Weston Solutions, Inc.
1090 King Georges Post Road, Suite 201
Edison, New Jersey 08837-3703
Phone: 732-585-4400
www.westonsolutions.com

SUPERFUND TECHNICAL ASSESSMENT & RESPONSE TEAM V
EPA CONTRACT NO.: 68HE0319D0004

December 11, 2019

Ms. Sandra Richards, On-Scene Coordinator
U.S. Environmental Protection Agency, Region II
Superfund and Emergency Management Division
2890 Woodbridge Avenue
Edison, New Jersey 08837

EPA CONTRACT No: 68HE0319D0004
TD No: TO-0032-0057
DC No: STARTV-01-F-0037
SUBJECT: FINAL REMOVAL ASSESSMENT SAMPLING REPORT
FORMER COVIDIEN PLANT SITE
ORISKANY FALLS, ONEIDA COUNTY, NEW YORK

Dear Ms. Richards,

Enclosed please find the Final Removal Assessment Sampling Report which summarizes the surface water sampling activities conducted by the U.S. Environmental Protection Agency (EPA) with the support of Weston Solutions, Inc., Superfund Technical Assessment and Response Team V (START V) at the Former Covidien Plant Site (the Site) located in Oriskany Falls, Oneida County, New York. The surface water sampling event was performed on August 20, 2019. The EPA comments in regards to the previous version (DCN: STARTV-01-D-0083) of this deliverable have been incorporated.

If you have any questions or comments, please contact me at (732)-425-1175.

Sincerely,

WESTON SOLUTIONS, INC.

Sean Quinn
START V Site Project Manager

Enclosure
cc: TD File: TO-0032-0057

FINAL REMOVAL ASSESSMENT SAMPLING REPORT

FORMER COVIDIEN PLANT SITE

Oriskany Falls, Oneida County, New York

Site Code: A27U
CERCLIS Code: NY000100131

Prepared by:

Superfund Technical Assessment & Response Team V
Weston Solutions, Inc.
Federal East Division
Edison, New Jersey 08837

Prepared for:

U.S. Environmental Protection Agency, Region II
Superfund and Emergency Management Division
2890 Woodbridge Avenue
Edison, New Jersey 08837

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December 2019

TABLE OF CONTENTS

Contents Page

1.0 Introduction 1
1.1 Site Location and Description 1
1.2 Site History and Background 1
2.0 Scope of Work 3
3.0 On-Site Personnel 3
4.0 Site Activities and Observations 3
5.0 Sampling Methodology 3
6.0 Laboratory Receiving Samples 4
7.0 Sample Collection and Dispatch 5
8.0 Analytical Results Summary 5

LIST OF ATTACHMENTS

Attachment A: Figure 1: Site Location Map
Figure 2: August 2019 Surface Water Sample Location Map

Attachment B: Table 1: Sample Collection Information Table
Table 2A: Validated Surface Water Analytical Results Summary Table - TCL VOCs
Table 2B: Validated Surface Water Analytical Results Summary Table - TCL SVOCs
Table 2C: Validated Surface Water Analytical Results Summary Table - TCL Pesticides
Table 2D: Validated Surface Water Analytical Results Summary Table - TCL PCBs
Table 2E: Validated Surface Water Analytical Results Summary Table - Herbicides
Table 2F: Validated Surface Water Analytical Results Summary Table - PFAS
Table 2G: Validated Surface Water Analytical Results Summary Table - TAL Metals + Hg, and CN

Attachment C: Photographic Documentation Log

Attachment D: Chain of Custody Records

Attachment E: Validated Analytical Data Packages

1.0 Introduction

On August 20, 2019, the U.S. Environmental Protection Agency (EPA) Region II Superfund and Emergency Management Division, with the support of Weston Solutions, Inc., Superfund Technical Assessment and Response Team V (START V) conducted a surface water sampling event as part of a Removal Assessment at the Former Covidien Plant Site (the Site). Surface water samples were collected from four waste water treatment features located in the former waste water treatment plant on Property P001. The surface water samples were submitted to the assigned laboratories for target compound list (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL pesticides, TCL polychlorinated biphenyls (PCBs), per- and poly- fluoroalkyl substances (PFAS), herbicides, target analyte list (TAL) metals including mercury (Hg), and cyanide (CN) analyses.

1.1 Site Location and Description

The Site, primarily situated at 130 Madison Street in the Village of Oriskany Falls, Oneida County, New York (latitude 42.937768, longitude -75.464201) is the location of the Former Covidien Plant, a medical supply manufacturing company. The Madison Street property (Property P001) consists of two parcels (Property Tax IDs: 381.019-4-44 and 390.007-2-1), covering approximately 5.5 acres. The property is located near the center of the Village and is bisected by the Oriskany Creek, a New York State Department of Environmental Conservation (NYSDEC) Classified B trout stream (TS) (deemed recreational use and may support trout spawning).

Prior to a fire in December 2016, there were three distinct buildings (Building A, Building B, and Building C) located on Property P001. These building letters were updated upon finding a facility map. Based on the facility map, Building A included buildings 4 (warehouse), 5 (bleachery building), and 6 (Expandover warehouse); Building B included building 3 (old warehouse over creek); and Building C included buildings 1 (main brick building), 2 (boiler room/maintenance building), and 7 (microbiology laboratory). A former waste water treatment plant is located directly to the southwest of building 7 and to the west of building 2. The four waste water treatment features sampled on Property P001 are located in the former waste water treatment plant and are identified as SW001 (Final Clarifier), SW002 (Tank 01), SW003 (Neutralization Equalization Aeration Pond), and SW004 (Tank 02).

In addition, the Site also consists of a parcel located on Alabam Road in Madison, Madison County, New York. The property on Alabam Road (Property P002) is a farmland property which measures approximately 46,000 square feet (Property Tax ID: 103.-2-61).

Refer to Attachment A, Figure 1: Site Location Map.

1.2 Site History and Background

The facility located at the Site has been closed since 2011. In August 26, 2016, Churchill Environmental, Inc., privately contracted by the property owner, collected 26 bulk samples of suspect asbestos containing material (SACM) from Building A, 23 bulk SACM samples from Building B, and 91 bulk SACM samples from Building C. The analysis of the samples concluded that one of the samples collected from Building A contained asbestos; four of the samples collected

from Building B contained asbestos; and 15 of the samples collected from Building C contained asbestos. The samples were analyzed by a contractor-procured laboratory per New York Codes, Rules, and Regulations (NYCRR) Part 56. The bulk SACM sampling event was prompted by an attempt to demolish the former facility. Asbestos was found in floor tile mastic, roofing material, and insulation.

On December 10, 2016, a fire burned down building 3 and partially damaged buildings 1, 2, and 4. Part of the debris from the fire was moved to Property P002 where it was staged in multiple debris piles. On December 31, 2016, A2Z Environmental collected five samples from Property P001 for asbestos analysis, including three wipe samples from steel poles, and two bulk SACM samples consisting of roofing material. The samples were collected for a petition to the New York State Department of Labor (NYSDOL). Analytical results of the samples indicated that chrysotile and anthophyllite asbestos were present at Property P001. The NYSDOL subsequently determined that all the structural debris is mixed with asbestos containing material (ACM). In September 2017, the Site was referred to the EPA by NYSDOL, and in October 2017, EPA received a request for assistance from the Mayor of Oriskany Falls, New York to assess the Site for a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Removal Action. In December 2017, EPA activated its Emergency and Rapid Services (ERRS) contractor to provide a perimeter fence for the Site.

On May 21, 2018, EPA and Weston Solutions, Inc., Removal Support Team 3 (RST 3), currently START V, conducted a Site walk at Properties P001 and P002 to identify presumed asbestos containing material (PACM) at each property. On May 22, 2018, RST 3 collected bulk PACM samples from locations selected by the EPA On-Scene Coordinator (OSC) throughout Property P001, including the former waste water treatment plant, Building C, and multiple debris piles. On May 23, 2018, RST 3 collected additional bulk PACM samples at Property P001 from Building A, Building C and multiple debris piles, and collected bulk PACM samples from several debris piles at Property P002. Materials that were sampled included insulation, brick, mortar, tar paper, tar, paint coating, tile, sheetrock, fibrous material, roofing material, multiple designs of linoleum tile, mastic material, pulverized concrete, ceiling tile and charred wood. A total of 80 PACM samples were collected during the May 2018 sampling event and submitted to the assigned laboratory for asbestos analysis via the New York State (NYS) Environmental Laboratory Approval Program (ELAP) by polarized light microscopy (PLM) Method 198.1 if friable, NYS ELAP PLM Method 198.6 *if non-friable, and* NYS ELAP transmission electron microscopy (TEM) Method 198.4, if PLM results were less than (<) 1.0 percent (%). Based on analytical results, 23 of the 80 samples contained friable and non-friable chrysotile asbestos.

On December 18, 2018, EPA and RST 3 conducted a Removal Assessment sampling event at the secondary property, Property P002. Heterogeneous samples of wood chips and soil were collected from piles of mulch where EPA observed the presence of oil sheen underneath and surrounding the mulch piles. The samples were submitted to the assigned laboratory for PCBs to verify if the mulch piles and surrounding areas were contaminated with PCBs. Based on the analytical results, concentrations of PCBs were not detected in any of the wood chip/soil samples at P002.

A Removal Action was initiated in November 2018. The removal action consisted of demolishing buildings 1 and 2, securing building 4, removing ACM from Oriskany Creek, and off-site disposal of ACM into the Oneida-Herkimer Solid Waste Landfill located in Ava, NY. As part of the

Removal Action, RST 3 collected surface soil samples from Properties P001 and P002 on April 29, 2019. The soil samples were collected as five-point composites from depths 0 to 2 inches below ground surface (bgs) in five areas where asbestos-containing debris piles were previously staged. A total of three composite soil samples were collected from Property P001 and two composite soil samples were collected from Property P002. The soil samples were analyzed for asbestos via California Air Resource Board (CARB) 435, 400 point count. Based on the analytical results, asbestos was not detected in any of the soil samples collected during the Removal Action.

2.0 Scope of Work

START V was tasked by EPA with collecting surface water samples from four waste water treatment features located in the former waste water treatment plant on Property P001. The surface water samples were submitted to the assigned laboratories for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, PFAS, herbicides, TAL metals including Hg, CN analyses. In addition, START V was tasked with providing photographic documentation and documenting all Site activities and in the Site logbook.

3.0 On-Site Personnel

Name	Affiliation	Duties On-site
Sandra Richards	EPA, Region II	On-Scene Coordinator
Sean Quinn	Weston Solutions, Inc. START V	Site Project Manager, Site Health and Safety, Sample Collection and Management
Kathryn Donohue	Weston Solutions, Inc. START V	Sample Collection and Sample Management

EPA: U.S. Environmental Protection Agency START V: Superfund Technical Assessment and Response Team V

4.0 Site Activities and Observations

On August 20, 2019, START V conducted and completed the surface water sampling event at four waste water treatment features located in the former waste water treatment plant on Property P001. Based on information provided by the EPA, the Final Clarifier (P001-SW001) contained approximately 0.5-1 feet of water and had a solid bottom (likely concrete). Tank 01 (P001-SW002) was approximately 4 feet bgs and contained approximately 2.5-3 feet of water; it had limited access (approximately 6-inch opening) and a solid bottom (likely concrete). The Neutralization Equalization Aeration Pond (P001-SW003) contained less than 0.5 feet of water and a thin layer of algae; it had a solid bottom (likely concrete), and some areas near the edge were deeper than 0.5 feet, approximately 1 foot deep. Tank 02 (P001-SW004) contained approximately 2.5 feet of water with a solid bottom (suspected to be either rock or concrete); there was debris in the tank and the bottom was approximately 4.5 – 5 feet bgs. START V encountered a large volume of algal growth on the water surface at P001-SW001. The area sampled at this location was chosen based on minimizing possible algal contamination.

Refer to Attachment A, Figure 2: August 2019 Surface Water Sample Location Map and Attachment C: Photographic Documentation Log.

5.0 Sampling Methodology

All field work was performed in accordance with the START V Site-Specific Health and Safety Plan (HASP), Site-Specific Uniform Federal Policy (UFP) Quality Assurance Project Plan

(QAPP), and EPA's Emergency Response Team (ERT)/Scientific, Engineering, Response & Analytical Services (SERAS) contractor's Standard Operation Procedure (SOP) Number (No.) 2001: *General Field Sampling Guidelines* and SOP No. 2013: *Surface Water Sampling.*

Prior to sampling, a daily PFAS protocol checklist was completed in order to prevent PFAS contamination of the samples. Surface water samples were collected using dedicated sampling equipment that was free of any material which may or potentially contain PFAS material. In addition, the following materials were excluded from the Site: Gore-Tex™, Tyvek®, Teflon®, Post-It-Notes, and any materials treated with waterproofing materials (field books, rain coats, etc.).To further minimize the possibility of contamination, the portions of surface water samples designated for PFAS analysis were collected and stored in a dedicated cooler prior to sampling for the other analyses.

Surface water samples were collected from the edge of the Final Clarifier (SW001), the Neutralization Equalization Aeration Pond (SW003), and Tank 02 (SW004) using a PFAS-free high density polyethylene (HDPE) dipper. Since Tank 01 (SW002) had an approximate 6-inch opening from which samples could be collected, a non-weighted polyvinyl chloride (PVC) bailer was utilized to collect the portion of the sample designated for PFAS analysis. After collecting the PFAS portion, it was determined that the hole on the concrete tank was large enough to use a HDPE dipper, and the remainder of the sample was collected using this method. For each sample, surface water was transferred from the HDPE dipper or PVC bailer into the appropriate sample containers based on required analyses. A field duplicate sample was collected from SW004 for quality control (QC) purposes.

