	*T A J*	*ug/L*		*2.62*		*07/18/14 15:19*	*07/29/14 15:20*	*1*
Unknown	*6.25*	*T J*	*ug/L*		*2.65*		*07/18/14 15:19*	*07/29/14 15:20*	*1*
Unknown	*1.54*	*T J*	*ug/L*		*3.05*		*07/18/14 15:19*	*07/29/14 15:20*	*1*
Unknown	*1.35*	*T J*	*ug/L*		*3.24*		*07/18/14 15:19*	*07/29/14 15:20*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-339694/6-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339694

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
o-Terphenyl	1.68	T J N	ug/L		9.31	84-15-1	07/18/14 15:19	07/29/14 15:20	1
Tetratetracontane	0.937	T J N	ug/L		15.04	7098-22-8	07/18/14 15:19	07/29/14 15:20	1
Unknown	1.21	T J	ug/L		15.46		07/18/14 15:19	07/29/14 15:20	1
Tetratetracontane	1.15	T J N	ug/L		15.94	7098-22-8	07/18/14 15:19	07/29/14 15:20	1
Unknown	0.863	T J	ug/L		17.15		07/18/14 15:19	07/29/14 15:20	1
Unknown	0.817	T J	ug/L		17.92		07/18/14 15:19	07/29/14 15:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	66		34 - 130	07/18/14 15:19	07/29/14 15:20	1
2-Fluorophenol	67		25 - 130	07/18/14 15:19	07/29/14 15:20	1
Nitrobenzene-d5	64		32 - 130	07/18/14 15:19	07/29/14 15:20	1
Phenol-d5	66		27 - 130	07/18/14 15:19	07/29/14 15:20	1
Terphenyl-d14	80		36 - 130	07/18/14 15:19	07/29/14 15:20	1
2,4,6-Tribromophenol	65		30 - 130	07/18/14 15:19	07/29/14 15:20	1

Lab Sample ID: LCS 680-339694/10-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Acetylaminofluorene	10.0	8.43		ug/L		84	10 - 130
alpha,alpha-Dimethyl phenethylamine	10.0	8.07	J	ug/L		81	10 - 130
4-Aminobiphenyl	10.0	4.03	J	ug/L		40	10 - 130
Aramite, Total	10.0	22.9	*	ug/L		229	10 - 130
Diallate	10.0	6.47		ug/L		65	10 - 130
2,6-Dichlorophenol	10.0	7.40		ug/L		74	10 - 130
Dimethoate	10.0	4.96		ug/L		50	10 - 130
7,12-Dimethylbenz(a)anthracene	10.0	7.57		ug/L		76	10 - 130
3,3'-Dimethylbenzidine	25.0	13.9	J	ug/L		56	10 - 130
Disulfoton	10.0	6.02		ug/L		60	10 - 130
Ethyl methanesulfonate	10.0	4.76		ug/L		48	10 - 130
Ethyl Parathion	10.0	7.21		ug/L		72	10 - 130
Famphur	10.0	1.22		ug/L		12	10 - 130
Hexachlorophene	50.0	500	U	ug/L		14	10 - 130
Hexachloropropene	10.0	3.02		ug/L		30	10 - 130
Isosafrole	10.0	12.8		ug/L		128	10 - 130
m-Dinitrobenzene	10.0	7.40		ug/L		74	10 - 130
Methapyrilene	50.0	25.4	J E	ug/L		51	10 - 130
3-Methylcholanthrene	10.0	96.7	E *	ug/L		967	10 - 130
Methyl methanesulfonate	10.0	4.90		ug/L		49	10 - 130
Methyl parathion	10.0	5.14		ug/L		51	10 - 130
1-Naphthalenamine	10.0	3.15	J	ug/L		32	10 - 130
2-Naphthalenamine	10.0	3.87	J	ug/L		39	10 - 130
1,4-Naphthoquinone	10.0	4.52		ug/L		45	10 - 130
5-Nitro-o-toluidine	10.0	6.12		ug/L		61	10 - 130
4-Nitroquinoline-1-oxide	10.0	4.44		ug/L		44	10 - 130
N-Nitrosodiethylamine	10.0	6.36		ug/L		64	10 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-339694/10-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodi-n-butylamine	10.0	7.90		ug/L		79	10 - 130
N-Nitrosomethylethylamine	10.0	5.93		ug/L		59	10 - 130
N-Nitrosomorpholine	10.0	5.81		ug/L		58	10 - 130
N-Nitrosopiperidine	10.0	6.82		ug/L		68	10 - 130
N-Nitrosopyrrolidine	10.0	6.36		ug/L		64	10 - 130
o,o',o''-Triethylphosphorothioate	10.0	7.22		ug/L		72	10 - 130
o-Toluidine	10.0	5.14		ug/L		51	10 - 130
p-Dimethylamino azobenzene	10.0	6.33		ug/L		63	10 - 130
Pentachlorobenzene	10.0	6.22		ug/L		62	10 - 130
Pentachloronitrobenzene	10.0	7.63		ug/L		76	10 - 130
Phenacetin	10.0	7.27		ug/L		73	10 - 130
Phorate	10.0	6.55		ug/L		65	10 - 130
2-Picoline	10.0	5.99		ug/L		60	10 - 130
p-Phenylene diamine	50.0	200	U	ug/L		12	10 - 130
Pronamide	10.0	7.44		ug/L		74	10 - 130
Safrole, Total	10.0	7.15		ug/L		71	10 - 130
2-sec-Butyl-4,6-dinitrophenol	10.0	7.07		ug/L		71	10 - 130
Sulfotepp	10.0	6.35		ug/L		64	10 - 130
1,2,4,5-Tetrachlorobenzene	10.0	5.30		ug/L		53	10 - 130
2,3,4,6-Tetrachlorophenol	10.0	7.27		ug/L		73	10 - 130
Thionazin	10.0	7.03		ug/L		70	10 - 130
1,3,5-Trinitrobenzene	10.0	6.42		ug/L		64	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 130*
2-Fluorophenol	*59*		*25 - 130*
Nitrobenzene-d5	*63*		*32 - 130*
Phenol-d5	*54*		*27 - 130*
Terphenyl-d14	*58*		*36 - 130*
2,4,6-Tribromophenol	*71*		*30 - 130*

Lab Sample ID: LCS 680-339694/7-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	6.28		ug/L		63	42 - 130
Acenaphthylene	10.0	6.73		ug/L		67	45 - 130
Acetophenone	10.0	7.74		ug/L		77	45 - 130
Aniline	10.0	6.07		ug/L		61	10 - 130
Anthracene	10.0	7.69		ug/L		77	58 - 130
Benzo[a]anthracene	10.0	7.70		ug/L		77	42 - 143
Benzo[a]pyrene	10.0	7.14		ug/L		71	45 - 151
Benzo[b]fluoranthene	10.0	7.67		ug/L		77	41 - 140
Benzo[g,h,i]perylene	10.0	7.36		ug/L		74	27 - 134
Benzo[k]fluoranthene	10.0	6.92		ug/L		69	45 - 140
Benzyl alcohol	10.0	7.45		ug/L		74	34 - 130
1,1'-Biphenyl	10.0	6.09		ug/L		61	50 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-339694/7-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	10.0	7.40		ug/L		74	47 - 130
Bis(2-chloroethyl)ether	10.0	6.77		ug/L		68	36 - 130
Bis(2-ethylhexyl) phthalate	10.0	8.90		ug/L		89	10 - 158
4-Bromophenyl phenyl ether	10.0	7.46		ug/L		75	44 - 130
Butyl benzyl phthalate	10.0	7.93		ug/L		79	60 - 130
4-Chloroaniline	10.0	6.31		ug/L		63	17 - 130
4-Chloro-3-methylphenol	10.0	7.88		ug/L		79	54 - 130
2-Chloronaphthalene	10.0	5.87		ug/L		59	48 - 130
2-Chlorophenol	10.0	7.55		ug/L		75	45 - 130
4-Chlorophenyl phenyl ether	10.0	7.02		ug/L		70	52 - 130
Chrysene	10.0	7.01		ug/L		70	40 - 142
Dibenz(a,h)anthracene	10.0	6.51		ug/L		65	38 - 130
Dibenzofuran	10.0	7.00		ug/L		70	56 - 130
1,2-Dichlorobenzene	10.0	4.33		ug/L		43	36 - 130
1,3-Dichlorobenzene	10.0	4.01		ug/L		40	31 - 130
1,4-Dichlorobenzene	10.0	4.17		ug/L		42	34 - 130
3,3'-Dichlorobenzidine	30.0	22.7	E	ug/L		76	10 - 158
2,4-Dichlorophenol	10.0	7.66		ug/L		77	58 - 130
Diethyl phthalate	10.0	7.08		ug/L		71	60 - 130
3,3'-Dimethylbenzidine	20.0	6.76	J	ug/L		34	10 - 130
2,4-Dimethylphenol	10.0	6.63		ug/L		66	41 - 130
Dimethyl phthalate	10.0	7.84		ug/L		78	58 - 130
Di-n-butyl phthalate	10.0	7.75		ug/L		78	59 - 130
4,6-Dinitro-2-methylphenol	20.0	15.0		ug/L		75	10 - 182
2,4-Dinitrophenol	20.0	13.7		ug/L		69	10 - 200
2,4-Dinitrotoluene	10.0	7.63		ug/L		76	57 - 130
2,6-Dinitrotoluene	10.0	7.49		ug/L		75	53 - 130
Di-n-octyl phthalate	10.0	8.81		ug/L		88	19 - 130
1,4-Dioxane	10.0	4.17		ug/L		42	10 - 130
Fluoranthene	10.0	8.01		ug/L		80	46 - 136
Fluorene	10.0	6.88		ug/L		69	48 - 130
Hexachlorobenzene	10.0	7.76		ug/L		78	49 - 130
Hexachlorobutadiene	10.0	4.37		ug/L		44	36 - 130
Hexachlorocyclopentadiene	10.0	2.77		ug/L		28	16 - 130
Hexachloroethane	10.0	3.84		ug/L		38	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	8.22		ug/L		82	12 - 130
Isophorone	10.0	7.37		ug/L		74	45 - 130
m-Dinitrobenzene	10.0	7.91		ug/L		79	10 - 130
2-Methylnaphthalene	10.0	5.74		ug/L		57	51 - 130
2-Methylphenol	10.0	7.36		ug/L		74	49 - 130
3 & 4 Methylphenol	10.0	7.12		ug/L		71	55 - 130
Naphthalene	10.0	5.63		ug/L		56	35 - 130
2-Nitroaniline	10.0	6.72		ug/L		67	48 - 130
3-Nitroaniline	10.0	6.44		ug/L		64	18 - 147
4-Nitroaniline	10.0	7.47		ug/L		75	31 - 147
Nitrobenzene	10.0	7.21		ug/L		72	45 - 130
2-Nitrophenol	10.0	7.35		ug/L		74	49 - 130
4-Nitrophenol	20.0	13.4		ug/L		67	36 - 132