All sample information was entered into the EPA SCRIBE data management system from which sample labels and chain of custody (COC) records were generated. All surface water samples were preserved with appropriate preservative, placed on ice, secured in coolers, and hand delivered to the assigned laboratories.

6.0 Laboratory Receiving Samples

The following laboratories were utilized for the analysis of the samples collected during the August 2019 Removal Assessment sampling event:

Laboratory Name/Location	Sample Matrix	Analyses
EPA LSASD Regional Laboratory 2890 Woodbridge Ave. Edison, NJ 08837	Surface Water	PFAS
Chemtech Consulting Group 284 Sheffield Street Mountainside, NJ 07092	Surface Water	Herbicides, TAL Metals + Hg, and CN
Chemtech Consulting Group 284 Sheffield Street Mountainside, NJ 07092 CLP Case # 48414	Surface Water	TCL VOCs, TCL SVOCs, TCL Pesticides, and TCL PCBs

EPA: U.S. Environmental Protection Agency
LSASD: Laboratory Services and Applied Sciences Division
VOCs: Volatile Organic Compounds
PCBs: Polychlorinated Biphenyls
PFAS: Per- and Poly-fluoroalkyl substances
CLP: Contract Laboratory Program
START V: Superfund Technical Assessment and Response Team V
TAL: Target Analyte List
SVOCs: Semivolatile Organic Compounds
Hg: Mercury
CN: Cyanide

7.0 Sample Collection and Dispatch

On August 20, 2019, a total of five surface water samples, including one field duplicate sample were collected from four AOCs at Property P001. In addition, one field blank and one trip blank sample were collected for QC purposes.

On August 21, 2019, START V hand-delivered six samples, including five surface water samples and one field blank sample to Chemtech Consulting Group (Chemtech) in Mountainside New Jersey for TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, herbicides, TAL metals including Hg, and CN analyses. One trip blank sample was also hand-delivered to Chemtech for TCL VOC analysis. The samples were hand-delivered to Chemtech under COC Record Numbers (Nos.) 2-082019-125808-0007 and 2-082019-130945-0009. In addition, six samples including, five surface water samples, and one field blank sample were hand-delivered under COC Record No. 2-082019-130534-0008 to the EPA LSASD Regional Laboratory for PFAS analysis.

Refer to Attachment B, Table 1: Sample Collection Information Table and Attachment D: Chain of Custody Records.

8.0 Analytical Results Summary

Based on validated analytical results, acetone was the only TCL VOC detected in any of the surface water samples, with detections of 4.5 J micrograms per liter (µg/L) and 4.4 J µg/L occurring in SW001 and SW003, respectively. Dimethylphthalate was the only TCL SVOC detected in any of the surface water samples, with a detection of 5.3 µg/L occurring in SW004. TCL PCBs, TCL pesticides, herbicides, and CN were not detected in any of the surface water samples.

Based on validated analytical results for TAL metals including mercury, concentrations of aluminum, arsenic, barium, calcium, chromium, copper, iron, magnesium, manganese, sodium, and vanadium were detected in all five surfaces water samples collected from all four sample locations. Additional detections included: beryllium in SW004; cobalt in SW001, SW003, and SW004; mercury in SW001; nickel in SW001 and SW004; potassium in SW002, SW003, and SW004; silver in SW001, SW002, and SW003; and zinc in SW001 and SW004. Antimony, cadmium, lead, selenium, and thallium were not detected in any of the surface water samples.

Based on validated analytical data for PFAS, perfluorooctanesulfonic acid (PFOS) was detected in all five surface water samples collected from all four sample locations, with a maximum concentration of 255 nanograms per liter (ng/L) occurring in SW002. Perfluorohexanesulfonic acid (PFHxS) was detected in SW001, SW002, and SW004, with a maximum concentration of 48.8 ng/L occurring in SW002. Perfluorooctanoic acid (PFOA) was detected in SW002 and SW004, with a maximum concentration of 29.3 ng/L occurring in SW004. Perfluorohexanoic acid (PFHxA) was detected in SW004 at a maximum concentration of 5.38 ng/L. Perfluoroheptanoic acid (PFHpA) was detected in SW004 at a maximum concentration of 4.93 ng/L. Perfluorobutanesulfonic acid (PFBS) was detected in SW001 at a concentration of 32.9 ng/L. Perfluorotridecanoic acid (PFTrDA) was detected in SW001 at a concentration of 5.25 L ng/L. N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) was detected in SW002 at a concentration of 15.5 ng/L. N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) was detected in SW002 at a concentration of 5.50 ng/L.

Based on validated analytical data, concentrations of TCL SVOCs, and TAL metals including mercury were detected in the field blank sample (Sample No. P001-FB-082019-01). TCL SVOC detections included dimethylphthalate, which was detected in the field blank sample at a concentration of 3.4 J µg/L. TAL metals detected in the field blank sample included antimony (0.27 J µg/L), lead (0.05 J µg/L), magnesium (6.48 J µg/L), potassium (38.3 J µg/L), sodium (35.9 J µg/L), thallium (0.11 J µg/L), and zinc (17.7 µg/L). Mercury was detected in the field blank sample at a concentration of 0.043 J µg/L).

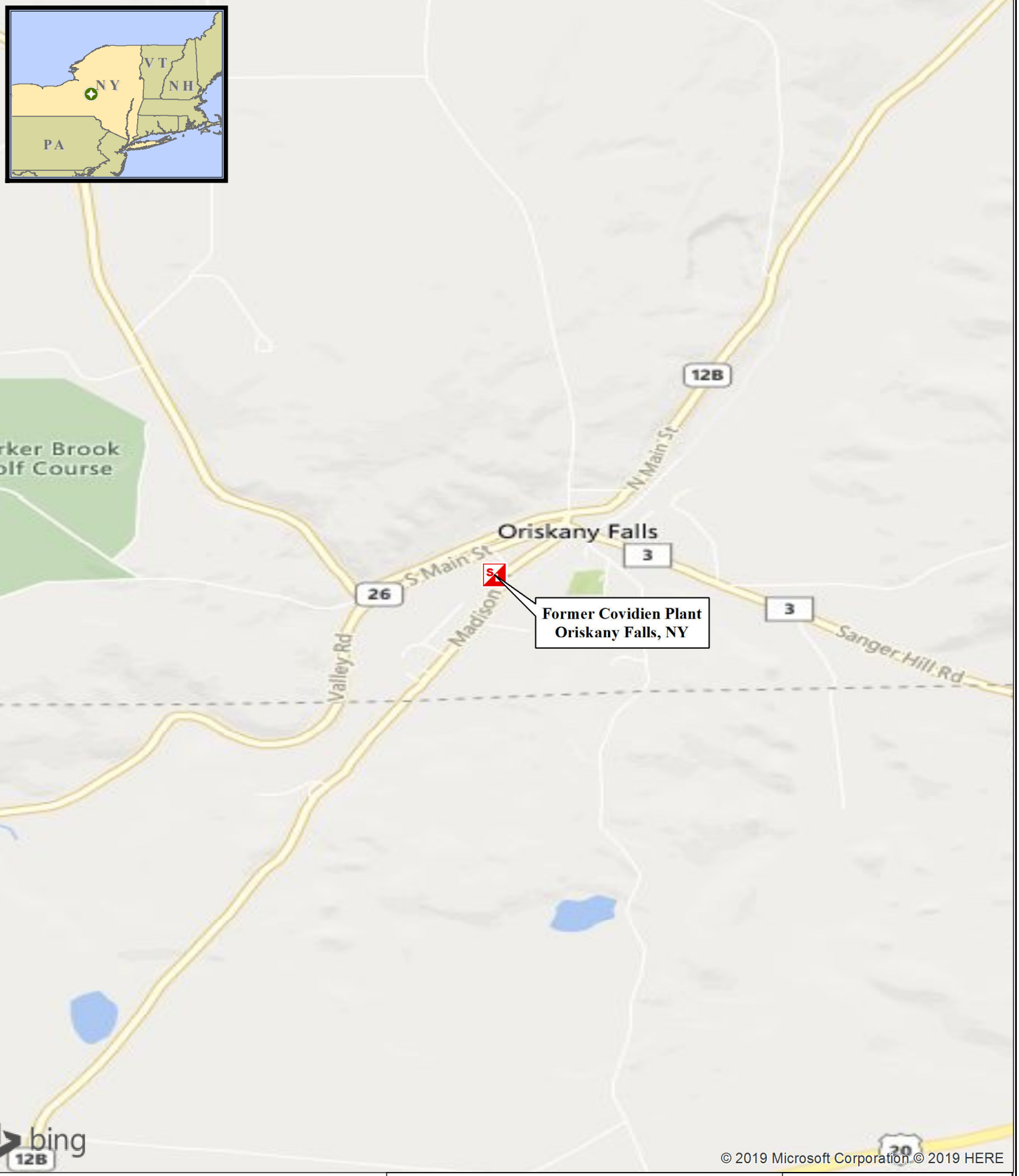
Refer to Attachment B, Table 2A: Validated Surface Water Analytical Results Summary Table – TCL VOCs, Table 2B: Validated Surface Water Analytical Results Summary Table – TCL SVOCs, Table 2C: Validated Surface Water Analytical Results Summary Table – TCL Pesticides, Table 2D: Validated Surface Water Analytical Results Summary Table – TCL PCBs, Table 2E: Validated Surface Water Analytical Results Summary Table – Herbicides, Table 2F: Validated Surface Water Analytical Results Summary Table – PFAS, Table 2G: Validated Surface Water Analytical Results Summary Table - TAL Metals + Hg, and CN, and Attachment E: Validated Analytical Data Packages.

Report prepared by: _____ 12/11/2019
Sean Quinn — Date
START V Site Project Manager

Report reviewed by: _____ 12/11/2019
Michael Beuthe, CHMM — Date
START V Group Leader

ATTACHMENT A:

Figure 1: Site Location Map
Figure 2: August 2019 Surface Water Sample Location Map



Legend

Site Location

N

0 0.1 0.2 0.4 0.6 0.8 Miles

Weston Solutions, Inc.
Federal East Division

In Association With
Eco-Risk, Pro-West & Associates, Inc., Avatar Environmental, LLC, On-Site Environmental, Inc., and Sovereign Consulting, Inc.

Figure 1:
Site Location Map

Former Covidien Plant
Oriskany Falls, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND TECHNICAL ASSESSMENT & RESPONSE TEAM V
CONTRACT # 68HE0319D0004

GIS ANALYST:	M. Lang
EPA OSC:	S. Richards
START V SPM:	M. Lang
FILENAME:	190813_FC_SLM

DATE MODIFIED: 8/13/2019

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Legend

Surface Water Sampling Locations

N

0 20 40 80 120 160 Feet

Weston Solutions, Inc.

In Association With
Eco-Risk, Avatar Environmental, LLC.,
Pro-West & Associates, Inc., On-Site Environmental Inc.,
Sovereign Consulting, Inc.

Figure 2: August 2019 Surface Water Sample Location Map

Former Covidien Site
Oriskany Falls, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND TECHNICAL ASSESSMENT & RESPONSE TEAM V
CONTRACT # 68HE0319D0004

GIS ANALYST:	M. BEUTHE
EPA OSC:	S. RICHARDS
RST SPM:	S. QUINN
FILENAME:	190826_FC_SampleLoc

DATE MODIFIED: 12/11/2019

ATTACHMENT B:

Table 1: Sample Collection Information Table
Table 2A: Validated Surface Water Analytical Results Summary Table - TCL VOCs
Table 2B: Validated Surface Water Analytical Results Summary Table - TCL SVOCs
Table 2C: Validated Surface Water Analytical Results Summary Table - TCL Pesticides
Table 2D: Validated Surface Water Analytical Results Summary Table - TCL PCBs
Table 2E: Validated Surface Water Analytical Results Summary Table - Herbicides
Table 2F: Validated Surface Water Analytical Results Summary Table - PFAS
Table 2G: Validated Surface Water Analytical Results Summary Table - TAL Metals + Hg, and CN

Table 1: Sample Collection Information Table
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
April 20, 2019

STARTV Sample Number	Sample Location	Sample Date	Sample Time	Matrix	Sample Type	Analyses
P001-SW001-08202019-01	P001-SW001	8/20/2019	11:40	Surface Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs Herbicides, PFAS, TAL Metals +Hg, and CN
P001-SW002-08202019-01	P001-SW002	8/20/2019	11:45	Surface Water	Field Sample	
P001-SW003-08202019-01	P001-SW003	8/20/2019	11:35	Surface Water	Field Sample	
P001-SW004-08202019-01	P001-SW004	8/20/2019	11:30	Surface Water	Field Sample	
P001-SW004-08202019-02	P001-SW004	8/20/2019	12:00	Surface Water	Field Sample	
P001-FB-082019-01	NA	8/20/2019	16:15	DI Water	Field Blank	
P001-TB-082019-01	NA	8/20/2019	16:00	DI Water	Trip Blank	TCL VOCs

Notes:

START V- Superfund Technical Assessment and Response Team V
EPA: U.S. Environmental Protection Agency
TCL: Target Compund List
TAL: Target Analyte List
VOCs: Volatile Organic Compounds
SVOCs: Semivolatile Organic Compounds
PCBs: Polychlorinated Biphenyls
Hg: Mercury
CN: Cyanide
PFAS: per- and poly-fluoroalkyl substances
DI - Deionized
NA - Not Applicable

Tabel 2A: Validated Surface Water Analytical Results Summary Table - TCL VOCs
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01	P001-TB-082019-01
CLP Sample Number	BEJT9	BEJW0	BEJW1	BEJW2	BEJW3	BEJT8	BEJW4
Sampling Date	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019
Sample Matrix	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	DI Water	DI Water
TCL VOC (µg/L)							
Dichlorodifluoromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	**4.5 J**	10 U	**4.4 J**	10 U	10 U	10 U	10 U
Carbon disulfide	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl Ether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-xylene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
m/p-xylene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes:
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CLP - Contract Laboratory Program
TCL - Target Compound List
VOC - Volatile Organic Compound
J - Indicates the reported result is an estimate.
U - Indicates the analyte was analyzed for, but not detceted.
All analytical results are reported in micrograms per liter (µg/L)
DI - Deionized
Detections are presented in bold font.