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-339694/7-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodimethylamine	10.0	6.07		ug/L		61	29 - 130
N-Nitrosodi-n-propylamine	10.0	7.05		ug/L		71	42 - 130
N-Nitrosodiphenylamine	10.0	7.13		ug/L		71	38 - 130
2,2'-oxybis[1-chloropropane]	10.0	5.61		ug/L		56	39 - 130
Pentachlorophenol	20.0	13.5		ug/L		68	12 - 156
Phenanthrene	10.0	7.49		ug/L		75	45 - 134
Phenol	10.0	6.68		ug/L		67	44 - 130
Pyrene	10.0	7.06		ug/L		71	47 - 143
Pyridine	10.0	5.29		ug/L		53	10 - 130
1,2,4,5-Tetrachlorobenzene	10.0	5.31		ug/L		53	10 - 130
2,3,4,6-Tetrachlorophenol	10.0	7.43		ug/L		74	10 - 130
1,2,4-Trichlorobenzene	10.0	4.80		ug/L		48	39 - 130
2,4,5-Trichlorophenol	10.0	7.84		ug/L		78	61 - 130
2,4,6-Trichlorophenol	10.0	7.97		ug/L		80	61 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*34 - 130*
2-Fluorophenol	*65*		*25 - 130*
Nitrobenzene-d5	*62*		*32 - 130*
Phenol-d5	*57*		*27 - 130*
Terphenyl-d14	*61*		*36 - 130*
2,4,6-Tribromophenol	*73*		*30 - 130*

Lab Sample ID: LCSD 680-339694/11-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Acetylaminofluorene	10.0	8.24		ug/L		82	10 - 130	2	50
alpha,alpha-Dimethyl phenethylamine	10.0	5.90	J	ug/L		59	10 - 130	31	50
4-Aminobiphenyl	10.0	3.40	J	ug/L		34	10 - 130	17	50
Aramite, Total	10.0	24.2	*	ug/L		242	10 - 130	6	50
Diallate	10.0	6.35		ug/L		64	10 - 130	2	50
2,6-Dichlorophenol	10.0	7.57		ug/L		76	10 - 130	2	50
Dimethoate	10.0	4.76		ug/L		48	10 - 130	4	50
7,12-Dimethylbenz(a)anthracene	10.0	9.23		ug/L		92	10 - 130	20	50
3,3'-Dimethylbenzidine	25.0	12.4	J	ug/L		49	10 - 130	12	50
Disulfoton	10.0	6.40		ug/L		64	10 - 130	6	50
Ethyl methanesulfonate	10.0	4.81		ug/L		48	10 - 130	1	50
Ethyl Parathion	10.0	7.04		ug/L		70	10 - 130	2	50
Famphur	10.0	1.25		ug/L		12	10 - 130	2	50
Hexachlorophene	50.0	500	U	ug/L		10	10 - 130	30	50
Hexachloropropene	10.0	2.58		ug/L		26	10 - 130	16	50
Isosafrole	10.0	13.2	*	ug/L		132	10 - 130	4	50
m-Dinitrobenzene	10.0	7.27		ug/L		73	10 - 130	2	50
Methapyrilene	50.0	25.3	J E	ug/L		51	10 - 130	0	50
3-Methylcholanthrene	10.0	103	* E	ug/L		1026	10 - 130	6	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 680-339694/11-A
Matrix: Water
Analysis Batch: 341364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 339694

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl methanesulfonate			10.0	4.86		ug/L		49	10 - 130	1	50
Methyl parathion			10.0	5.20		ug/L		52	10 - 130	1	50
1-Naphthalenamine			10.0	3.22	J	ug/L		32	10 - 130	2	50
2-Naphthalenamine			10.0	2.70	J	ug/L		27	10 - 130	36	50
1,4-Naphthoquinone			10.0	3.49		ug/L		35	10 - 130	26	50
5-Nitro-o-toluidine			10.0	5.74		ug/L		57	10 - 130	6	50
4-Nitroquinoline-1-oxide			10.0	3.28		ug/L		33	10 - 130	30	50
N-Nitrosodiethylamine			10.0	5.38		ug/L		54	10 - 130	17	50
N-Nitrosodi-n-butylamine			10.0	7.69		ug/L		77	10 - 130	3	50
N-Nitrosomethylethylamine			10.0	6.47		ug/L		65	10 - 130	9	50
N-Nitrosomorpholine			10.0	6.06		ug/L		61	10 - 130	4	50
N-Nitrosopiperidine			10.0	6.74		ug/L		67	10 - 130	1	50
N-Nitrosopyrrolidine			10.0	7.00		ug/L		70	10 - 130	10	50
o,o',o''-Triethylphosphorothioate			10.0	6.39		ug/L		64	10 - 130	12	50
o-Toluidine			10.0	4.84		ug/L		48	10 - 130	6	50
p-Dimethylamino azobenzene			10.0	7.04		ug/L		70	10 - 130	11	50
Pentachlorobenzene			10.0	6.61		ug/L		66	10 - 130	6	50
Pentachloronitrobenzene			10.0	7.92		ug/L		79	10 - 130	4	50
Phenacetin			10.0	7.48		ug/L		75	10 - 130	3	50
Phorate			10.0	6.20		ug/L		62	10 - 130	5	50
2-Picoline			10.0	5.90		ug/L		59	10 - 130	2	50
p-Phenylene diamine			50.0	200	U *	ug/L		24	10 - 130	66	50
Pronamide			10.0	7.61		ug/L		76	10 - 130	2	50
Safrole, Total			10.0	7.04		ug/L		70	10 - 130	1	50
2-sec-Butyl-4,6-dinitrophenol			10.0	8.20		ug/L		82	10 - 130	15	50
Sulfotepp			10.0	5.97		ug/L		60	10 - 130	6	50
1,2,4,5-Tetrachlorobenzene			10.0	5.84		ug/L		58	10 - 130	10	50
2,3,4,6-Tetrachlorophenol			10.0	7.68		ug/L		77	10 - 130	5	50
Thionazin			10.0	6.55		ug/L		65	10 - 130	7	50
1,3,5-Trinitrobenzene			10.0	6.84		ug/L		68	10 - 130	6	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*53*		*34 - 130*
2-Fluorophenol	*53*		*25 - 130*
Nitrobenzene-d5	*58*		*32 - 130*
Phenol-d5	*50*		*27 - 130*
Terphenyl-d14	*56*		*36 - 130*
2,4,6-Tribromophenol	*69*		*30 - 130*

Lab Sample ID: 680-103376-1 MS
Matrix: Water
Analysis Batch: 341364

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.20	U	9.99	6.71		ug/L		67	42 - 130
Acenaphthylene	0.20	U	9.99	6.91		ug/L		69	45 - 130
Acetophenone	0.51	J B	9.99	7.58		ug/L		71	45 - 130
Aniline	2.0	U	9.99	2.05		ug/L		21	10 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-103376-1 MS
Matrix: Water
Analysis Batch: 341364