Table 2B: Validated Surface Water Analytical Results Summary Table - TCL SVOCs
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01
CLP Sample Number	BEJT9	BEJW0	BEJW1	BEJW2	BEJW3	BEJT8
Sampling Date	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019
Sample Matrix	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	DI Water
TCL SVOC (µg/L)						
1,4-Dioxane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzaldehyde	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Oxybis(1-chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U
Acetophenone	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Nitrobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Caprolactam	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclo-pentadiene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Biphenyl	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitroaniline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Dimethylphthalate	5.0 U	5.0 U	5.0 U	**5.3**	5.0 U	**3.4 J**
2,6-Dinitrotoluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthylene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	10 U	10 U	10 U	10 U	10 U	10 UJ
Acenaphthene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrophenol	10 U	10 U	10 U	10 U	10 U	10 UJ
4-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 UJ
Dibenzofuran	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitroaniline	10 U	10 U	10 U	10 U	10 U	10 UJ
4,6-Dinitro-2-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4,5-Tetrachlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Anthracene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
3,3-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octyl phthalate	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzo(a,h)anthracene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes:
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CLP - Contract Laboratory Program
TCL - Target Compound List
VOC - Volatile Organic Compound
J - Indicates the reported result is an estimate.
U - Indicates the analyte was analyzed for, but not detceted.
All analytical results are reported in micrograms per liter (µg/L)
DI - Deionized
Detections are presented in bold font.

Table 2C: Validated Surface Water Analytical Results Summary Table - TCL Pesticides
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01
CLP Sample Number	BEJT9	BEJW0	BEJW1	BEJW2	BEJW3	BEJT8
Sampling Date	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019
Sample Matrix	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	DI Water
TCL Pesticide (µg/L)						
alpha-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
beta-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
delta-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
gamma-BHC (Lindane)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Heptachlor	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Aldrin	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Heptachlor epoxide	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Endosulfan I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Dieldrin	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Methoxychlor	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Endrin ketone	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
alpha-Chlordane	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
gamma-Chlordane	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Toxaphene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes:
START V - Superfund Technical Assessment & Response Team V
CLP - Contract Laboratory Program
TCL - Target Compound List
U - Indicates the analyte was analyzed for, but not detceted.
All analytical results reported in micrograms per liter (µg/L)
DI - Deionized

Table 2D: Validated Surface Water Analytical Results Summary Table - TCL PCBs
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01
CLP Sample Number	BEJT9	BEJW0	BEJW1	BEJW2	BEJW3	BEJT8
Sampling Date	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019
Sample Matrix	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	DI Water
TCL PCB (µg/L)						
Aroclor-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1221	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1262	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1268	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
START V - Superfund Technical Assessment & Response Team V
CLP - Contract Laboratory Program
TCL - Target Compound List
PCB - Polychlorinated Biphenyl
U - Indicates the analyte was analyzed for, but not detceted.
All analytical results reported in micrograms per liter (µg/L)
DI - Deionized

Table 2E: Validated Surface Water Analytical Results Summary Table - Herbicides
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01
Sampling Date	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**
Sample Matrix	**Surface Water**	**Surface Water**	**Surface Water**	**Surface Water**	**Surface Water**	**DI Water**
Herbicides (µg/L)						
Dicamba	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Dichlorprop	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
2,4-D	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
2,4,5-TP (Silvex)	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
2,4,5-T	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
2,4-DB	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Dinoseb	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U

Notes:
START V - Superfund Technical Assessment & Response Team V
U - Indicates the analyte was analyzed for, but not detceted.
All analytical results reported in micrograms per liter (µg/L)
DI - Deionized

Table 2F: Validated Surface Water Analytical Results Summary Table - PFAS
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01
Sampling Date	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**
Sample Matrix	**Surface Water**	**Surface Water**	**Surface Water**	**Surface Water**	**Surface Water**	**DI Water**
PFAS (ng/L)						
Perfluorobutanesulfonic acid (PFBS)	**32.9**	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
Perfluorodecanoic acid (PFDA)	3.51 UL	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
Perfluorododecanoic acid (PFDoA)	3.51 UL	3.57 U	3.46 U	3.52 UL	3.50 U	3.53 U
Perfluoroheptanoic acid (PFHpA)	3.51 UL	3.57 U	3.46 U	**4.57**	**4.93**	3.53 U
Perfluorohexanesulfonic acid (PFHxS)	**5.52 K**	**48.8**	3.46 U	**4.56 K**	**4.10 K**	3.53 U
Perfluorohexanoic acid (PFHxA)	3.51 UL	3.57 U	3.46 U	**5.38**	**3.80**	3.53 U
Perfluorononanoic acid (PFNA)	3.51 UL	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
Perfluorooctanesulfonic acid (PFOS)	**9.88**	**255**	**3.46**	**34.5 K**	**38.0**	3.53 U
Perfluorooctanoic acid (PFOA)	3.51 UL	**22.9**	3.46 U	**28.7 K**	**29.3**	3.53 U
Perfluorotetradecanoic acid (PFTeDA	3.51 UL	3.57 U	3.46 U	3.52 UL	3.50 U	3.53 U
Perfluorotridecanoic acid (PFTrDA)	**5.25 L**	3.57 U	3.46 U	3.52 UL	3.50 U	3.53 U
Perfluoroundecanoic acid (PFUdA)	3.51 UL	3.57 U	3.46 U	3.52 UL	3.50 U	3.53 U
Hexafluoropropylene oxide dimer acid (GENX)	3.51 UL	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	3.51 UL	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	3.51 U	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	3.51 U	3.57 U	3.46 U	3.52 U	3.50 U	3.53 U
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.51 UL	**15.5**	3.46 UL	3.52 UL	3.50 UL	3.53 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.51 UL	**5.50**	3.46 UL	3.52 UL	3.50 UL	3.53 U

Notes:
START V - Superfund Technical Assessment and Response Team V
EPA - U.S. Environmental Protection Agency
PFAS - Per- and Poly-fluoroalkyl substances
U - Indicates the analyte was analyzed, but was not detcted.
K - Indicates the reported value may be biased high.
L - Indicates the reported value may be biased low.
DI - Deionized
All analytical results are reported in nanograms per liter (ng/L)
Detections are presented in bold font.

Table 2G: Validated Surface Water Analytical Results Summary Table - TAL Metals + Hg, and CN
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

START V Sample Number	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02	P001-FB-082019-01
Sampling Date	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**	**8/20/2019**
Sample Matrix	**Surface Water**	**Surface Water**	**Surface Water**	**Surface Water**	**Surface Water**	**DI Water**
TAL Metal (µg/L)						
Aluminum	**7.81 J**	**210**	**7.18 J**	**15 J**	**15.9 J**	3.67 U
Antimony	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.27 J**
Arsenic	**0.78 J**	**1.07**	**1.46**	**0.72 J**	**0.7 J**	0.115 U
Barium	**263**	**23.4**	**166**	**39.2**	**38.7**	0.184 U
Beryllium	0.068 U	0.068 U	0.068 U	0.068 U	**0.08 J**	0.068 U
Cadmium	1.0 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Calcium	**39,300**	**39,100**	**28,100**	**28,800**	**29,000**	14.3 U
Chromium	**1.01 J**	**0.68 J**	**0.63 J**	**0.54 J**	**0.53 J**	0.075 U
Cobalt	**0.23 J**	0.053 U	**0.12 J**	**0.09 J**	**0.11 J**	0.053 U
Copper	**5.95**	**13.5**	**6.28**	**4.18**	**3.44**	0.487 U
Iron	**1,670**	**94.7**	**909**	**466**	**466**	2.69 U
Lead	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.05 J**
Magnesium	**1,400**	**709**	**2,480**	**2,030**	**2,050**	**6.48 J**
Manganese	**41.5**	**1.05**	**40.4**	**39.3**	**39.7**	0.073 U
Mercury	**0.043 J**	0.028 U	0.028 U	0.028 U	0.028 U	**0.043 J**
Nickel	**1.37**	1.0 U	1.1 U	**1.11**	**1.10**	0.068 U
Potassium	500 U	**19,800**	**1,110**	**8,720**	**8,800**	**38.3 J**
Selenium	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Silver	**1.51**	**0.86 J**	**0.37 J**	0.3 U	0.3 U	0.3 U
Sodium	**598**	**6,070**	**844**	**4,030**	**4,020**	**35.9 J**
Thallium	1.0 U	1.0 U	1.0 U	0.03 U	1.0 U	**0.11 J**
Vanadium	**0.3 J**	**2.07 J**	**0.33 J**	**0.48 J**	**0.46 J**	0.07 U
Zinc	**28.4 J**	17.7 U	17.7 U	**27.7 J**	17.7 U	**17.7**
Cyanide	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U

Notes:
START V - Superfund Technical Assessment & Response Team V
TAL - Target Analyte List
Hg - Mercury
CN - Cyanide
J - Indicates the reported result is an estimate.
U - Indicates the analyte was analyzed for, but not detceted.
All analytical results reported in micrograms per liter (µg/L)
DI - Deionized
Detections are presented in bold font.

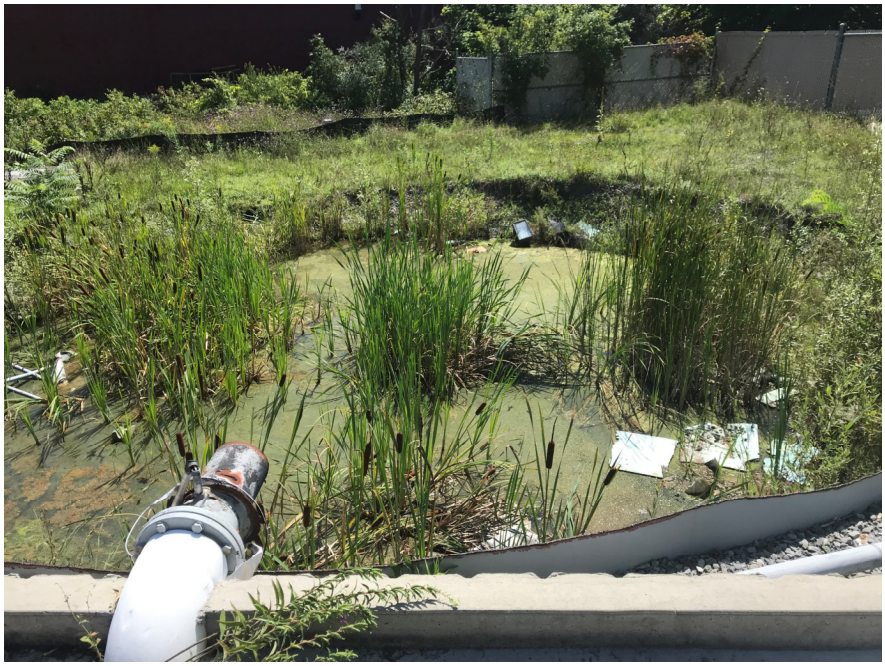
ATTACHMENT C

Photographic Documentation Log

Photographic Documentation Log
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

Photograph 1: On August 20, 2019, the U.S. Environmental Protection Agency (EPA) and Weston Solutions, Inc., Superfund Technical Assessment and Response Team V (START V), conducted a surface water sampling event as part of a Removal Assessment at the Former Covidien Plant Site (the Site). Surface water samples were collected from four waste water treatment features located in the former waste water treatment plant on Property P001. Above is a view of the sampling location area looking towards SW003 (Neutralization Equalization Aeration Pond).

Photograph 2: View looking towards the remaining waste water treatment features at property P001, (SW001, SW002, and SW004). All surface water samples were collected with special considerations taken to eliminate possible contamination for per- and poly- fluoroalkyl substances (PFAS).



Photograph 3: A view of SW001 (Final Clarifier). A large volume of algae was present at this location. The sampling location that was chosen had as little algal present to help minimize any contamination.

Photograph 4: View of SW002 (Tank 01). A non-weight polyvinyl chloride (PVC) bailer was used to collect the PFAS sample from the approximate 6 inch hole in the top of the tank. After the PFAS sample was collected, START V concluded that a high density polyethylene (HDPE) dipper would fit into the hole. The remaining five samples were collected using that dedicated piece of sampling equipment.

Photographic Documentation Log
Former Covidien Plant Site
Oriskany Falls, Oneida County, New York
August 20, 2019

Photograph 5: View of SW003 (Neutralization Equalization Aeration Pond).

Photograph 6: View of SW004 (Tank 02). This location had mostly clear water, with several items that appeared to be cinderblock type material at the bottom. There was also some items floating in the tank, which can be seen in Photograph 8.

Photograph 7: View of the PFAS sample bottles after they had been collected. Dedicated HDPE, PVC sampling equipment, and sample bottles were placed onto silicone vapor shield to keep equipment and bottles off the ground and free of any PFAS contaminates. Labels were hand written on paper tags to insure that PFAS contamination did not occur from adhesives. Samples were placed into HDPE bags and stored on ice.

Photograph 8: View of START V team member sampling at SW004. Natural latex booties were worn to add an extra layer of protection, helping to further eliminate PFAS contaminants. The floating material referenced from photograph 6 can also be seen.