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	0.20	U	9.99	6.93		ug/L		69	58 - 130
Benzo[a]anthracene	0.20	U	9.99	6.64		ug/L		67	42 - 143
Benzo[a]pyrene	0.20	U	9.99	5.36		ug/L		54	45 - 151
Benzo[b]fluoranthene	0.20	U	9.99	6.27		ug/L		63	41 - 140
Benzo[g,h,i]perylene	0.20	U	9.99	4.63		ug/L		46	27 - 134
Benzo[k]fluoranthene	0.20	U	9.99	5.81		ug/L		58	45 - 140
Benzyl alcohol	0.99	U	9.99	7.30		ug/L		73	34 - 130
1,1'-Biphenyl	0.99	U	9.99	6.18		ug/L		62	50 - 130
Bis(2-chloroethoxy)methane	0.99	U	9.99	7.10		ug/L		71	47 - 130
Bis(2-chloroethyl)ether	0.99	U	9.99	6.74		ug/L		67	36 - 130
Bis(2-ethylhexyl) phthalate	2.0	U	9.99	7.30		ug/L		73	10 - 158
4-Bromophenyl phenyl ether	0.99	U	9.99	6.79		ug/L		68	44 - 130
Butyl benzyl phthalate	0.99	U	9.99	7.87		ug/L		79	60 - 130
4-Chloroaniline	2.0	U	9.99	1.37	J F1	ug/L		14	17 - 130
4-Chloro-3-methylphenol	0.99	U	9.99	7.32		ug/L		73	54 - 130
2-Chloronaphthalene	0.99	U	9.99	5.93		ug/L		59	48 - 130
2-Chlorophenol	0.99	U	9.99	7.28		ug/L		73	45 - 130
4-Chlorophenyl phenyl ether	0.99	U	9.99	6.47		ug/L		65	52 - 130
Chrysene	0.20	U	9.99	6.08		ug/L		61	40 - 142
Dibenz(a,h)anthracene	0.20	U	9.99	4.19		ug/L		42	38 - 130
Dibenzofuran	0.99	U	9.99	7.12		ug/L		71	56 - 130
1,2-Dichlorobenzene	0.99	U	9.99	4.32		ug/L		43	36 - 130
1,3-Dichlorobenzene	0.99	U	9.99	4.16		ug/L		42	31 - 130
1,4-Dichlorobenzene	0.99	U	9.99	4.28		ug/L		43	34 - 130
3,3'-Dichlorobenzidine	20	U	30.0	20	U F1	ug/L		0	10 - 158
2,4-Dichlorophenol	0.99	U	9.99	7.22		ug/L		72	58 - 130
Diethyl phthalate	0.99	U	9.99	6.77		ug/L		68	60 - 130
3,3'-Dimethylbenzidine	20	U	20.0	20	U F1	ug/L		0	10 - 130
2,4-Dimethylphenol	2.0	U	9.99	7.41		ug/L		74	41 - 130
Dimethyl phthalate	0.99	U	9.99	7.36		ug/L		74	58 - 130
Di-n-butyl phthalate	0.99	U	9.99	7.10		ug/L		71	59 - 130
4,6-Dinitro-2-methylphenol	5.0	U	20.0	15.4		ug/L		77	10 - 182
2,4-Dinitrophenol	9.9	U	20.0	15.8		ug/L		79	10 - 200
2,4-Dinitrotoluene	0.99	U	9.99	7.17		ug/L		72	57 - 130
2,6-Dinitrotoluene	0.99	U	9.99	7.25		ug/L		73	53 - 130
Di-n-octyl phthalate	0.99	U	9.99	7.29		ug/L		73	19 - 130
1,4-Dioxane	2.1		9.99	7.62		ug/L		55	10 - 130
Fluoranthene	0.20	U	9.99	7.62		ug/L		76	46 - 136
Fluorene	0.20	U	9.99	6.92		ug/L		69	48 - 130
Hexachlorobenzene	0.99	U	9.99	6.44		ug/L		65	49 - 130
Hexachlorobutadiene	0.99	U	9.99	4.02		ug/L		40	36 - 130
Hexachlorocyclopentadiene	2.0	U	9.99	3.07		ug/L		31	16 - 130
Hexachloroethane	0.99	U	9.99	3.86		ug/L		39	32 - 130
Indeno[1,2,3-cd]pyrene	0.20	U	9.99	4.83		ug/L		48	12 - 130
Isophorone	0.99	U	9.99	6.53		ug/L		65	45 - 130
m-Dinitrobenzene	0.99	U	9.99	7.81		ug/L		78	10 - 130
2-Methylnaphthalene	0.20	U	9.99	6.10		ug/L		61	51 - 130
2-Methylphenol	2.0	U	9.99	7.50		ug/L		75	49 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-103376-1 MS
Matrix: Water
Analysis Batch: 341364

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	2.0	U	9.99	7.26		ug/L		73	55 - 130
Naphthalene	0.20	U	9.99	5.76		ug/L		58	35 - 130
2-Nitroaniline	0.99	U	9.99	6.24		ug/L		62	48 - 130
3-Nitroaniline	5.0	U	9.99	2.90	J	ug/L		29	18 - 147
4-Nitroaniline	5.0	U	9.99	2.49	J F1	ug/L		25	31 - 147
Nitrobenzene	0.99	U	9.99	6.77		ug/L		68	45 - 130
2-Nitrophenol	0.99	U	9.99	7.74		ug/L		78	49 - 130
4-Nitrophenol	5.0	U	20.0	13.9		ug/L		70	36 - 132
N-Nitrosodimethylamine	0.99	U	9.99	5.66		ug/L		57	29 - 130
N-Nitrosodi-n-propylamine	0.99	U	9.99	7.45		ug/L		75	42 - 130
N-Nitrosodiphenylamine	0.99	U	9.99	3.70	F1	ug/L		37	38 - 130
2,2'-oxybis[1-chloropropane]	0.99	U	9.99	7.00		ug/L		70	39 - 130
Pentachlorophenol	5.0	U	20.0	18.1		ug/L		91	12 - 156
Phenanthrene	0.20	U	9.99	7.26		ug/L		73	45 - 134
Phenol	0.99	U	9.99	6.09		ug/L		61	44 - 130
Pyrene	0.20	U	9.99	6.32		ug/L		63	47 - 143
Pyridine	5.0	U	9.99	4.80	J	ug/L		48	10 - 130
1,2,4,5-Tetrachlorobenzene	0.99	U	9.99	4.99		ug/L		50	10 - 130
2,3,4,6-Tetrachlorophenol	0.99	U	9.99	8.20		ug/L		82	10 - 130
1,2,4-Trichlorobenzene	0.99	U	9.99	4.55		ug/L		46	39 - 130
2,4,5-Trichlorophenol	0.99	U	9.99	7.90		ug/L		79	61 - 130
2,4,6-Trichlorophenol	0.99	U	9.99	7.99		ug/L		80	61 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*47*		*34 - 130*
2-Fluorophenol	*49*		*25 - 130*
Nitrobenzene-d5	*48*		*32 - 130*
Phenol-d5	*45*		*27 - 130*
Terphenyl-d14	*33*	*X*	*36 - 130*
2,4,6-Tribromophenol	*65*		*30 - 130*

Lab Sample ID: 680-103376-1 MSD
Matrix: Water
Analysis Batch: 341364

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.20	U	9.04	5.81		ug/L		64	42 - 130	14	50
Acenaphthylene	0.20	U	9.04	6.09		ug/L		67	45 - 130	13	50
Acetophenone	0.51	J B	9.04	6.75		ug/L		69	45 - 130	12	50
Aniline	2.0	U	9.04	2.40		ug/L		27	10 - 130	16	50
Anthracene	0.20	U	9.04	6.56		ug/L		73	58 - 130	5	50
Benzo[a]anthracene	0.20	U	9.04	6.98		ug/L		77	42 - 143	5	50
Benzo[a]pyrene	0.20	U	9.04	5.68		ug/L		63	45 - 151	6	50
Benzo[b]fluoranthene	0.20	U	9.04	6.96		ug/L		77	41 - 140	10	50
Benzo[g,h,i]perylene	0.20	U	9.04	5.50		ug/L		61	27 - 134	17	50
Benzo[k]fluoranthene	0.20	U	9.04	6.79		ug/L		75	45 - 140	15	50
Benzyl alcohol	0.99	U	9.04	6.13		ug/L		68	34 - 130	17	50
1,1'-Biphenyl	0.99	U	9.04	5.63		ug/L		62	50 - 130	9	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-103376-1 MSD
Matrix: Water
Analysis Batch: 341364

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane	0.99	U	9.04	6.18		ug/L		68	47 - 130	14	50
Bis(2-chloroethyl)ether	0.99	U	9.04	5.47		ug/L		60	36 - 130	21	50
Bis(2-ethylhexyl) phthalate	2.0	U	9.04	7.95		ug/L		88	10 - 158	9	50
4-Bromophenyl phenyl ether	0.99	U	9.04	6.85		ug/L		76	44 - 130	1	50
Butyl benzyl phthalate	0.99	U	9.04	7.36		ug/L		81	60 - 130	7	50
4-Chloroaniline	2.0	U	9.04	1.55	J	ug/L		17	17 - 130	12	50
4-Chloro-3-methylphenol	0.99	U	9.04	6.77		ug/L		75	54 - 130	8	50
2-Chloronaphthalene	0.99	U	9.04	5.23		ug/L		58	48 - 130	12	50
2-Chlorophenol	0.99	U	9.04	6.34		ug/L		70	45 - 130	14	50
4-Chlorophenyl phenyl ether	0.99	U	9.04	5.89		ug/L		65	52 - 130	9	50
Chrysene	0.20	U	9.04	6.14		ug/L		68	40 - 142	1	50
Dibenz(a,h)anthracene	0.20	U	9.04	5.24		ug/L		58	38 - 130	22	50
Dibenzofuran	0.99	U	9.04	6.41		ug/L		71	56 - 130	10	50
1,2-Dichlorobenzene	0.99	U	9.04	3.48		ug/L		38	36 - 130	22	50
1,3-Dichlorobenzene	0.99	U	9.04	3.40		ug/L		38	31 - 130	20	50
1,4-Dichlorobenzene	0.99	U	9.04	3.39		ug/L		37	34 - 130	23	50
3,3'-Dichlorobenzidine	20	U	27.1	18	U F1	ug/L		0	10 - 158	NC	50
2,4-Dichlorophenol	0.99	U	9.04	6.45		ug/L		71	58 - 130	11	50
Diethyl phthalate	0.99	U	9.04	6.57		ug/L		73	60 - 130	3	50
3,3'-Dimethylbenzidine	20	U	18.1	18	U F1	ug/L		0	10 - 130	NC	50
2,4-Dimethylphenol	2.0	U	9.04	6.78		ug/L		75	41 - 130	9	50
Dimethyl phthalate	0.99	U	9.04	6.83		ug/L		75	58 - 130	7	50
Di-n-butyl phthalate	0.99	U	9.04	7.33		ug/L		81	59 - 130	3	50
4,6-Dinitro-2-methylphenol	5.0	U	18.1	14.8		ug/L		82	10 - 182	4	50
2,4-Dinitrophenol	9.9	U	18.1	16.0		ug/L		89	10 - 200	1	50
2,4-Dinitrotoluene	0.99	U	9.04	6.83		ug/L		76	57 - 130	5	50
2,6-Dinitrotoluene	0.99	U	9.04	6.71		ug/L		74	53 - 130	8	50
Di-n-octyl phthalate	0.99	U	9.04	7.75		ug/L		86	19 - 130	6	50
1,4-Dioxane	2.1		9.04	4.84		ug/L		30	10 - 130	44	50
Fluoranthene	0.20	U	9.04	7.63		ug/L		84	46 - 136	0	50
Fluorene	0.20	U	9.04	6.36		ug/L		70	48 - 130	9	50
Hexachlorobenzene	0.99	U	9.04	6.78		ug/L		75	49 - 130	5	50
Hexachlorobutadiene	0.99	U	9.04	3.29		ug/L		36	36 - 130	20	50
Hexachlorocyclopentadiene	2.0	U	9.04	2.75		ug/L		30	16 - 130	11	50
Hexachloroethane	0.99	U	9.04	3.05		ug/L		34	32 - 130	23	50
Indeno[1,2,3-cd]pyrene	0.20	U	9.04	5.37		ug/L		59	12 - 130	11	50
Isophorone	0.99	U	9.04	5.85		ug/L		65	45 - 130	11	50
m-Dinitrobenzene	0.99	U	9.04	7.37		ug/L		81	10 - 130	6	50
2-Methylnaphthalene	0.20	U	9.04	5.34		ug/L		59	51 - 130	13	50
2-Methylphenol	2.0	U	9.04	6.38		ug/L		71	49 - 130	16	50
3 & 4 Methylphenol	2.0	U	9.04	4.12	F1 F2	ug/L		46	55 - 130	55	50
Naphthalene	0.20	U	9.04	4.67		ug/L		52	35 - 130	21	50
2-Nitroaniline	0.99	U	9.04	5.72		ug/L		63	48 - 130	9	50
3-Nitroaniline	5.0	U	9.04	2.23	J	ug/L		25	18 - 147	26	50
4-Nitroaniline	5.0	U	9.04	1.80	J F1	ug/L		20	31 - 147	32	50
Nitrobenzene	0.99	U	9.04	5.84		ug/L		65	45 - 130	15	50
2-Nitrophenol	0.99	U	9.04	6.92		ug/L		77	49 - 130	11	50
4-Nitrophenol	5.0	U	18.1	13.4		ug/L		74	36 - 132	4	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-103376-1 MSD — **Client Sample ID: RAB-MW1R**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 341364 — **Prep Batch: 339694**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodimethylamine	0.99	U	9.04	4.80		ug/L		53	29 - 130	16	50
N-Nitrosodi-n-propylamine	0.99	U	9.04	6.20		ug/L		69	42 - 130	18	50
N-Nitrosodiphenylamine	0.99	U	9.04	3.23	F1	ug/L		36	38 - 130	14	50
2,2'-oxybis[1-chloropropane]	0.99	U	9.04	5.95		ug/L		66	39 - 130	16	50
Pentachlorophenol	5.0	U	18.1	18.3		ug/L		101	12 - 156	1	50
Phenanthrene	0.20	U	9.04	7.20		ug/L		80	45 - 134	1	50
Phenol	0.99	U	9.04	5.43		ug/L		60	44 - 130	11	50
Pyrene	0.20	U	9.04	6.29		ug/L		70	47 - 143	1	50
Pyridine	5.0	U	9.04	4.37	J	ug/L		48	10 - 130	9	50
1,2,4,5-Tetrachlorobenzene	0.99	U	9.04	4.25		ug/L		47	10 - 130	16	50
2,3,4,6-Tetrachlorophenol	0.99	U	9.04	7.75		ug/L		86	10 - 130	6	50
1,2,4-Trichlorobenzene	0.99	U	9.04	3.95		ug/L		44	39 - 130	14	50
2,4,5-Trichlorophenol	0.99	U	9.04	7.59		ug/L		84	61 - 130	4	50
2,4,6-Trichlorophenol	0.99	U	9.04	7.24		ug/L		80	61 - 130	10	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*49*		*34 - 130*
2-Fluorophenol	*50*		*25 - 130*
Nitrobenzene-d5	*46*		*32 - 130*
Phenol-d5	*45*		*27 - 130*
Terphenyl-d14	*43*		*36 - 130*
2,4,6-Tribromophenol	*71*		*30 - 130*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-340462/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	5.0	U	5.0	0.33	mg/L			07/23/14 14:05	1
Methanol	5.0	U	5.0	1.0	mg/L			07/23/14 14:05	1

Lab Sample ID: LCS 680-340462/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethanol	20.0	16.2		mg/L		81	38 - 156
Methanol	20.0	16.8		mg/L		84	43 - 143

Lab Sample ID: LCSD 680-340462/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 340462

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethanol	20.0	17.6		mg/L		88	38 - 156	8	50
Methanol	20.0	18.4		mg/L		92	43 - 143	9	50

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-339514/10
Matrix: Water
Analysis Batch: 339514

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050	0.025	mg/L			07/17/14 13:27	1
Nitrite as N	0.050	U	0.050	0.025	mg/L			07/17/14 13:27	1

Lab Sample ID: LCS 680-339514/11
Matrix: Water
Analysis Batch: 339514

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.999	1.05		mg/L		106	90 - 110
Nitrite as N	0.997	1.02		mg/L		102	90 - 110

Lab Sample ID: LCSD 680-339514/12
Matrix: Water
Analysis Batch: 339514

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
Nitrate as N	0.999	1.04		mg/L		104	90 - 110	1	30
Nitrite as N	0.997	1.01		mg/L		101	90 - 110	1	30

Lab Sample ID: MB 680-340163/5
Matrix: Water
Analysis Batch: 340163

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.050	U	0.050	0.025	mg/L			07/21/14 16:19	1

Lab Sample ID: LCS 680-340163/6
Matrix: Water
Analysis Batch: 340163

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.997	1.05		mg/L		105	90 - 110

Lab Sample ID: LCSD 680-340163/7
Matrix: Water
Analysis Batch: 340163

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
Nitrite as N	0.997	1.06		mg/L		106	90 - 110	1	30

Lab Sample ID: MB 680-340703/5
Matrix: Water
Analysis Batch: 340703

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			07/24/14 11:05	1
Sulfate	0.50	U	0.50	0.25	mg/L			07/24/14 11:05	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 680-340703/6
Matrix: Water
Analysis Batch: 340703

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.7		mg/L		107	90 - 110

Lab Sample ID: LCSD 680-340703/7
Matrix: Water
Analysis Batch: 340703

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
Chloride	10.0	10.6		mg/L		106	90 - 110	0	30
Sulfate	10.0	10.7		mg/L		107	90 - 110	0	30