ATTACHMENT D

Chain of Custody Records

USEPA CLP COC (LAB COPY)

DateShipped: 8/21/2019
CarrierName: Hand-Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD

Case #: 48414
Cooler #: 1

No: 2-082019-125808-0007

Lab: Chemtech Consulting Group
Lab Contact: Mohammed Ahmed
Lab Phone: (908) 789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-FB-082019-01	BEJT8	Surface Water/ START	Grab	VOA(42), SVOA(42), PEST/PCB(42)	1015 (HCl pH <2), 1016 (4 C), 1017 (4 C) (7)	P001-SW004	08/20/2019 16:15	
P001-SW001-08202019-01	BEJT9	Surface Water/ START	Grab	VOA(42), SVOA(42), PEST/PCB(42)	1018 (HCl pH <2), 1019 (4 C), 1020 (4 C) (7)	P001-SW001	08/20/2019 11:40	
P001-SW002-08202019-01	BEJW0	Surface Water/ START	Grab	VOA(42), SVOA(42), PEST/PCB(42)	1021 (HCl pH <2), 1022 (4 C), 1023 (4 C) (7)	P001-SW002	08/20/2019 11:45	
P001-SW003-08202019-01	BEJW1	Surface Water/ START	Grab	VOA(42), SVOA(42), PEST/PCB(42)	1024 (HCl pH <2), 1025 (4 C), 1026 (4 C) (7)	P001-SW003	08/20/2019 11:35	
P001-SW004-08202019-01	BEJW2	Surface Water/ START	Grab	VOA(42), SVOA(42), PEST/PCB(42)	1027 (HCl pH <2), 1028 (4 C), 1029 (4 C) (11)	P001-SW004	08/20/2019 11:30	
P001-SW004-08202019-02	BEJW3	Surface Water/ START	Grab	VOA(42), SVOA(42), PEST/PCB(42)	1030 (HCl pH <2), 1031 (4 C), 1032 (4 C) (7)	P001-SW004	08/20/2019 12:00	
P001-TB-082019-01	BEJW4	Surface Water/ START	Grab	VOA(42)	1033 (HCl pH <2) (3)	P001-SW004	08/20/2019 16:00	

Special Instructions:

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: VOA=CLP Volatiles, SVOA=CLP Semivolatiles, PEST/PCB=CLP Pesticides and PCBs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples An Analysis	Sean Quinn START V.	8/21/19 12:18		8/21/19	4.4°C, 3.5°C 4.8°
				12:25	IR GUN #1
					Temp blank Present
					No Tape

USEPA
DateShipped: 8/21/2019
CarrierName: Hand-Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
Former Covidien Plant Assessment
Contact Name: Sean Quinn
Contact Phone: 732-425-1175

No: 2-082019-130534-0008
Cooler #: 1
Lab: LSASD
Lab Phone: 732-321-4431

Lab #	Sample #	Location	CLP Sample #	Tag	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-FB-082019-01	P001-SW004		G	PFAS	Surface Water	8/20/2019	16:15	1	250 mL poly	Trizma 0-6 C	
	P001-SW001-08202019-01	P001-SW001		G	PFAS	Surface Water	8/20/2019	11:40	1	250 mL poly	Trizma 0-6 C	
	P001-SW002-08202019-01	P001-SW002		G	PFAS	Surface Water	8/20/2019	11:45	1	250 mL poly	Trizma 0-6 C	
	P001-SW003-08202019-01	P001-SW003		G	PFAS	Surface Water	8/20/2019	11:35	1	250 mL poly	Trizma 0-6 C	
	P001-SW004-08202019-01	P001-SW004		G	PFAS	Surface Water	8/20/2019	11:30	3	250 mL poly	Trizma 0-6 C	
	P001-SW004-08202019-02	P001-SW004		G	PFAS	Surface Water	8/20/2019	12:00	1	250 mL poly	Trizma 0-6 C	

SG

Special Instructions: Analyze for Perfluorinated alkyl acids (PFAAs) TAT= 21 days preliminary, 42 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Sean.Quinn@westonsolutions

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples/ All Analytes	Sean Quinn STANTV	8/21/19 1440	NESS TIROL	8/21/19 1445	SC

USEPA
DateShipped: 8/21/2019
CarrierName: Hand-Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
RFP#605 ~~Site #: AZ7U 9Q~~
Contact Name: Sean Quinn
Contact Phone: 732-425-1175

No: 2-082019-130945-0009
Cooler #: 1
Lab: Chemtech Consulting Group
Lab Phone: (908) 789-8900

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-FB-082019-01	P001-SW004	Herbicides	Surface Water	8/20/2019	16:15	1	1 liter amber	<6 C	
	P001-FB-082019-01	P001-SW004	TAL Metals + Hg	Surface Water	8/20/2019	16:15	1	1 L poly	HNO3 pH<2	
	P001-FB-082019-01	P001-SW004	Cyanide	Surface Water	8/20/2019	16:15	1	1 L poly	NaOH pH>12	
	P001-SW001-08202019-01	P001-SW001	Herbicides	Surface Water	8/20/2019	11:40	1	1 liter amber	<6 C	
	P001-SW001-08202019-01	P001-SW001	TAL Metals + Hg	Surface Water	8/20/2019	11:40	1	1 L poly	HNO3 pH<2	
	P001-SW001-08202019-01	P001-SW001	Cyanide	Surface Water	8/20/2019	11:40	1	1 L poly	NaOH pH>12	
	P001-SW002-08202019-01	P001-SW002	Herbicides	Surface Water	8/20/2019	11:45	1	1 liter amber	<6 C	
	P001-SW002-08202019-01	P001-SW002	TAL Metals + Hg	Surface Water	8/20/2019	11:45	1	1 L poly	HNO3 pH<2	
	P001-SW002-08202019-01	P001-SW002	Cyanide	Surface Water	8/20/2019	11:45	1	1 L poly	NaOH pH>12	
	P001-SW003-08202019-01	P001-SW003	Herbicides	Surface Water	8/20/2019	11:35	1	1 liter amber	<6 C	

Special Instructions: Analyze for Herbicides and TAL Metals + Hg and CN, TAT= 21 days preliminary, 42 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Sean.Quinn@westonsolutions.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All summary / All Analytes	Sean Quinn START V	8/21/19 12:18	Steve Lin CHEMTECH	8/21/19 12:25	5.7°C, 2.9°C
					IR-Gun-1
					~~C.F~~ Temp Blank Present SK 8/21/19

SK 8/21/19

USEPA
DateShipped: 8/21/2019
CarrierName: Hand-Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
RPP# 605 ~~Site #: A27U~~ SQ
Contact Name: Sean Quinn
Contact Phone: 732-425-1175

No: 2-082019-130945-0009
Cooler #: 1
Lab: Chemtech Consulting Group
Lab Phone: (908) 789-8900

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-SW003-08202019-01	P001-SW003	TAL Metals + Hg	Surface Water	8/20/2019	11:35	1	1 L poly	HNO3 pH<2	
	P001-SW003-08202019-01	P001-SW003	Cyanide	Surface Water	8/20/2019	11:35	1	1 L poly	NaOH pH>12	
	P001-SW004-08202019-01	P001-SW004	Herbicides	Surface Water	8/20/2019	11:30	3	1 liter amber	<6 C	
	~~P001-SW004-08202019-01~~	~~P001-SW004~~	~~TAL Metals + Hg~~	~~Surface Water~~	~~8/20/2019~~	~~11:30~~	~~3~~	~~1 L poly~~	~~HNO3 pH<2~~	
	P001-SW004-08202019-01	P001-SW004	Cyanide	Surface Water	8/20/2019	11:30	3	1 L poly	NaOH pH>12	
	P001-SW004-08202019-02	P001-SW004	Herbicides	Surface Water	8/20/2019	12:00	1	1 liter amber	<6 C	
	P001-SW004-08202019-02	P001-SW004	TAL Metals + Hg	Surface Water	8/20/2019	12:00	1	1 L poly	HNO3 pH<2	
	P001-SW004-08202019-02	P001-SW004	Cyanide	Surface Water	8/20/2019	12:00	1	1 L poly	NaOH pH>12	

Special Instructions: Analyze for Herbicides and TAL Metals + Hg and CN, TAT= 21 days preliminary, 42 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Sean.Quinn@westonsolutions.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
11 Samples / All Analysis	Sean Quinn START	8/21/19 12:16	Steven Lin CHEMTECH	8/21/19 12:25	5.7°C, 2.9°C
					IR Gun - 1,
					Temp Blank present

SK 8/21/19

ATTACHMENT E

Validated Analytical Data Packages

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
DESA/HWSB/HWSS
2890 Woodbridge Avenue, Edison, NJ 08837

EXECUTIVE NARRATIVE

Case No.: 48414
Site: Former Covidien Plant
Number of Samples: 7 (water)
Analysis: VOA, SVOA, PEST, ARO

SDG No.: BEJT8
Laboratory: Chemtech Consulting Group
Sampling dates: 08/20/2019
Validation SOP: HW-33A (Rev 1)

QAPP:
Contractor: Weston Solutions
Reference: DCN: STARTV-01-F0011, August 2019

SUMMARY OF DEFINITIONS:
Critical: Results have an unacceptable level of uncertainty and should not be used for making decisions. Data have been qualified "R" rejected.
Major: A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be present in the results. Data has been qualified "J" estimated. "J+" and "J-" represent likely direction of the bias.
Minor: The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings:
None.

Major Findings:
The following samples have analytes that have been qualified "J", "J+" or "J-".
SVOA: All samples.

Minor Findings:
One or more analytes in one or more samples are qualified "J" due to results between MDL and CRQL.

COMMENTS: The site-specific QAPP did not provide the project action levels for field samples.

Reviewer Name(s): Archana Mirle/ Walter Mager

Approver's Signature:

Date: 09/25/2019

Name: Russell Arnone

Affiliation: USEPA/R2/HWSB/HWSS

Data Qualifier Definitions (National Functional Guidelines)			
Qualifier Symbol	**Explanation**		
	INORGANICS	**ORGANICS**	**CHLORINATED DIOXIN/FURAN**
U	The analyte was analyzed for, but was not detected above the level of the reported quantitation limit.	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method	The analyte was analyzed for but not detected. The value preceding the "U" may represent the adjusted Contract Required Quantitation Limit (see DLM02.X, Exhibit D, Section 1.2 and Table 2), or the sample specific estimated detection limit (EDL, see Method 8290A, Section 11.9.5).
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to an issue with the quality of the data generated because certain QC criteria were not met, or the concentration of the analyte was below the adjusted CRQL).
J+	The result is an estimated quantity, but the result may be biased high.	The result is an estimated quantity, but the result may be biased high.	
J–	The result is an estimated quantity, but the result may be biased low.	The result is an estimated quantity, but the result may be biased low.	
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.	The analyte was not detected (see definition of "U" flag, above). The reported value should be considered approximate.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
N		The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.	
NJ		The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	
C		This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).	
X		This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.	

DATA ASSESSMENT

ANALYSIS: VOA

The current SOP HW-33A (Revision 1) September 2016, USEPA Region II for the evaluation of Volatile organic data generated through Statement of Work SOM02.2 and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report. Tentatively Identified Compounds (TICs) for VOA organic fraction is not validated.

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. DEUTERATED MONITORING COMPOUNDS (DMC's)

All samples are spiked with DMC compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured DMC recovery limits were outside Table 6 of the SOP HW-33A (Revision 1) qualifications were applied as per Table 7 SOP HW-33A (Revision 1) to all the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

Not applicable.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the amount of contamination present in the QA blanks, the analytes are qualified as per Table 5 of SOP HW-33A (Rev 1).

A) Method blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination: BEJT8

No problems were found for this criterion.

C) Trip blank contamination for VOA aqueous samples: BEJW4

No problems were found for this criterion.

D) Storage Blank associated with VOA samples only:

No problems were found for this criterion.

E) Tentatively Identified Compounds:

Tentatively Identified Compounds (TICs) for VOA organic fractions are not validated.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene. If the mass calibration is in error, all associated data will be classified as unusable "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. All analytes for initial calibration, ICV and continuing calibration should meet the minimum RRF criteria as listed in Table 2 of SOP HW 33A (Revision 1). If RRF is less than minimum RRF specified in Table 2 for all target analytes, use professional judgment and all detects in the sample will be qualified as "J+" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration.

Percent RSD must be less than maximum %RSD in Table 2 of SOP HW 33A (Revision 1) for all target analytes. For the Initial calibration verification ICV/opening or closing CCV %D must be within the inclusive opening or closing maximum %D limits as listed in Table 2 of SOP HW 33A (Revision 1) for all Target compounds. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and Non-detects are flagged "UJ" for %D values outside criteria only. If %RSD exceeds QC criteria, detects may be qualified as "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

The following samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detected compounds are qualified J. Non-detected compounds are not qualified.

1,2,4-Trichlorobenzene: BEJT8, BEJT9, BEJW0, BEJW1, BEJW2, BEJW3, BEJW4

7. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must be in the range as specified in Table 9 of SOP HW 33A (Rev 1) of the associated continuing calibration internal standard area. The retention time of the internal standards must be within the range as specified in Table 9 of SOP HW 33A (Rev 1). If the area count is greater than, all positive results quantitated using that IS are qualified as estimated "J-", and non-detects are not qualified. If the area count is less than the associated standard, all positive results for compounds quantitated with that IS are qualified as estimated "J+" and all non-detects are qualified "R".

If an internal standard retention time were not met as specified in Table 9 of SOP HW 33A (Rev 1), the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction. Qualifications were applied to the samples and analytes as shown below. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

8. FIELD DUPLICATES: BEJW2/BEJW3

No problems were found for this criterion.

9. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within a window of 0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary m/z intensities within 20% of that in the standard compound. For the

tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

10. CONTRACT PROBLEMS NON-COMPLIANCE:

None

11. FIELD DOCUMENTATION:

No problems were identified.