Lab Sample ID: MB 680-340895/5
Matrix: Water
Analysis Batch: 340895

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.25	mg/L			07/25/14 14:32	1

Lab Sample ID: LCS 680-340895/6
Matrix: Water
Analysis Batch: 340895

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.6		mg/L		106	90 - 110

Lab Sample ID: LCSD 680-340895/7
Matrix: Water
Analysis Batch: 340895

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
Chloride	10.0	10.6		mg/L		106	90 - 110	0	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-339673/1-A
Matrix: Water
Analysis Batch: 340267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100	50	ug/L		07/18/14 08:49	07/21/14 19:17	1
Antimony	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 19:17	1
Arsenic	2.5	U	2.5	1.3	ug/L		07/18/14 08:49	07/21/14 19:17	1
Barium	5.0	U	5.0	1.4	ug/L		07/18/14 08:49	07/21/14 19:17	1
Beryllium	0.50	U	0.50	0.15	ug/L		07/18/14 08:49	07/21/14 19:17	1
Cadmium	0.50	U	0.50	0.13	ug/L		07/18/14 08:49	07/21/14 19:17	1
Chromium	5.0	U	5.0	2.5	ug/L		07/18/14 08:49	07/21/14 19:17	1
Cobalt	0.50	U	0.50	0.12	ug/L		07/18/14 08:49	07/21/14 19:17	1
Copper	5.0	U	5.0	1.1	ug/L		07/18/14 08:49	07/21/14 19:17	1
Iron	100	U	100	44	ug/L		07/18/14 08:49	07/21/14 19:17	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-339673/1-A
Matrix: Water
Analysis Batch: 340267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.5	U	1.5	0.50	ug/L		07/18/14 08:49	07/21/14 19:17	1
Manganese	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/21/14 19:17	1
Mercury	0.80	U	0.80	0.40	ug/L		07/18/14 08:49	07/21/14 19:17	1
Selenium	2.5	U	2.5	1.1	ug/L		07/18/14 08:49	07/21/14 19:17	1
Silver	1.0	U	1.0	0.18	ug/L		07/18/14 08:49	07/21/14 19:17	1
Sodium	500	U	500	170	ug/L		07/18/14 08:49	07/21/14 19:17	1
Thallium	1.0	U	1.0	0.25	ug/L		07/18/14 08:49	07/21/14 19:17	1
Vanadium	10	U	10	3.2	ug/L		07/18/14 08:49	07/21/14 19:17	1
Zinc	20	U	20	8.4	ug/L		07/18/14 08:49	07/21/14 19:17	1

Lab Sample ID: MB 680-339673/1-A
Matrix: Water
Analysis Batch: 340482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	5.0	U	5.0	2.0	ug/L		07/18/14 08:49	07/22/14 19:07	1
Thallium	1.0	U	1.0	0.25	ug/L		07/18/14 08:49	07/22/14 19:07	1
Zinc	20	U	20	8.4	ug/L		07/18/14 08:49	07/22/14 19:07	1

Lab Sample ID: LCS 680-339673/2-A
Matrix: Water
Analysis Batch: 340267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5000	5100		ug/L		102	75 - 125
Antimony	50.0	50.7		ug/L		101	75 - 125
Arsenic	100	102		ug/L		102	75 - 125
Barium	100	99.0		ug/L		99	75 - 125
Beryllium	50.0	52.5		ug/L		105	75 - 125
Cadmium	50.0	51.1		ug/L		102	75 - 125
Chromium	100	103		ug/L		103	75 - 125
Cobalt	50.0	52.2		ug/L		104	75 - 125
Copper	100	104		ug/L		104	75 - 125
Iron	5000	5350		ug/L		107	75 - 125
Lead	50.0	50.5		ug/L		101	75 - 125
Manganese	500	524		ug/L		105	75 - 125
Mercury	5.00	4.87		ug/L		97	75 - 125
Selenium	100	102		ug/L		102	75 - 125
Silver	50.0	52.1		ug/L		104	75 - 125
Sodium	5000	5070		ug/L		101	75 - 125
Thallium	40.0	40.9		ug/L		102	75 - 125
Vanadium	100	99.9		ug/L		100	75 - 125
Zinc	100	104		ug/L		104	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-339673/2-A
Matrix: Water
Analysis Batch: 340482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	100	103		ug/L		103	75 - 125
Thallium	40.0	40.2		ug/L		100	75 - 125
Zinc	100	99.3		ug/L		99	75 - 125

Lab Sample ID: 680-103376-1 MS
Matrix: Water
Analysis Batch: 340267

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	820		5000	6980		ug/L		123	75 - 125
Antimony	5.0	U	50.0	51.9		ug/L		104	75 - 125
Arsenic	2.7		100	106		ug/L		103	75 - 125
Barium	240		100	333		ug/L		95	75 - 125
Beryllium	0.32	J	50.0	49.2		ug/L		98	75 - 125
Cadmium	0.50	U	50.0	50.8		ug/L		102	75 - 125
Chromium	10		100	120		ug/L		110	75 - 125
Cobalt	140		50.0	182		ug/L		84	75 - 125
Copper	4.7	J	100	106		ug/L		102	75 - 125
Iron	82000		5000	91400	4	ug/L		178	75 - 125
Lead	4.2		50.0	52.7		ug/L		97	75 - 125
Manganese	9900		500	9800	4	ug/L		-28	75 - 125
Mercury	0.54	J	5.00	5.42		ug/L		97	75 - 125
Selenium	2.5	U	100	101		ug/L		101	75 - 125
Silver	1.0	U	50.0	52.7		ug/L		105	75 - 125
Sodium	230000		5000	236000	4	ug/L		179	75 - 125
Thallium	1.0	U	40.0	39.8		ug/L		100	75 - 125
Vanadium	4.5	J	100	112		ug/L		107	75 - 125
Zinc	18	J	100	116		ug/L		98	75 - 125

Lab Sample ID: 680-103376-1 MS
Matrix: Water
Analysis Batch: 340482

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	32		100	133		ug/L		101	75 - 125
Thallium	1.0	U	40.0	39.2		ug/L		98	75 - 125
Zinc	14	J	100	112		ug/L		99	75 - 125

Lab Sample ID: 680-103376-1 MSD
Matrix: Water
Analysis Batch: 340267

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	820		5000	6640		ug/L		116	75 - 125	5	20
Antimony	5.0	U	50.0	56.0		ug/L		112	75 - 125	8	20
Arsenic	2.7		100	108		ug/L		105	75 - 125	2	20
Barium	240		100	356		ug/L		119	75 - 125	7	20
Beryllium	0.32	J	50.0	52.2		ug/L		104	75 - 125	6	20
Cadmium	0.50	U	50.0	54.9		ug/L		110	75 - 125	8	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-103376-1 MSD
Matrix: Water
Analysis Batch: 340267

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	10		100	120		ug/L		110	75 - 125	0	20
Cobalt	140		50.0	190		ug/L		101	75 - 125	5	20
Copper	4.7	J	100	108		ug/L		103	75 - 125	1	20
Iron	82000		5000	89300	4	ug/L		136	75 - 125	2	20
Lead	4.2		50.0	56.3		ug/L		104	75 - 125	7	20
Manganese	9900		500	10400	4	ug/L		101	75 - 125	6	20
Mercury	0.54	J	5.00	5.69		ug/L		103	75 - 125	5	20
Selenium	2.5	U	100	101		ug/L		101	75 - 125	1	20
Silver	1.0	U	50.0	55.4		ug/L		111	75 - 125	5	20
Sodium	230000		5000	230000	4	ug/L		44	75 - 125	3	20
Thallium	1.0	U	40.0	42.6		ug/L		106	75 - 125	7	20
Vanadium	4.5	J	100	113		ug/L		108	75 - 125	1	20
Zinc	18	J	100	123		ug/L		105	75 - 125	6	20

Lab Sample ID: 680-103376-1 MSD
Matrix: Water
Analysis Batch: 340482

Client Sample ID: RAB-MW1R
Prep Type: Total/NA
Prep Batch: 339673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	32		100	130		ug/L		99	75 - 125	2	20
Thallium	1.0	U	40.0	38.7		ug/L		97	75 - 125	1	20
Zinc	14	J	100	110		ug/L		96	75 - 125	3	20

Lab Sample ID: MB 680-339693/1-A
Matrix: Water
Analysis Batch: 340599

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 339693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	100	U	100	33	ug/L		07/18/14 10:06	07/23/14 12:06	1
Manganese, Dissolved	5.0	U	5.0	1.0	ug/L		07/18/14 10:06	07/23/14 12:06	1
Potassium, Dissolved	500	U	500	170	ug/L		07/18/14 10:06	07/23/14 12:06	1
Sodium, Dissolved	500	U	500	250	ug/L		07/18/14 10:06	07/23/14 12:06	1
Calcium, Dissolved	250	U	250	130	ug/L		07/18/14 10:06	07/23/14 12:06	1
Magnesium, Dissolved	250	U	250	43	ug/L		07/18/14 10:06	07/23/14 12:06	1