12. OTHER PROBLEMS:

None

13. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

ANALYSIS: SVOA

The current SOP HW-35A (Revision 1) September 2016, USEPA Region II for the evaluation of Semi-Volatile organic data generated through Statement of Work SOM02.2, and any future editorial revisions of SOM02.2 has been applied. Data has been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report. Tentatively Identified Compounds (TICs) for BNA organic fraction is not validated.

1. HOLDING TIME AND PRESERVATION:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded, qualifications will be applied as per SOP HW-35A (Rev 1).

No problems were found for this criterion.

2. DEUTERATED MONITORING COMPOUNDS (DMCs):

All samples are spiked with DMC compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured DMC recovery limits were outside Table 6 of SOP HW-35A (Revision 1), qualifications were applied as per Table 7 of SOP HW-35A (Revision 1) to all the samples and analytes as shown below.

The following undiluted sample analyses have DMC/surrogate percent recoveries less than the primary minimum criteria but greater than or equal to the expanded minimum criteria. Detects are qualified as estimated J-. Non-detects are qualified as estimated UJ.

4-Nitrophenol-d4 BEJT8
2-Nitroaniline, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, 4-Nitroaniline

The following samples have DMC/surrogate recoveries above the upper limit of the criteria window. Detected compounds are qualified J+. Non-detected compounds are not qualified.

Pyrene-d10 BEJT9
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

Not applicable.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the amount of contamination present in the QA blanks, the analytes are qualified as per Table 5 of SOP HW-35A (Rev 1).

A) Method blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination: BEJT8

The following samples have analyte concentrations reported less than the CRQL. The associated field blank concentration is less than the CRQL. Detected compounds are qualified U. Non-detected compounds are not qualified. Sample concentrations have been reported at the CRQL.

Dimethylphthalate BEJT9, BEJW0, BEJW1, BEJW3

C) Tentatively Identified Compounds:

Tentatively Identified Compounds (TICs) for BNA organic fraction are not validated.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for Semi-volatiles is Decafluorotriphenyl-phosphine (DFTPP). If the mass calibration is in error, all associated data will be classified as unusable "R".

No problems were found for this criterion.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. All analytes for initial calibration, ICV and continuing calibration should meet the minimum RRF criteria as listed in Table 2 of SOP HW 35A (Rev 1). If RRF is less than minimum RRF as specified in Table 2 for all target analytes, use professional judgment and all detects in the sample will be qualified as "J+" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance.

Percent RSD must be less than maximum %RSD in Table 2 of SOP HW 35A (Rev 1) for all target analytes. For the ICV/opening or closing CCV %D must be within the inclusive opening or closing maximum %D limits as listed in Table 2 of SOP HW 35A (Rev 1) for all Target compounds. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and Non-detects are flagged "UJ" for %D values outside criteria only. If %RSD exceeds QC criteria, detects may be qualified as "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

The following samples are associated with an ICV/opening or closing CCV percent difference (%D) outside criteria. Detected compounds are qualified J. Non-detected compounds are qualified UJ.

Pyrene BEJW2

Butylbenzylphthalate BEJT8, BEJT9, BEJW0, BEJW1, BEJW3

7. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must be in the range as specified in Table 10 of SOP HW 35A (Rev 1) of the associated continuing calibration internal standard area. The retention time of the internal standards must be within the range as specified in Table 10 of SOP HW 35A (Rev 1). If the area count is greater than, all positive results quantitated using that IS are qualified as estimated "J-", and non-detects are not qualified. If the area count is less than the associated standard, all positive results for compounds quantitated with that IS are qualified as estimated "J+" and all non-detects are qualified "R".

If an internal standard retention time were not met as specified in Table 10 of SOP HW 35A (Rev 1), the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction. Qualifications were applied to the samples and analytes as shown below. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

8. FIELD DUPLICATES: BEJW2/BEJW3

Samples BEJW2/BEJW3: Dimethylphthalate is non-detected in sample BEJW3 and is detected in sample BEJW2 at 5.3 ug/l.

9. COMPOUND IDENTIFICATION:

Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within 0.06 RRT units of the standard compound and have ion spectra which have a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

10. CONTRACT PROBLEMS NON-COMPLIANCE:

None.

11. FIELD DOCUMENTATION:

No problems were identified.

12. OTHER PROBLEMS:

None.

13. DILUTIONS, RE-EXTRACTIONS and REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

ANALYSIS: PEST

The current SOP HW-36A (Revision 1) October 2016, USEPA Region II for the evaluation of Pesticides data generated through Statement of Work SOM02.2, and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report.

1. HOLDING TIME AND PRESERVATION:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". Use professional judgment to qualify the non-detects (sample quantitation limits), if the holding times are grossly exceeded. If the holding times are grossly exceeded. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery were outside Table 7 of the SOP HW-36A (Revision 1), qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. LABORATORY CONTROL RECOVERY (LCS):

LCS data is generated to determine the long-term precision and accuracy of the analytical method. The LCS may be used in conjunction with other QC criteria for additional

qualification of data. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

5. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the concentration of the analyte in the blank, the analytes are qualified as non-detects, "U". Qualifications were applied to the samples and analytes as shown below.

A) Method/Instrument blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination: BEJT8

No problems were found for this criterion.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

For the PESTICIDE fraction, if %RSD exceeds 20% for all analytes except alpha-BHC and delta-BHC 25%, for the two surrogates and Toxaphene 30%, qualify all associated positive results "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) The Percent Difference (%D) for each of the SCP and surrogate in the PEM used for CCV must be greater than or equal to -25% and less than or equal to 25.0%. The Percent Difference (%D) between the calibration Factor (CF) for each of the SCP and surrogate in the Calibration Verification Standard (CS3) and the mean calibration factor from the initial calibration must be greater than or equal to -25% and less than or equal to 25.0%. The Percent Difference not within limits, detected associated compounds are qualified "J" and non-detected associated compounds are qualified "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. FIELD DUPLICATES: BEJW2/BEJW3

No problems were found for this criterion.

8. COMPOUND IDENTIFICATION:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract. Qualifications were applied to the samples and analytes as shown below.

Percent Differences	Qualifier
0% - 25%	No qualification
26% - 70%	J
71% - 200% (interference detected, either column)	JN
> 50% (pesticide value < CRQL, value raised to CRQL)	U
> 200%	R

The following samples were qualified for % difference on the two columns.

None.

9. CONTRACT PROBLEMS NON-COMPLIANCE:

None.

10. FIELD DOCUMENTATION:

No problems were identified.

11. OTHER PROBLEMS:

None.

12. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

ANALYSIS: ARO

The current SOP HW-37A (Revision 0) June 2015, USEPA Region II for the evaluation of ARO data generated through Statement of Work SOM02.2 and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report.

1. HOLDING TIME AND PRESERVATION:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". Use professional judgment to qualify the non-detects (sample quantitation limits), if the holding times are grossly exceeded. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery were outside Table 5 of the SOP HW-37A (Revision 0), qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. Laboratory Control Samples (LCS):

LCS data provides information on the accuracy of the analytical method and laboratory performance. If LCS recoveries fell outside of the acceptable limits, qualifications were applied to the associated samples and compounds as shown below.

No problems were found for this criterion.

5. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the concentration of the analyte in the blank, the analytes are qualified as non-detects U. Qualifications were applied to the samples and analytes as shown below.

A) Method blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination: BEJT8

No problems were found for this criterion.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Percent Relative Standard Deviation (%RSD):

For the ARO fraction, if %RSD exceeds 20% for all analytes and the two surrogates, qualify all associated positive results "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Difference (%D):

For opening CCV, or closing CCV that is used as an opening CCV for the next 12-hour period, if %D exceeds 25% for analytes and 30% for the two surrogates, qualify all associated positive results "J" and non-detects "UJ".

For closing CCV, if %D exceeds 50% for all analytes and the two surrogates, qualify all associated positive results "J" and non-detects "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. FIELD DUPLICATES: BEJW2/BEJW3

No problems were found for this criterion.

8. COMPOUND IDENTIFICATION:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract. Qualifications were applied to the samples and analytes as shown below.

Percent Differences	**Qualifier**
0% - 25%	No qualification
26% - 70%	J
71% - 200% (interference detected, either column)	JN
> 50% (ARO value < CRQL, value raised to CRQL)	U
> 200%	R

The following sample were qualified for % difference on the two columns.

None.

9. CONTRACT PROBLEMS NON-COMPLIANCE:

None.

10. FIELD DOCUMENTATION:

No problems were identified.

11. OTHER PROBLEMS:

None.

12. DILUTIONS, RE-EXTRACTIONS & RE-ANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: ABLK55	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: ALCS55	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT8	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 5	Sample Date: 08/20/2019	Sample Time: 16:15:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT8	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 5	Sample Date: 08/20/2019	Sample Time: 16:15:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT8	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 5	Sample Date: 08/20/2019	Sample Time: 16:15:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	3.4	J	ug/L	3.4	J	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
n-Hexadecanoic acid	TIC	2.2	JN	ug/L	2.2	JN	1.0	YES	NV
Ethanol, 2-(hexadecyloxy)-	TIC	2.8	JN	ug/L	2.8	JN	1.0	YES	NV
7,9-Di-tert-butyl-1-oxaspiro(4,5)d	TIC	16	JN	ug/L	16	JN	1.0	YES	NV
3,5-di-tert-Butyl-4-hydroxyphenylp	TIC	20	JN	ug/L	20	JN	1.0	YES	NV
Total Alkanes	TIC	7.9	N	ug/L	7.9	N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT8	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 16:15:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT9	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-SW001	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:40:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT9	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-SW001	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:40:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT9	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-SW001	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:40:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	4.2	J	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC	20	N	ug/L	20	N	1.0	YES	NV
Octadecanoic acid	TIC	4.6	JN	ug/L	4.6	JN	1.0	YES	NV
n-Hexadecanoic acid	TIC	5.5	JN	ug/L	5.5	JN	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJT9	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW001	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 11:40:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	4.5	J	ug/L	4.5	J	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW0	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-SW002	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW0	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-SW002	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW0	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-SW002	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	2.7	J	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC	8.6	N	ug/L	8.6	N	1.0	YES	NV
n-Hexadecanoic acid	TIC	3.0	JN	ug/L	3.0	JN	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW0	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW002	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 11:45:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW1	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-SW003	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:35:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW1	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-SW003	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:35:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW1	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-SW003	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:35:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	2.5	J	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methyl-3-(3-methyl-but-2-enyl)-2	TIC	2.8	JN	ug/L	2.8	JN	1.0	YES	NV
13-Tetradece-11-yn-1-ol	TIC	7.2	JN	ug/L	7.2	JN	1.0	YES	NV
Trichloroacetic acid, hexadecyl es	TIC	3.1	JN	ug/L	3.1	JN	1.0	YES	NV
Octadecanoic acid	TIC	2.8	JN	ug/L	2.8	JN	1.0	YES	NV
Tridecanoic acid	TIC	4.3	JN	ug/L	4.3	JN	1.0	YES	NV
Total Alkanes	TIC	8.4	N	ug/L	8.4	N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW1	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW003	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 11:35:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	4.4	J	ug/L	4.4	J	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.3		ug/L	5.3		1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
n-Hexadecanoic acid	TIC	3.9	JN	ug/L	3.9	JN	1.0	YES	NV
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV
Tetradecanoic acid	TIC	2.4	JN	ug/L	2.4	JN	1.0	YES	NV
Trichloroacetic acid, hexadecyl es	TIC	3.4	JN	ug/L	3.4	JN	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2MS	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	4.1		ug/L	4.1		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	3.4		ug/L	3.4		1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2MS	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.52		ug/L	0.52		1.0	YES	S3VEM
Heptachlor	Spike	0.53		ug/L	0.53		1.0	YES	S3VEM
Aldrin	Spike	0.51		ug/L	0.51		1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Spike	1.2		ug/L	1.2		1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2MSD	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	4.4		ug/L	4.4		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	3.6		ug/L	3.6		1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW2MSD	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date: 08/20/2019	Sample Time: 11:30:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.52		ug/L	0.52		1.0	YES	S3VEM
Heptachlor	Spike	0.53		ug/L	0.53		1.0	YES	S3VEM
Aldrin	Spike	0.52		ug/L	0.52		1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Spike	1.2		ug/L	1.2		1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW3	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 6	Sample Date: 08/20/2019	Sample Time: 12:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW3	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 6	Sample Date: 08/20/2019	Sample Time: 12:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW3	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 6	Sample Date: 08/20/2019	Sample Time: 12:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	3.7	J	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
n-Hexadecanoic acid	TIC	3.6	JN	ug/L	3.6	JN	1.0	YES	NV
Bromoacetic acid, hexadecyl ester	TIC	2.4	JN	ug/L	2.4	JN	1.0	YES	NV
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW3	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 12:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: BEJW4	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location: P001-SW004	pH: 1.0	Sample Date: 08/20/2019	Sample Time: 16:00:00
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: PBLK56	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: PLCS56	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.46		ug/L	0.46		1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Spike	0.48		ug/L	0.48		1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Spike	0.96		ug/L	0.96		1.0	YES	S3VEM
4,4-DDE	Spike	1.0		ug/L	1.0		1.0	YES	S3VEM
Endrin	Spike	1.0		ug/L	1.0		1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan Sulfate	Spike	0.84		ug/L	0.84		1.0	YES	S3VEM
4,4-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin Aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Spike	0.47		ug/L	0.47		1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: SBLK57	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-Chloroethyl)ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2-oxybis(1-Chloropropane)	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n-propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-Chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclopentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
3,3-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octyl phthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK66	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: VBLK67	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Propanoic acid, 2,2,3-trichloro-,	TIC	3.3	JN	ug/L	3.3	JN	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Sample Number: VHBLK01	Method: Volatile Organics	Matrix: Water	MA Number:
Sample Location:	pH: 1.0	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S3VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Toluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Ethylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
m,p-Xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isopropylbenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
unknown-01	TIC	3.0	J	ug/L	3.0	J	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project **GroupID: 48414/EPW14030/BEJT8** **Lab Name: Chemtech Consulting Group**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Sample Summary Report