Lab Sample ID: LCS 680-339693/2-A
Matrix: Water
Analysis Batch: 340599

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 339693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron, Dissolved	5000	5000		ug/L		100	75 - 125
Manganese, Dissolved	500	478		ug/L		96	75 - 125
Potassium, Dissolved	5000	5190		ug/L		104	75 - 125
Sodium, Dissolved	5000	4910		ug/L		98	75 - 125
Calcium, Dissolved	5000	5150		ug/L		103	75 - 125
Magnesium, Dissolved	5000	4990		ug/L		100	75 - 125

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-340094/2
Matrix: Water
Analysis Batch: 340094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.050	U	0.050	0.026	mg/L			07/21/14 10:49	1

Lab Sample ID: LCS 680-340094/1
Matrix: Water
Analysis Batch: 340094

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	1.00		mg/L		100	90 - 110

Lab Sample ID: 680-103376-8 MS
Matrix: Water
Analysis Batch: 340094

Client Sample ID: SDB-MW2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.059		1.00	1.29	F1	mg/L		123	90 - 110

Lab Sample ID: 680-103376-8 MSD
Matrix: Water
Analysis Batch: 340094

Client Sample ID: SDB-MW2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.059		1.00	1.27	F1	mg/L		121	90 - 110	2	30

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 680-339642/2
Matrix: Water
Analysis Batch: 339642

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate, Dissolved	0.050	U	0.050	0.016	mg/L			07/17/14 15:50	1

Lab Sample ID: LCS 680-339642/1
Matrix: Water
Analysis Batch: 339642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	1.20	1.20		mg/L		100	90 - 110

Lab Sample ID: 680-103376-8 MS
Matrix: Water
Analysis Batch: 339642

Client Sample ID: SDB-MW2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate, Dissolved	0.071		1.00	1.10		mg/L		103	90 - 110

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: 680-103376-8 MSD
Matrix: Water
Analysis Batch: 339642

Client Sample ID: SDB-MW2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Orthophosphate, Dissolved	0.071		1.00	1.10		mg/L		103	90 - 110	1	30

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-340020/1
Matrix: Water
Analysis Batch: 340020

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/21/14 10:15	1

Lab Sample ID: LCS 680-340020/2
Matrix: Water
Analysis Batch: 340020

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.50		mg/L		95	75 - 125

Lab Sample ID: LCSD 680-340020/3
Matrix: Water
Analysis Batch: 340020

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
Sulfide	10.0	9.68		mg/L		97	75 - 125	2	30

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-341085/3
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	1.0	U	1.0	1.0	mg/L			07/25/14 04:52	1

Lab Sample ID: LCS 680-341085/4
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	20.0	19.3		mg/L		96	80 - 120

Lab Sample ID: LCSD 680-341085/5
Matrix: Water
Analysis Batch: 341085

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon	20.0	16.3		mg/L		82	80 - 120	17	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-340171/5
Matrix: Water
Analysis Batch: 340171

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			07/21/14 13:11	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/21/14 13:11	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			07/21/14 13:11	1

Lab Sample ID: LCS 680-340171/6
Matrix: Water
Analysis Batch: 340171

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	245		mg/L		98	80 - 120		

Lab Sample ID: LCSD 680-340171/32
Matrix: Water
Analysis Batch: 340171

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
Alkalinity			250	248		mg/L		99	80 - 120	1	30

Lab Sample ID: 680-103376-8 DU
Matrix: Water
Analysis Batch: 340171

Client Sample ID: SDB-MW2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	350			336		mg/L				3	30
Bicarbonate Alkalinity as CaCO3	350			336		mg/L				3	30
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	30

GC/MS VOA

Analysis Batch: 340195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-1	RAB-MW1R	Total/NA	Water	8260B	
680-103417-3	Field Blank	Total/NA	Water	8260B	
680-103417-4	Equipment Blank 1	Total/NA	Water	8260B	
LCS 680-340195/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-340195/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-340195/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 340433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103417-2	Field Duplicate	Total/NA	Water	8260B	
680-103417-22	Trip Blank	Total/NA	Water	8260B	
LCS 680-340433/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-340433/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-340433/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 340832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-10	NAT-4	Total/NA	Water	8260B	
680-103376-11	MW-4	Total/NA	Water	8260B	
680-103376-12	MW-4U	Total/NA	Water	8260B	
680-103376-13	Trip Blank	Total/NA	Water	8260B	
LCS 680-340832/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-340832/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-340832/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 341019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-7	SDB-MW1	Total/NA	Water	8260B	
680-103376-9	SDB-MW3	Total/NA	Water	8260B	
LCS 680-341019/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-341019/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-341019/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 341499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-6	RAB MW-2	Total/NA	Water	8260B	
LCS 680-341499/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-341499/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-341499/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 339694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-1	RAB-MW1R	Total/NA	Water	3520C	
680-103376-1 MS	RAB-MW1R	Total/NA	Water	3520C	
680-103376-1 MSD	RAB-MW1R	Total/NA	Water	3520C	
680-103376-2	Field Duplicate	Total/NA	Water	3520C	
680-103376-3	Field Blank	Total/NA	Water	3520C	
680-103376-4	Equipment Blank	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 339694 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-339694/10-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 680-339694/7-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-339694/11-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 680-339694/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 341362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-2	Field Duplicate	Total/NA	Water	8270D LL	339694
680-103376-3	Field Blank	Total/NA	Water	8270D LL	339694
680-103376-4	Equipment Blank	Total/NA	Water	8270D LL	339694

Analysis Batch: 341364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-1	RAB-MW1R	Total/NA	Water	8270D LL	339694
680-103376-1 MS	RAB-MW1R	Total/NA	Water	8270D LL	339694
680-103376-1 MSD	RAB-MW1R	Total/NA	Water	8270D LL	339694
LCS 680-339694/10-A	Lab Control Sample	Total/NA	Water	8270D LL	339694
LCS 680-339694/7-A	Lab Control Sample	Total/NA	Water	8270D LL	339694
LCSD 680-339694/11-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	339694
MB 680-339694/6-A	Method Blank	Total/NA	Water	8270D LL	339694

GC VOA

Analysis Batch: 340462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-1	RAB-MW1R	Total/NA	Water	8015C	
680-103376-2	Field Duplicate	Total/NA	Water	8015C	
680-103376-3	Field Blank	Total/NA	Water	8015C	
680-103376-4	Equipment Blank	Total/NA	Water	8015C	
680-103376-6	RAB MW-2	Total/NA	Water	8015C	
680-103376-10	NAT-4	Total/NA	Water	8015C	
680-103376-11	MW-4	Total/NA	Water	8015C	
680-103376-12	MW-4U	Total/NA	Water	8015C	
LCS 680-340462/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 680-340462/5	Lab Control Sample Dup	Total/NA	Water	8015C	
MB 680-340462/7	Method Blank	Total/NA	Water	8015C	

HPLC/IC

Analysis Batch: 339514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Total/NA	Water	9056A	
680-103376-11	MW-4	Total/NA	Water	9056A	
680-103376-12	MW-4U	Total/NA	Water	9056A	
LCS 680-339514/11	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-339514/12	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-339514/10	Method Blank	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 340163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Total/NA	Water	9056A	
LCS 680-340163/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340163/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340163/5	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Total/NA	Water	9056A	
680-103376-8	SDB-MW2	Total/NA	Water	9056A	
680-103376-11	MW-4	Total/NA	Water	9056A	
680-103376-12	MW-4U	Total/NA	Water	9056A	
LCS 680-340703/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340703/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340703/5	Method Blank	Total/NA	Water	9056A	

Analysis Batch: 340895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-11	MW-4	Total/NA	Water	9056A	
680-103376-12	MW-4U	Total/NA	Water	9056A	
LCS 680-340895/6	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-340895/7	Lab Control Sample Dup	Total/NA	Water	9056A	
MB 680-340895/5	Method Blank	Total/NA	Water	9056A	

Metals

Prep Batch: 339673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-1	RAB-MW1R	Total/NA	Water	3010A	
680-103376-1 MS	RAB-MW1R	Total/NA	Water	3010A	
680-103376-1 MSD	RAB-MW1R	Total/NA	Water	3010A	
680-103376-2	Field Duplicate	Total/NA	Water	3010A	
680-103376-3	Field Blank	Total/NA	Water	3010A	
680-103376-4	Equipment Blank	Total/NA	Water	3010A	
680-103376-5	RAB MW-3	Total/NA	Water	3010A	
680-103376-6	RAB MW-2	Total/NA	Water	3010A	
680-103376-7	SDB-MW1	Total/NA	Water	3010A	
680-103376-9	SDB-MW3	Total/NA	Water	3010A	
680-103376-10	NAT-4	Total/NA	Water	3010A	
680-103376-11	MW-4	Total/NA	Water	3010A	
680-103376-12	MW-4U	Total/NA	Water	3010A	
LCS 680-339673/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-339673/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 339693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Dissolved	Water	3005A	
680-103376-11	MW-4	Dissolved	Water	3005A	
680-103376-12	MW-4U	Dissolved	Water	3005A	
LCS 680-339693/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-339693/1-A	Method Blank	Total Recoverable	Water	3005A	

Metals (Continued)

Analysis Batch: 340267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-1	RAB-MW1R	Total/NA	Water	6020A	339673
680-103376-1 MS	RAB-MW1R	Total/NA	Water	6020A	339673
680-103376-1 MSD	RAB-MW1R	Total/NA	Water	6020A	339673
680-103376-2	Field Duplicate	Total/NA	Water	6020A	339673
680-103376-3	Field Blank	Total/NA	Water	6020A	339673
680-103376-4	Equipment Blank	Total/NA	Water	6020A	339673
680-103376-5	RAB MW-3	Total/NA	Water	6020A	339673
680-103376-6	RAB MW-2	Total/NA	Water	6020A	339673
680-103376-7	SDB-MW1	Total/NA	Water	6020A	339673
680-103376-9	SDB-MW3	Total/NA	Water	6020A	339673
680-103376-10	NAT-4	Total/NA	Water	6020A	339673
680-103376-11	MW-4	Total/NA	Water	6020A	339673
680-103376-12	MW-4U	Total/NA	Water	6020A	339673
LCS 680-339673/2-A	Lab Control Sample	Total/NA	Water	6020A	339673
MB 680-339673/1-A	Method Blank	Total/NA	Water	6020A	339673

Analysis Batch: 340482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-1	RAB-MW1R	Total/NA	Water	6020A	339673
680-103376-1 MS	RAB-MW1R	Total/NA	Water	6020A	339673
680-103376-1 MSD	RAB-MW1R	Total/NA	Water	6020A	339673
680-103376-2	Field Duplicate	Total/NA	Water	6020A	339673
680-103376-3	Field Blank	Total/NA	Water	6020A	339673
680-103376-4	Equipment Blank	Total/NA	Water	6020A	339673
680-103376-6	RAB MW-2	Total/NA	Water	6020A	339673
680-103376-7	SDB-MW1	Total/NA	Water	6020A	339673
680-103376-9	SDB-MW3	Total/NA	Water	6020A	339673
LCS 680-339673/2-A	Lab Control Sample	Total/NA	Water	6020A	339673
MB 680-339673/1-A	Method Blank	Total/NA	Water	6020A	339673

Analysis Batch: 340599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Dissolved	Water	6020A	339693
680-103376-11	MW-4	Dissolved	Water	6020A	339693
680-103376-12	MW-4U	Dissolved	Water	6020A	339693
LCS 680-339693/2-A	Lab Control Sample	Total Recoverable	Water	6020A	339693
MB 680-339693/1-A	Method Blank	Total Recoverable	Water	6020A	339693

Analysis Batch: 341940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-12	MW-4U	Dissolved	Water	6020A	339693

General Chemistry

Analysis Batch: 339642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Dissolved	Water	365.1	
680-103376-8 MS	SDB-MW2	Dissolved	Water	365.1	
680-103376-8 MSD	SDB-MW2	Dissolved	Water	365.1	
680-103376-11	MW-4	Dissolved	Water	365.1	

General Chemistry (Continued)

Analysis Batch: 339642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-12	MW-4U	Dissolved	Water	365.1	
LCS 680-339642/1	Lab Control Sample	Total/NA	Water	365.1	
MB 680-339642/2	Method Blank	Total/NA	Water	365.1	

Analysis Batch: 340020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Dissolved	Water	9034	
680-103376-8	SDB-MW2	Total/NA	Water	9034	
680-103376-11	MW-4	Dissolved	Water	9034	
680-103376-11	MW-4	Total/NA	Water	9034	
680-103376-12	MW-4U	Dissolved	Water	9034	
680-103376-12	MW-4U	Total/NA	Water	9034	
LCS 680-340020/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-340020/3	Lab Control Sample Dup	Total/NA	Water	9034	
MB 680-340020/1	Method Blank	Total/NA	Water	9034	

Analysis Batch: 340094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Dissolved	Water	350.1	
680-103376-8 MS	SDB-MW2	Dissolved	Water	350.1	
680-103376-8 MSD	SDB-MW2	Dissolved	Water	350.1	
680-103376-11	MW-4	Dissolved	Water	350.1	
680-103376-12	MW-4U	Dissolved	Water	350.1	
LCS 680-340094/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-340094/2	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 340171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Total/NA	Water	SM 2320B	
680-103376-8 DU	SDB-MW2	Total/NA	Water	SM 2320B	
680-103376-11	MW-4	Total/NA	Water	SM 2320B	
680-103376-12	MW-4U	Total/NA	Water	SM 2320B	
LCS 680-340171/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-340171/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-340171/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 340720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Total/NA	Water	UnionizedNH3	
680-103376-11	MW-4	Total/NA	Water	UnionizedNH3	
680-103376-12	MW-4U	Total/NA	Water	UnionizedNH3	

Analysis Batch: 341085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-103376-8	SDB-MW2	Dissolved	Water	9060	
680-103376-11	MW-4	Dissolved	Water	9060	
680-103376-12	MW-4U	Dissolved	Water	9060	
LCS 680-341085/4	Lab Control Sample	Dissolved	Water	9060	
LCSD 680-341085/5	Lab Control Sample Dup	Dissolved	Water	9060	
MB 680-341085/3	Method Blank	Dissolved	Water	9060	

Client Sample ID: RAB-MW1R

Lab Sample ID: 680-103376-1

Date Collected: 07/16/14 09:40

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			339694	07/18/14 15:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341364	07/29/14 22:29	SMC	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 18:56	AJMC	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 19:39	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 19:22	BWR	TAL SAV

Client Sample ID: Field Duplicate

Lab Sample ID: 680-103376-2

Date Collected: 07/16/14 00:00

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			339694	07/18/14 15:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341362	07/29/14 17:41	SMC	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 19:20	AJMC	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 20:15	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 19:58	BWR	TAL SAV

Client Sample ID: Field Blank

Lab Sample ID: 680-103376-3

Date Collected: 07/16/14 09:50

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			339694	07/18/14 15:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341362	07/29/14 18:06	SMC	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 14:54	AJMC	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 20:23	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 20:05	BWR	TAL SAV

Client Sample ID: Equipment Blank

Lab Sample ID: 680-103376-4

Date Collected: 07/16/14 09:55

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			339694	07/18/14 15:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	341362	07/29/14 18:31	SMC	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 15:18	AJMC	TAL SAV

Lab Chronicle

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Equipment Blank — Lab Sample ID: 680-103376-4

Date Collected: 07/16/14 09:55 — **Matrix: Water**
Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 20:45	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 20:12	BWR	TAL SAV

Client Sample ID: RAB MW-3 — Lab Sample ID: 680-103376-5

Date Collected: 07/16/14 11:40 — **Matrix: Water**
Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 20:52	BWR	TAL SAV

Client Sample ID: RAB MW-2 — Lab Sample ID: 680-103376-6

Date Collected: 07/16/14 12:30 — **Matrix: Water**
Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	341499	07/30/14 16:54	TF1	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 19:44	AJMC	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 20:59	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 20:41	BWR	TAL SAV

Client Sample ID: SDB-MW1 — Lab Sample ID: 680-103376-7

Date Collected: 07/16/14 14:20 — **Matrix: Water**
Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	341019	07/28/14 19:03	MMT	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 21:07	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 20:49	BWR	TAL SAV

Client Sample ID: SDB-MW2 — Lab Sample ID: 680-103376-8

Date Collected: 07/16/14 14:50 — **Matrix: Water**
Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		2	340163	07/21/14 17:51	VAS	TAL SAV

Client Sample ID: SDB-MW2

Lab Sample ID: 680-103376-8

Date Collected: 07/16/14 14:50

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	340703	07/24/14 12:53	PAT	TAL SAV
Total/NA	Analysis	9056A		50	340703	07/24/14 13:08	PAT	TAL SAV
Total/NA	Analysis	9056A		1	339514	07/17/14 18:51	DAS	TAL SAV
Dissolved	Prep	3005A			339693	07/18/14 10:06	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340599	07/23/14 13:04	BWR	TAL SAV
Dissolved	Analysis	350.1		1	340094	07/21/14 10:49	JME	TAL SAV
Dissolved	Analysis	365.1		1	339642	07/17/14 15:50	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 06:43	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340171	07/21/14 14:10	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: SDB-MW3

Lab Sample ID: 680-103376-9

Date Collected: 07/16/14 15:40

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	341019	07/28/14 19:27	MMT	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 21:21	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340482	07/22/14 21:03	BWR	TAL SAV

Client Sample ID: NAT-4

Lab Sample ID: 680-103376-10

Date Collected: 07/16/14 14:25

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	340832	07/25/14 14:14	TF1	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 21:21	AJMC	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 21:29	BWR	TAL SAV