Project Name: FORMER COVIDIEN PLANT Project | **GroupID: 48414/EPW14030/BEJT8** | **Lab Name: Chemtech Consulting Group**

Weston Solutions, Inc.
1090 King Georges Post Road, Suite 201
Edison, New Jersey 08837-3703
Phone: 732-585-4400
www.westonsolutions.com

SUPERFUND TECHNICAL ASSESSMENT & RESPONSE TEAM V
EPA CONTRACT NO.: 68HE0319D0004

START V-01-F-0019

TRANSMITTAL MEMO

To:	Ms. Sandra Richards, On-Scene Coordinator Emergency and Remedial Response Division U.S. EPA, Region II
From:	Smita Sumbaly, Data Reviewer START V, Region II
Subject:	Former Covidien Plant Site Data Validation Assessment
Date:	September 17, 2019

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

TAL Metals plus Mercury	6 Samples
Cyanide	6 Samples
Herbicides	6 Samples

- Matrices and Number of Samples

Surface Water	5 Samples
Aqueous-Field Blank	1 Samples

- Sampling Date: August 20, 2019

The final data assessment narrative and original analytical data package are attached.

cc:	START V SPM:	Sean Quinn
	START V SITE FILE TD #:	TO-0032-0057
	START V ANALYTICAL TD #:	TO-0032-0065
	TASK#:	1065

U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: **September 17, 2019**

TO: **Sandra Richards, On-Scene Coordinator**
U.S. EPA, Region II

FROM: **Smita Sumbaly**
START V Data Review Team

SUBJECT: **QA/QC Compliance Review Summary**

As requested quality control and performance measures for the data packages noted have been examined and compared to the U.S. Environmental Protection Agency, Region II (EPA) standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness	Holding Time
Calibration, Initial	Calibration, Continuing
Initial/Continuing Calibration Blanks	Laboratory Control Sample
Laboratory Duplicate Sample	ICP Serial Dilution
ICP Interference Check Sample	Matrix Spike/Matrix Spike Duplicate
Surrogate Recovery	(MS/MSD)
Instrument Tuning	Internal Standard
Sample Quantification	Compound Identification

Any statistical measures used to support the following conclusions are attached so that the information may be reviewed by others.

Summary of Results

	I Metals + Hg	II Cyanide	II Herbicides
Acceptable as Submitted	____	__X__	__X__
Acceptable with Comments	__X__	____	____
Unacceptable, Action Pending	_____	_____	_____
Unacceptable	_____	_____	_____

Data Reviewed by: Smita Sumbaly Date: 9/17/2019

Approved By:  Date: 9/17/2019

Area Code/Phone No.: (732) 585-4410

NARRATIVE

PCS No. 1065

SITE NAME: **Former Covidien Plant Site**
130 Madison Street, Oriskany Falls
Oneida County
New York

Laboratory Name: Chemtech Consulting Group, 284 Sheffield Street, Mountainside, New Jersey 07092.

INTRODUCTION:

The laboratory's portion of this case consisted of five surface water samples and one aqueous field blank for target analyte list (TAL) metals including mercury, and cyanide and herbicide, analyses. The samples were collected on August 20, 2019. The Chemtech Project Number is: K4463.

The laboratory reported no problem(s) with the receipt of these samples:

The laboratory reported no quality control problems with the analysis of TAL Metals, Mercury, Cyanide, and Herbicides.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

Appropriate Form Is and Chain of Custody have been copied from the original data package and appended to the data assessment narrative for reference.

Inorganic:

_Y_ Holding Time	_Y_ Laboratory Duplicate
_Y_ Calibration, Initial	_Y_ MS/MSD
_Y_ Calibration, Continuing	_Y_ Lab Duplicate
_Y_ Blanks	_Y_ Data Completeness
_Y_ Laboratory Control Sample	_Y_ ICP Serial Dilutions
_Y_ ICP Interference Check Sample	

Comments: Refer to Data Assessment Narrative.

Organic:

_Y_ Holding Time	_Y_ Instrument Tuning
_Y_ Calibration, Initial	_Y_ Calibration, Continuing
_Y_ Surrogate Recovery	_Y_ Blanks
_Y_ MS/MSD	_Y_ Laboratory Control Sample
_Y_ Compound Identification/Quantification	
_Y_ Field Duplicate	_Y_ Data Completeness

Comments: Refer to Data Assessment Narrative.

REGION II RST 3 DATA ASSESSMENT REPORT

SITE: Former Covidien Plant Site

LAB: Chemtech Consulting Group, Mountainside, New Jersey

ANALYSIS: Target Analyte List (TAL) Metals, Mercury, Cyanide, and Herbicides.

CONTRACTOR: Weston Solutions, Inc., Superfund Technical Assessment & Response Team V (START V)

The following table summarizes the analytical methods used for the requested analyses and the U.S. Environmental Protection Agency, Region II (EPA), data validation standard operating procedures (SOPs) used for data validation.

Analysis	Analytical Method	Data Validation SOP No.
TAL Metals	SW-846 Method 6020B	No. HW-3a (Revision 1), September 2016 and Analytical Method
Mercury	EPA Method 245.1	No. HW-3c (Revision 1), September 2016 and Analytical Method and Lab SOP
Cyanide	SW-846 Method 9012B	No. HW-3c (Revision 1), September 2016 and Analytical Method and Lab SOP
Herbicides	SW-846 Method 8151A	HW-17 (Revision 3.1), December 2010

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various quality control (QC) problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer
Signature: Smita Sumbaly **Date:** 9/17/2019

Verified By: **Date:** 9/17/2019

On August 20, 2019, EPA Region II and START V sampling personnel collected six surface water samples, including one field blank and one field duplicate, for TAL metals including mercury, and cyanide and herbicides, analyses from the Former Covidien Plant Site located at 130 Madison Street, Oriskany Falls, Oneida County, New York. The samples were shipped under chain of custody (COC) for the requested analyses to Chemtech Consulting Group located at 284 Sheffield Street, Mountainside, New Jersey. The laboratory verified that samples were received intact, properly sealed, and refrigerated. The sample cooler temperature measured 2.9 Degrees Celsius (°C).

Field Sample ID*	Lab Sample ID	Matrix	Analysis	Sampling Date
SDG No.: K4463				
P001-FB-082019-01	K4463-01	Field Blank	TAL Metals including Mercury, and Cyanide and Herbicides	8/20/2019
P004-SW001-08202019-01	K4463-02	Surface Water	TAL Metals including Mercury, and Cyanide and Herbicides	8/20/2019
P004-SW002-08202019-01	K4463-03	Surface Water	TAL Metals including Mercury, and Cyanide and Herbicides	8/20/2019
P004-SW003-08202019-01	K4463-04	Surface Water	TAL Metals including Mercury, and Cyanide and Herbicides	8/20/2019
P004-SW004-08202019-01	K4463-05	Surface Water	TAL Metals including Mercury, and Cyanide and Herbicides	8/20/2019
P004-SW004-08202019-02[1]	K4463-08	Surface Water	TAL Metals including Mercury, and Cyanide and Herbicides	8/20/2019
[1]A field duplicate of P004-SW004-08202019-01				

The current SOPs HW-3b/3c (Revision 1) September 2016, USEPA Region II for the evaluation of metals data generated through SW 846 Method 6020B, mercury data by EPA Method 245.1, and Cyanide data by SW 846 Method 9012B; the National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (based on ISM02.4) were followed for data qualifications.

1. HOLDING TIME AND PRESERVATION:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time or pH (aqueous samples) is not within the acceptable range, the data may not be valid. Those analytes detected in the samples whose holding time (180 days for metals and 28 days for mercury) or pH (<2) have not been met will be qualified as estimated, "J"; the non-detects will be flagged as unusable, "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. CALIBRATION:
Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for the metals on the inorganic target analyte list (TAL). Initial Calibration Verification (ICV) demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing Calibration Verification (CCV) demonstrates that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.

A) INITIAL CALIBRATION:
A blank and at least five calibration standards shall be used to establish each analytical curve. At least one of these standards shall be at or below the Contract Required Quantitation Limit (CRQL). The calibration curve shall be fitted using linear regression or weighted linear regression. The curve may be forced through zero. The curve must have a correlation coefficient ≥ 0.995. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) INITIAL AND CONTINUING CALIBRATION VERIFICATION:
Immediately after each system has been calibrated, the accuracy of the initial calibration must be verified and documented for each target analyte by the analysis of an ICV solution(s).

The CCV standard shall be analyzed at a frequency of every two hours during an analytical run. The CCV standard shall also be analyzed at the beginning of the run, and again after the last analytical sample. The percent recovery acceptable limits for ICV/CCV are 90 – 110%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. BLANK CONTAMINATION:
Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Initial calibration blank and continuing calibration blank (ICB and CCB) are used to ensure a stable instrument baseline before and during the analysis of analytical samples. The preparation blank is used to assess the level of contamination introduced to the analytical samples throughout the sample preparation process. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

The following samples have analyte results greater than or equal to method detection limits (MDLs) but less than CRQLs. The associated CCBs and/or preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Positive results were qualified (U). Non-detected analytes were not qualified. The following sample results were elevated to the CRQLs:

Antimony: P001-SW001-08202019-01, P001-SW002-08202019-01, and P001-SW004-08202019-02

Cadmium: P001-SW001-08202019-01

Lead: P004-SW001-08202019-01, P004-SW002-08202019-01, P004-SW003-08202019-01, P004-SW004-08202019-01, and P004-SW004-08202019-02

Nickel: P001-SW002-08202019-01

Potassium: P001-SW001-08202019-01

Thallium: P004-SW001-08202019-01, P004-SW002-08202019-01, P004-SW003-08202019-01, and P004-SW004-08202019-02

Field Blank: P001-FB-082019-01
The following samples have analyte results greater than CRQL and less than blank results. The associated field blank analyte result is greater than CRQL. Results will be reported at level of blank result with a "U".

Zinc: P004-SW002-08202019-01, P004-SW003-08202019-01, and P004-SW004-08202019-02

The following samples have analyte result greater than CRQL and less than 10x blank results. The associated field blank analyte result is greater than CRQL. Using professional judgment, below sample results will be estimated as J.

Zinc: P001-SW001-08202019-01 and P001-SW004-08202019-01

The following samples have analyte result greater than or equal to MDL but less than CRQL. The associated field blank analyte result is greater than MDL but less than CRQL. Positive results were qualified (U) for antimony. Non-detected analyte was not qualified.
The following sample results were elevated to the CRQLs:

Antimony: P001-SW003-08202019-01 and P001-SW004-08202019-01

Beryllium, calcium, copper, iron, magnesium, sodium, and thallium were also detected in the CCBs and/or field blank. Qualification of the data was not required for these analytes since their concentrations exceeded the CRQLs in associated samples and/or analytes were previously qualified due to CCBs.

4. INTERFERENCE CHECK SAMPLE:
The Interference Check Sample (ICS) verifies the analytical instrument's ability to overcome interferences typical of those found in samples. The laboratory should have analyzed and reported ICS results for all elements being reported from the analytical run and for all interferents (target and non-target) for these reported elements. The ICS consists of two solutions: Solution A and Solution AB. Solution A consists of the interferents, and Solution AB consists of the analytes mixed with the interferents. Results for the analysis of ICS Solution must fall within the control limits of ± 20% or less than true value -2X CRQL (whichever is greater) of the true value for the analytes and

interferents included in the solution. If results that are ≥ MDL are observed for analytes that are not present in the ICS solution, the possibility of false positives exists. If negative results are observed for analytes that are not present in the ICS solution, and their absolute value is ≥ MDL, the possibility of false negatives in the samples exists. In general, ICP sample data can be accepted if the concentrations of aluminum, calcium, iron, and magnesium in the sample are found to be less than or equal to their respective concentrations in the ICS. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

5. SPIKE SAMPLE ANALYSIS:
The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The spike Percent Recovery (%R) shall be within the established acceptance limits of 75 – 125%. However, spike recovery limits do not apply when the sample concentration is ≥ 4x the spike added. For a matrix spike analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the matrix spike sample.

The laboratory performed the MS/MSD analyses on sample P001-SW004-08202019-01. The %R were between 75-125% for all analytes. No qualifications were required.

6. DUPLICATE SAMPLE ANALYSIS:
The objective of duplicate sample analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. A control limit of 20% (for aqueous sample) and 35% (for soil samples) for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the CRQL. A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For a duplicate sample analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the duplicate sample.

No problems were found for this criterion.

7. FIELD DUPLICATE:
Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 50% for the RPD shall be used for original and duplicate sample values ≥ five times (5x) the CRQL. A control limit of the 2 x CRQL for solid matrix shall be used if either the sample or duplicate value is < 5x the CRQL. For field duplicates analysis that does not meet the technical criteria, the action was applied to only the field sample and it's duplicate.

Field duplicate sample pairs P001-SW004-08202019-01 and P001-SW004-08202019-02 did not meet the technical criteria for zinc. Sample P001-SW004-08202019-01 was previously qualified as estimated (J) due to field blank contamination and field duplicate P001-SW004-08202019-02 was previously qualified as U due to field blank contamination. Therefore, no further action was required.

8. LABORATORY CONTROL SAMPLE:

The laboratory control sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous/water, soil/sediment, wipe, and filter LCSs shall be analyzed for each analyte utilizing the same sample preparations, analytical methods, and Quality Assurance/Quality Control (QA/QC) procedures as employed for the samples. All LCS recoveries must fall within the control limits of 70-130%, except for antimony and silver which must fall within the control limits of 50-150%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

9. ICP SERIAL DILUTION:

The serial dilution of samples quantitated by inductively coupled plasma (ICP) determines whether or not significant physical or chemical interferences exist due to sample matrix. If the analyte concentration is sufficiently high [concentration in the original sample is > 50 times (50x) the Method Detection Limit (MDL)], the percent difference (%D) between the original determination and the serial dilution analysis (a five-fold dilution) after correction for dilution shall be less than 15 %D. For a serial dilution analysis that does not meet the technical criteria, the action was applied to the field sample used to prepare the serial dilution sample.

No problems were found for this criterion.

10. ICP-MS TUNE ANALYSIS:

The Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) tune serves as an initial demonstration of instrument stability and precision. Prior to calibration, the laboratory shall analyze or scan the ICP-MS tuning solution at least five times (5x) consecutively. The tuning solution contains 100 µg/L of beryllium, magnesium, cobalt, indium, and lead. The solution shall contain all required isotopes of the aforementioned elements. The laboratory shall make any adjustments necessary to bring peak width within the instrument manufacturer's specifications and adjust mass resolution to within 0.1 u over the range of 6-210 u. The relative standard deviation (RSD) of the absolute signals for all analytes in the tuning solution must be < 5%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

11. ICP-MS INTERNAL STANDARDS:

The analysis of ICP-MS internal standards determines the existence and magnitude of instrument drift and physical interferences. The criteria for evaluation of internal standard results apply to all analytical and QC samples analyzed during the run, beginning with the calibration. All samples analyzed during a run, with the exception of the ICP-MS tune, shall contain internal standards. A minimum of five internal standards shall be added to each sample. The laboratory shall monitor the same internal standards throughout the entire analytical run and shall assign each analyte to at least one internal standard. The relative intensity (%RI) in the sample shall fall within 70-130% of the response in the calibration blank. If the response in the sample falls outside of these limits, the laboratory shall reanalyze the original sample at a two-fold dilution with internal standard added.

Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

12. PERCENT SOLIDS:
The laboratory is required to perform the percent solids determination prior to sample preparation and analysis. All results of a sample with solid content less than 50% are estimated (J/UJ). Qualifications were applied to the samples and analytes as shown below.

Not Applicable

13. OTHER PROBLEMS:

None

14. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:
Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are consolidated in one single report and the other report is marked as not to be used. The following sample results were reported from a dilution analysis.

None

ANALYSIS: HERBICIDES

1. HOLDING TIME:
The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". Use professional judgment to qualify the non-detects (sample quantitation limits), if the holding times are grossly exceeded. Qualifications were applied to the samples and analytes as shown below.

All holding times were met.

2. SURROGATES:
All samples are spiked with a surrogate compound prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery were outside the laboratory QC limits of 30 – 150%, qualifications were applied to samples and analytes as shown below.

All recoveries were within the control limits. Data qualification was not required.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD):
MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

Sample P001-SW004-08202019-01 was used for MS/MSD analyses. The MS/MSD recoveries exceeded the laboratory control limits for dichloroprop (120/122%), 2,4-D (134/134%), 2,4,5-T (132/134%), and 2,4-DB (156/160%). Since, dichloroprop, 2,4-D, 2,4,5-T, and 2,4-DB were not detected in sample P001-SW004-08202019-01; no action was required.

4. Laboratory Control Samples (LCS):
LCS data provides information on the accuracy of the analytical method and laboratory performance. If LCS recoveries fell outside of the acceptable limits, qualifications were applied to the associated samples and compounds as shown below.

All recoveries were within the control limits.

5. BLANK CONTAMINATION:
Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the concentration of the analyte in the blank, the analytes are qualified as non-detects U. Qualifications were applied to the samples and analytes as shown below.
A) Method blank contamination:

Target analytes were not detected.

B) Field or rinse blank contamination:

Target analytes were not detected in field blank P001-FB-082019-01.

6. CALIBRATION:
Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Percent Relative Standard Deviation (%RSD):
For herbicide analysis, if %RSD exceeds 20% for any analytes, qualify all associated positive results "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Difference (%D):
For initial calibration verification (ICV), if the %D exceeds 30% for any analytes, estimate (J) all associated positive results and use professional judgment to qualify non-detects. For opening continuing calibration verification (CCV), or closing CCV that is used as an opening CCV for the next 12-hour period, if %D exceeds 15% for any analytes, qualify all associated positive results "J" and non-detects "UJ". For closing CCV, if %D exceeds 20% for any analytes, qualify all associated positive results "J" and non-detects "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. FIELD DUPLICATES:

Target analytes were not detected in sample P001-SW004-08202019-01 and its field duplicate sample P001-SW004-08202019-02. Data qualifications were not required.

8. COMPOUND IDENTIFICATION:
The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns. Qualifications were applied to the samples and analytes as shown below.

Target analytes were not detected in any samples.

9. METHOD NON-COMPLIANCE:

None.

10. FIELD DOCUMENTATION:

None was observed.

11. OTHER PROBLEMS:

None

12. DILUTIONS, RE-EXTRACTIONS & RE-ANALYSIS:
Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are consolidated in one single report. The following sample results were reported from a dilution analysis.

None

OTHER ANALYTES WORK TABLE

PROJECT: Former Covidien Plant Site

SAMPLING DATE: August 20, 2019

Matrix	Field Blank	Surface Water	Surface Water
Field Sample ID	P001-FB-082019-01	P001-SW001-08202019-01	P001-SW002-08202019-01
Lab Sample ID	K4463-01	K4463-02	K4463-03
Sample Weight/Volume	1000 mL	1000 mL	1000 mL
Dilution Factor	1	1	1
Herbicides (ug/L)			
Dicamba	0.30 U	0.30 U	0.30 U
Dichloroprop	0.44 U	0.44 U	0.44 U
2,4-D	0.55 U	0.55 U	0.55 U
2,4-5-TP (Silvex)	0.43 U	0.43 U	0.43 U
2,4,5-T	0.40 U	0.40 U	0.40 U
2,4-DB	0.44 U	0.44 U	0.44 U
Dinoseb	0.45 U	0.45 U	0.45 U

Matrix	Surface Water	Surface Water	Surface Water
Field Sample ID	P001-SW003-08202019-01	P001-SW004-08202019-01	P001-SW004-08202019-02[1]
Lab Sample ID	K4463-04	K4463-05	K4463-08
Sample Weight/Volume	1000 mL	1000 mL	1000 mL
Dilution Factor	1	1	1
Herbicides (ug/L)			
Dicamba	0.30 U	0.30 U	0.30 U
Dichloroprop	0.44 U	0.44 U	0.44 U
2,4-D	0.55 U	0.55 U	0.55 U
2,4-5-TP (Silvex)	0.43 U	0.43 U	0.43 U
2,4,5-T	0.40 U	0.40 U	0.40 U
2,4-DB	0.44 U	0.44 U	0.44 U
Dinoseb	0.45 U	0.45 U	0.45 U

[1] A field duplicate of P001-SW001-08202019-01
U - Not detected at the method detection limit (MDL)
ug/L - micrograms per Liter

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Cover Page

Order ID : K4463

Project ID : RFP 605

Client : Weston Solutions, Inc.

Lab Sample Number	Client Sample Number
K4463-01	P001-FB-082019-01
K4463-02	P001-SW001-08202019-01
K4463-03	P001-SW002-08202019-01
K4463-04	P001-SW003-08202019-01
K4463-05	P001-SW004-08202019-01
K4463-06	P001-SW004-08202019-01MS
K4463-07	P001-SW004-08202019-01MSD
K4463-08	P001-SW004-08202019-02

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : N. N. Pandya

APPROVED

By Nimisha Pandya, QA QC Supervisor at 12:07 pm, Sep 03, 2019

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Weston Solutions, Inc.
Project Name: RFP 605
Project # N/A
Chemtech Project # K4463
Test Name: Herbicide

A. Number of Samples and Date of Receipt:
8 Water samples were received on 08/21/2019.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide, Mercury, Metals ICP-TAL and METALS TAL+CN. This data package contains results for Herbicide.

C. Analytical Techniques:
The analysis was performed on instrument ECD_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324The analysis of Herbicides was based on method 8151A and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Retention Times were acceptable for all samples.
The MS {K4463-06MS} with File ID: PS006312.D recoveries met the requirements for all compounds except for 2,4,5-T[132%], 2,4-D[134%], 2,4-DB[156%] and DICHLORPROP[120%] due to bad matrix interference.
The MSD {K4463-07MSD} with File ID: PS006313.D recoveries met the acceptable requirements except for 2,4,5-T[134%], 2,4-D[134%], 2,4-DB[160%] and DICHLORPROP[122%] due to bad matrix interference.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .

E. Additional Comments:

Calculations of water sample :

$$\mu g/L = \frac{(Ax)\,(Vt)\,(MW)}{(ICF)\,(Vi)\,(Vs)} \times DF$$

Where:
Ax = Area for the parameter to be measured.
ICF = average calibration factor for the calibration standards.
Vt = Volume of total extract in uL (Take into account dilutions)
Is = Amount of standard injected in nanograms (ng)
Vi = Volume of extract injected.
Vs = Volume of Aqueous extracted (mL).

$$D = \frac{100 - \%\ \text{Moisture}}{100}$$

MW = molecular weight of the compound

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

APPROVED
By Nimisha Pandya, QA QC Supervisor at 12:08 pm, Sep 03, 2019

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

QA Control # A3040960

SAMPLE DATA

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-FB-082019-01	SDG No.:	K4463
Lab Sample ID:	K4463-01	Matrix:	WATER
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS006307.D	1	08/23/19 10:15	08/23/19 17:57	PB122513

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.30	U	0.30	2.00	ug/L
120-36-5	DICHLORPROP	0.44	U	0.44	2.00	ug/L
94-75-7	2,4-D	0.55	U	0.55	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.43	U	0.43	2.00	ug/L
93-76-5	2,4,5-T	0.40	U	0.40	2.00	ug/L
94-82-6	2,4-DB	0.44	U	0.44	2.00	ug/L
88-85-7	DINOSEB	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	536		43 - 172	107%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW001-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-02	Matrix:	WATER
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS006308.D	1	08/23/19 10:15	08/23/19 18:19	PB122513

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.30	U	0.30	2.00	ug/L
120-36-5	DICHLORPROP	0.44	U	0.44	2.00	ug/L
94-75-7	2,4-D	0.55	U	0.55	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.43	U	0.43	2.00	ug/L
93-76-5	2,4,5-T	0.40	U	0.40	2.00	ug/L
94-82-6	2,4-DB	0.44	U	0.44	2.00	ug/L
88-85-7	DINOSEB	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	514		43 - 172	103%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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5

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW002-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-03	Matrix:	WATER
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS006309.D	1	08/23/19 10:15	08/23/19 18:41	PB122513

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.30	U	0.30	2.00	ug/L
120-36-5	DICHLORPROP	0.44	U	0.44	2.00	ug/L
94-75-7	2,4-D	0.55	U	0.55	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.43	U	0.43	2.00	ug/L
93-76-5	2,4,5-T	0.40	U	0.40	2.00	ug/L
94-82-6	2,4-DB	0.44	U	0.44	2.00	ug/L
88-85-7	DINOSEB	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	474		43 - 172	95%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW003-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-04	Matrix:	WATER
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS006310.D	1	08/23/19 10:15	08/23/19 19:03	PB122513

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.30	U	0.30	2.00	ug/L
120-36-5	DICHLORPROP	0.44	U	0.44	2.00	ug/L
94-75-7	2,4-D	0.55	U	0.55	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.43	U	0.43	2.00	ug/L
93-76-5	2,4,5-T	0.40	U	0.40	2.00	ug/L
94-82-6	2,4-DB	0.44	U	0.44	2.00	ug/L
88-85-7	DINOSEB	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	458		43 - 172	92%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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5

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW004-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-05	Matrix:	WATER
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS006311.D	1	08/23/19 10:15	08/23/19 19:25	PB122513

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.30	U	0.30	2.00	ug/L
120-36-5	DICHLORPROP	0.44	U	0.44	2.00	ug/L
94-75-7	2,4-D	0.55	U	0.55	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.43	U	0.43	2.00	ug/L
93-76-5	2,4,5-T	0.40	U	0.40	2.00	ug/L
94-82-6	2,4-DB	0.44	U	0.44	2.00	ug/L
88-85-7	DINOSEB	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	499		43 - 172	100%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW004-08202019-02	SDG No.:	K4463
Lab Sample ID:	K4463-08	Matrix:	WATER
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS006314.D	1	08/23/19 10:15	08/23/19 20:31	PB122513

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.30	U	0.30	2.00	ug/L
120-36-5	DICHLORPROP	0.44	U	0.44	2.00	ug/L
94-75-7	2,4-D	0.55	U	0.55	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.43	U	0.43	2.00	ug/L
93-76-5	2,4,5-T	0.40	U	0.40	2.00	ug/L
94-82-6	2,4-DB	0.44	U	0.44	2.00	ug/L
88-85-7	DINOSEB	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	527		43 - 172	105%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	K4463	**OrderDate:**	8/21/2019 12:33:35 PM
Client:	Weston Solutions, Inc.	**Project:**	RFP 605
Contact:	Smita Sumbaly	**Location:**	H13