Client Sample ID: MW-4

Lab Sample ID: 680-103376-11

Date Collected: 07/16/14 11:30

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	340832	07/25/14 14:44	TF1	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 20:57	AJMC	TAL SAV

Client Sample ID: MW-4

Lab Sample ID: 680-103376-11

Date Collected: 07/16/14 11:30

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	340703	07/24/14 13:24	PAT	TAL SAV
Total/NA	Analysis	9056A		20	340895	07/25/14 16:20	PAT	TAL SAV
Total/NA	Analysis	9056A		2	339514	07/17/14 19:06	DAS	TAL SAV
Dissolved	Prep	3005A			339693	07/18/14 10:06	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340599	07/23/14 13:26	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 21:36	BWR	TAL SAV
Dissolved	Analysis	350.1		2	340094	07/21/14 11:41	JME	TAL SAV
Dissolved	Analysis	365.1		1	339642	07/17/14 15:50	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 06:59	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340171	07/21/14 14:01	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client Sample ID: MW-4U

Lab Sample ID: 680-103376-12

Date Collected: 07/16/14 13:40

Matrix: Water

Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	340832	07/25/14 15:13	TF1	TAL SAV
Total/NA	Analysis	8015C		1	340462	07/23/14 20:08	AJMC	TAL SAV
Total/NA	Analysis	9056A		5	340703	07/24/14 13:39	PAT	TAL SAV
Total/NA	Analysis	9056A		20	340895	07/25/14 16:35	PAT	TAL SAV
Total/NA	Analysis	9056A		2	339514	07/17/14 19:22	DAS	TAL SAV
Dissolved	Prep	3005A			339693	07/18/14 10:06	BJB	TAL SAV
Dissolved	Analysis	6020A		1	340599	07/23/14 13:33	BWR	TAL SAV
Dissolved	Prep	3005A			339693	07/18/14 10:06	BJB	TAL SAV
Dissolved	Analysis	6020A		10	341940	07/31/14 15:00	BWR	TAL SAV
Total/NA	Prep	3010A			339673	07/18/14 08:49	BJB	TAL SAV
Total/NA	Analysis	6020A		1	340267	07/21/14 21:43	BWR	TAL SAV
Dissolved	Analysis	350.1		10	340094	07/21/14 11:45	JME	TAL SAV
Dissolved	Analysis	365.1		1	339642	07/17/14 15:50	GRX	TAL SAV
Dissolved	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Total/NA	Analysis	9034		1	340020	07/21/14 10:15	ANH	TAL SAV
Dissolved	Analysis	9060		1	341085	07/25/14 07:18	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	340171	07/21/14 14:33	LBH	TAL SAV
Total/NA	Analysis	UnionizedNH3		1	340720	07/24/14 12:45	JER	TAL SAV

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Client Sample ID: Trip Blank — Lab Sample ID: 680-103376-13

Date Collected: 07/16/14 00:00 — **Matrix: Water**
Date Received: 07/17/14 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	340832	07/25/14 12:17	TF1	TAL SAV

Client Sample ID: RAB-MW1R — Lab Sample ID: 680-103417-1

Date Collected: 07/16/14 09:40 — **Matrix: Water**
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	340195	07/22/14 14:11	MMT	TAL SAV

Client Sample ID: Field Duplicate — Lab Sample ID: 680-103417-2

Date Collected: 07/16/14 00:00 — **Matrix: Water**
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	340433	07/23/14 13:19	MMT	TAL SAV

Client Sample ID: Field Blank — Lab Sample ID: 680-103417-3

Date Collected: 07/16/14 09:50 — **Matrix: Water**
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	340195	07/22/14 12:04	MMT	TAL SAV

Client Sample ID: Equipment Blank 1 — Lab Sample ID: 680-103417-4

Date Collected: 07/16/14 09:55 — **Matrix: Water**
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	340195	07/22/14 12:29	MMT	TAL SAV

Client Sample ID: Trip Blank — Lab Sample ID: 680-103417-22

Date Collected: 07/16/14 00:00 — **Matrix: Water**
Date Received: 07/18/14 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	340433	07/23/14 11:52	MMT	TAL SAV

Laboratory References:

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

Certification Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

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	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-15
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-14
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	09-005r	04-16-15
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-14 *
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-14
Kentucky (UST)	State Program	4	18	06-30-15
Louisiana	NELAP	6	30690	06-30-15
Louisiana (DW)	NELAP	6	LA140023	12-31-14
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-15
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-14
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-14
South Carolina	State Program	4	98001	06-30-15
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-08-TX	11-30-14 *
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-14
West Virginia DEP	State Program	3	94	06-30-15
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Ashland Inc
Project/Site: Hercules Aqualon Corrective Action

TestAmerica Job ID: 680-103376-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
365.1	Phosphorus, Ortho	EPA	TAL SAV
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Serial Number 83763

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)
Ashland Aqualon		VA
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Erin Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL	
CLIENT ADDRESS: 23 S 13th St Richmond VA 23219		
COMPANY CONTRACTING THIS WORK (if applicable): Ashland		

PAGE 1 OF

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

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260 VOCs	8270 SVOC	6020 metals	8015 Ethanol, methanol	PRESERVATIVE	REMARKS
7/16/14	9:40	RAB-MW1R	6	X				X					
	—	Field Duplicate						X					
	9:50	Field Blank						X					
	9:55	Equipment Blank 1						X					
7/17/14	8:50	MW-1							X	X			
	9:50	LF-1						X		X	X		
	10:10	LF-2 ~~(MS/MSD)~~						X		X	X		
	10:10	~~LF-3~~ MS/MSD 2								X			
	10:50	LF-3								X	X		
	11:35	LF-5						X		X	X		
	14:15	WWL-2								X	X		
7/17/14	16:15	WWL-3L	6	X						X			

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	7-17-14	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	09:47	07/18/14	YES ○ NO ○		680-103417	3.0 a.c. 0.8 a.c. 3.6 a.c. 1.8 a.c.

TAL8240-680 (1008)

Page 92 of 96

11/18/2014

Serial Number 83761

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: Ashland Aquabo
PROJECT NO.:
PROJECT LOCATION (STATE): VA
TAL (LAB) PROJECT MANAGER: Kathy Smith
P.O. NUMBER:
CONTRACT NO.:
CLIENT (SITE) PM: Erin Wright
CLIENT PHONE:
CLIENT FAX:
CLIENT NAME: GES
CLIENT E-MAIL:
CLIENT ADDRESS: 23 S. 13th St
COMPANY CONTRACTING THIS WORK (if applicable): Ashland

PAGE 1 OF 2

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

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

REQUIRED ANALYSIS — PRESERVATIVE — NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	8260 VOCs	8270 SVOC	6020 Metals	6020 Dissolved Metals	8015 Ethanol + Methanol	6020 Dissolved Iron + Manganese	6020 Dissolved major cation	Dissolved orthophosphate	Diss. Ammonia	Total sulfide	REMARKS
7/16/14	9:40	RAB-MW1R	G	X					X	X	X	X						See Attached
	[illegible]	Field Duplicate							X	X	X	X						sheet for
	9:50	Field Blank							X	X		X						specific analytes
	9:55	Equipment Blank							X	X		X						
	11:40	RAB MW-3								X	X							Hold the
	12:30	RAB-MW2								X	X							dissolved metals
	14:20	SDB-MW1						X		X								until we receive
	14:50	SDB-MW2											X	X	X	X	X	results from
	15:40	SDB-MW3						X		X								unfiltered
	14:25	NAT-4						X		X	X	X						
	11:30	MW-4						X		X	[illegible]	X	X	X	X	X	X	
	13:40	MW-4U						X		X	[illegible]	X	X	X	X	X	X	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	DATE	TIME
[signature] Trip Blank	7/16/14	17:15				
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	DATE	TIME

680-103376 Chain of Custody

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	7/17/14	10:26	YES ◯ NO ◯		680-103376	1.4 ac 3.8 ac 1.8 ac

TAL8240-680 (1008)

Serial Number 83762

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)
Ashland - Aquaba		VA
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Fran Wright	CLIENT PHONE	CLIENT FAX
CLIENT NAME: GES	CLIENT E-MAIL	
CLIENT ADDRESS		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 2

STANDARD REPORT DELIVERY ◯
DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: Dis. Sulfide	Alkalinity	Major Anions	Dissolved Carbon Organic	PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED	REMARKS
7/16/14	14:50	SOB-MW2	G	X				X	X	X	X		6	
↓	11:30	MW-4	G	X				X	X	X	X		6	
—	13:40	MW-46	G	X				X	X	X	X		6	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	7/16/14	17:15						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	7/17/14	10:26	YES ◯ NO ◯		680-103376	1.4 ac 3.8 ac 1.8 ac

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Ashland Inc

Job Number: 680-103376-1

Login Number: 103376

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

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	RAB-MW2 received with 3 HCL and 3 UP vials not on COC
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 Inc

Job Number: 680-103376-1

Login Number: 103417

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

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.	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	