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
K4463-01	**P001-FB-082019-01**	**WATER**			**08/20/19**			**08/21/19**
			Herbicide	8151A		08/23/19	08/23/19	
K4463-02	**P001-SW001-082020 19-01**	**WATER**			**08/20/19**			**08/21/19**
			Herbicide	8151A		08/23/19	08/23/19	
K4463-03	**P001-SW002-082020 19-01**	**WATER**			**08/20/19**			**08/21/19**
			Herbicide	8151A		08/23/19	08/23/19	
K4463-04	**P001-SW003-082020 19-01**	**WATER**			**08/20/19**			**08/21/19**
			Herbicide	8151A		08/23/19	08/23/19	
K4463-05	**P001-SW004-082020 19-01**	**WATER**			**08/20/19**			**08/21/19**
			Herbicide	8151A		08/23/19	08/23/19	
K4463-08	**P001-SW004-082020 19-02**	**WATER**			**08/20/19**			**08/21/19**
			Herbicide	8151A		08/23/19	08/23/19	

OTHER ANALYTES WORK TABLE

PROJECT: Former Covidien Plant Site

SAMPLING DATE: August 20, 2019

SAMPLE #/CONCENTRATION (ug/L)

Matrix:	Field Blank	Surface Water	Surface Water	Surface Water
Field Sample ID	P001-FB-082019-01	P001-SW001-08202019-01	P001-SW002-08202019-01	P001-SW003-08202019-01
Lab Sample ID	K4463-01	K4463-02	K4463-03	K4463-04
Dilution Factor	1	1	1	1
Inorganics				
Aluminum	3.67 U	**7.81 J**	**210**	**7.18 J**
Antimony	**0.27 J**	2.0 U	2.0 U	2.0 U
Arsenic	0.115 U	**0.78 J**	**1.07**	**1.46**
Barium	0.184 U	**263**	**23.4**	**166**
Beryllium	0.068 U	0.068 U	0.068 U	0.068 U
Cadmium	0.26 U	1.0 U	0.26 U	0.26 U
Calcium	14.3 U	**39300**	**39100**	**28100**
Chromium	0.075 U	**1.01 J**	**0.68 J**	**0.63 J**
Cobalt	0.053 U	**0.23 J**	0.053 U	**0.12 J**
Copper	0.487 U	**5.95**	**13.5**	**6.28**
Iron	2.69 U	**1670**	**94.7**	**909**
Lead	**0.05 J**	1.0 U	1.0 U	1.0 U
Magnesium	**6.48 J**	**1400**	**709**	**2480**
Manganese	0.073 U	**41.5**	**1.05**	**40.4**
Mercury	**0.043 J**	**0.043 J**	0.028 U	0.028 U
Nickel	0.068 U	**1.37**	1.0 U	1.1 U
Potassium	**38.3 J**	500 U	**19800**	**1110**
Selenium	3.3 U	3.3 U	3.3 U	3.3 U
Silver	0.3 U	**1.51**	**0.86 J**	**0.37 J**
Sodium	**35.9 J**	**598**	**6070**	**844**
Thallium	**0.11 J**	1.0 U	1.0 U	1.0 U
Vanadium	0.07 U	**0.3 J**	**2.07 J**	**0.33 J**
Zinc	**17.7**	**28.4 J**	17.7 U	17.7 U
Cyanide	2.4 U	2.4 U	2.4 U	2.4 U

U - non-detected analyte

J - estimated value

OTHER ANALYTES WORK TABLE

PROJECT: Former Covidien Plant Site

SAMPLING DATE: August 20, 2019

SAMPLE #/CONCENTRATION (ug/L)

Matrix:	Surface Water	Surface Water
Field Sample ID	P001-SW004-08202019-01	P001-SW004-08202019-02[1]
Lab Sample ID	K4463-05	K4463-08
Dilution Factor	1	1
Inorganics		
Aluminum	**15 J**	**15.9 J**
Antimony	2.0 U	2.0 U
Arsenic	**0.72 J**	**0.7 J**
Barium	**39.2**	**38.7**
Beryllium	0.068 U	**0.08 J**
Cadmium	0.26 U	0.26 U
Calcium	**28800**	**29000**
Chromium	**0.54 J**	**0.53 J**
Cobalt	**0.09 J**	**0.11 J**
Copper	**4.18**	**3.44**
Iron	**466**	**466**
Lead	1.0 U	1.0 U
Magnesium	**2030**	**2050**
Manganese	**39.3**	**39.7**
Mercury	0.028 U	0.028 U
Nickel	**1.11**	**1.10**
Potassium	**8720**	**8800**
Selenium	3.3 U	3.3 U
Silver	0.3 U	0.3 U
Sodium	**4030**	**4020**
Thallium	0.03 U	1.0 U
Vanadium	**0.48 J**	**0.46 J**
Zinc	**27.7 J**	17.7 U
Cyanide	2.4 U	2.4 U

U - non-detected analyte

J - estimated value

[1] A field duplicate of P001-SW004-08202019-01

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CASE NARRATIVE

Weston Solutions, Inc.
Project Name: RFP 605
Project # N/A
Chemtech Project # K4463
Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:
8 Water samples were received on 08/21/2019.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide, Mercury, Metals ICP-TAL and METALS TAL+CN. This data package contains results for Metals ICP-TAL,Mercury.

C. Analytical Techniques:
The analysis and digestion of Mercury was based on 245.1, The analysis of Metals ICP-TAL was based on method 6020B and digestion based on method 3010 (waters).

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Calculation:

1. Calculation for ICP-MS Water Sample:

$$\text{Concentration or Result } (\mu g/L) = C \times \frac{V_f}{V_i} \times DF$$

Where,

C = Instrument value in ppb (The average of all replicate integrations)
V_f = Final digestion volume (mL)
V_i = Initial aliquot amount (mL) (Sample amount taken in prep)
DF = Dilution Factor

2. Calculation for Hg Water Sample:

$$\text{Concentration or Result } (\mu g/L) = C \times DF$$

Where,

C = Instrument response in µg/L from the calibration curve.
DF = Dilution Factor

F. Additional Comments:

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_ N. N. Pandya

APPROVED
By Nimisha Pandya, QA QC Supervisor at 12:08 pm, Sep 03, 2019

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CASE NARRATIVE

Weston Solutions, Inc.
Project Name: RFP 605
Project # N/A
Chemtech Project # K4463
Test Name: Cyanide

A. Number of Samples and Date of Receipt:
8 Water samples were received on 08/21/2019.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide, Mercury, Metals ICP-TAL and METALS TAL+CN. This data package contains results for Cyanide.

C. Analytical Techniques:
The analysis of Cyanide was based on method 9012B.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

E. Calculation:

1. Calculation for CN Water Sample:

$$\text{Concentration or Result (mg/L)} = C \times \frac{V_f}{V_i} \times DF \times \frac{1}{1000}$$

Where,

C = Instrument response in ug/L CN from the calibration curve
V_f = Final prepared(absorbing solution) volume (mL)
V_i = Initial aliquot amount (mL) (Sample amount taken in prep)
DF = Dilution Factor

F. Additional Comments:

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed

above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_ N. N. Pandya

APPROVED

By Nimisha Pandya, QA QC Supervisor at 12:08 pm, Sep 03, 2019

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers **"P"** for ICP instrument **"PM"** for ICP when Microwave Digestion is used **"CV"** for Manual Cold Vapor AA **"AV"** for automated Cold Vapor AA **"CA"** for MIDI-Distillation Spectrophotometric **"AS"** for Semi -Automated Spectrophotometric **"C"** for Manual Spectrophotometric **"T"** for Titrimetric **"NR"** for analyte not required to be analyzed
OR	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

SAMPLE DATA

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-FB-082019-01	SDG No.:	K4463
Lab Sample ID:	K4463-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	3.67	U	1	3.67	20.0	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-36-0	Antimony	0.27	J	1	0.076	2.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-38-2	Arsenic	0.12	U	1	0.12	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-39-3	Barium	0.18	U	1	0.18	10.0	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-41-7	Beryllium	0.068	U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-43-9	Cadmium	0.26	U	1	0.26	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-70-2	Calcium	14.3	U	1	14.3	500	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-47-3	Chromium	0.075	U	1	0.075	2.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-48-4	Cobalt	0.053	U	1	0.053	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-50-8	Copper	0.49	U	1	0.49	2.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7439-89-6	Iron	2.69	U	1	2.69	50.0	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7439-92-1	Lead	0.050	J	1	0.019	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7439-95-4	Magnesium	6.48	J	1	3.74	500	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7439-96-5	Manganese	0.073	U	1	0.073	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7439-97-6	Mercury	0.043	J	1	0.028	0.20	ug/L	08/22/19 15:21	08/23/19 10:48	E245.1
7440-02-0	Nickel	0.068	U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-09-7	Potassium	38.3	J	1	19.9	500	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7782-49-2	Selenium	3.30	U	1	3.30	5.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-22-4	Silver	0.30	U	1	0.30	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-23-5	Sodium	35.9	J	1	28.5	500	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-28-0	Thallium	0.11	J	1	0.030	1.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-62-2	Vanadium	0.070	U	1	0.070	5.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020
7440-66-6	Zinc	17.7		1	0.56	2.00	ug/L	08/30/19 09:54	08/30/19 20:02	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
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* = indicates the duplicate analysis is not within control limits.
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OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW001-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	7.81	J	1	3.67	20.0	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-36-0	Antimony 2.0	1.39	J U	1	0.076	2.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-38-2	Arsenic	0.78	J	1	0.12	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-39-3	Barium	263		1	0.18	10.0	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-41-7	Beryllium	0.068	U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-43-9	Cadmium 1.0	0.47	J U	1	0.26	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-70-2	Calcium	39300		1	14.3	500	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-47-3	Chromium	1.01	J	1	0.075	2.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-48-4	Cobalt	0.23	J	1	0.053	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-50-8	Copper	5.95		1	0.49	2.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7439-89-6	Iron	1670		1	2.69	50.0	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7439-92-1	Lead 1.0	0.49	J U	1	0.019	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7439-95-4	Magnesium	1400		1	3.74	500	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7439-96-5	Manganese	41.5		1	0.073	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7439-97-6	Mercury	0.043	J	1	0.028	0.20	ug/L	08/22/19 15:21	08/23/19 10:50	E245.1
7440-02-0	Nickel	1.37		1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-09-7	Potassium 500	266	J U	1	19.9	500	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7782-49-2	Selenium	3.30	U	1	3.30	5.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-22-4	Silver	1.51		1	0.30	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-23-5	Sodium	598		1	28.5	500	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-28-0	Thallium 1.0	0.75	J U	1	0.030	1.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-62-2	Vanadium	0.30	J	1	0.070	5.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020
7440-66-6	Zinc	28.4	J	1	0.56	2.00	ug/L	08/30/19 09:54	08/30/19 20:05	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW002-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-03	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	210		1	3.67	20.0	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-36-0	Antimony 2.0	1.16	J U	1	0.076	2.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-38-2	Arsenic	1.07		1	0.12	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-39-3	Barium	23.4		1	0.18	10.0	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-41-7	Beryllium	0.068	U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-43-9	Cadmium	0.26	U	1	0.26	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-70-2	Calcium	39100		1	14.3	500	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-47-3	Chromium	0.68	J	1	0.075	2.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-48-4	Cobalt	0.053	U	1	0.053	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-50-8	Copper	13.5		1	0.49	2.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7439-89-6	Iron	94.7		1	2.69	50.0	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7439-92-1	Lead 1.0	0.88	J U	1	0.019	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7439-95-4	Magnesium	709		1	3.74	500	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7439-96-5	Manganese	1.05		1	0.073	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7439-97-6	Mercury	0.028	U	1	0.028	0.20	ug/L	08/22/19 15:21	08/23/19 10:53	E245.1
7440-02-0	Nickel 1.0	0.26	J U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-09-7	Potassium	19800		1	19.9	500	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7782-49-2	Selenium	3.30	U	1	3.30	5.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-22-4	Silver	0.86	J	1	0.30	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-23-5	Sodium	6070		1	28.5	500	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-28-0	Thallium 1.0	0.11	J U	1	0.030	1.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-62-2	Vanadium	2.07	J	1	0.070	5.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020
7440-66-6	Zinc 17.7	11.9	U	1	0.56	2.00	ug/L	08/30/19 09:54	08/30/19 20:09	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW003-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	7.18	J	1	3.67	20.0	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-36-0	Antimony 2.0	0.82	J U	1	0.076	2.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-38-2	Arsenic	1.46		1	0.12	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-39-3	Barium	166		1	0.18	10.0	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-41-7	Beryllium	0.068	U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-43-9	Cadmium	0.26	U	1	0.26	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-70-2	Calcium	28100		1	14.3	500	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-47-3	Chromium	0.63	J	1	0.075	2.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-48-4	Cobalt	0.12	J	1	0.053	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-50-8	Copper	6.28		1	0.49	2.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7439-89-6	Iron	909		1	2.69	50.0	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7439-92-1	Lead 1.0	0.050	J U	1	0.019	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7439-95-4	Magnesium	2480		1	3.74	500	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7439-96-5	Manganese	40.4		1	0.073	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7439-97-6	Mercury	0.028	U	1	0.028	0.20	ug/L	08/22/19 15:21	08/23/19 10:55	E245.1
7440-02-0	Nickel	1.10		1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-09-7	Potassium	1110		1	19.9	500	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7782-49-2	Selenium	3.30	U	1	3.30	5.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-22-4	Silver	0.37	J	1	0.30	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-23-5	Sodium	844		1	28.5	500	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-28-0	Thallium 1.0	0.040	J U	1	0.030	1.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-62-2	Vanadium	0.33	J	1	0.070	5.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020
7440-66-6	Zinc 17.7	14.5	U	1	0.56	2.00	ug/L	08/30/19 09:54	08/30/19 20:13	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW004-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-05	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	15.0	J	1	3.67	20.0	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-36-0	Antimony 2.0 ~~1.40~~ J U			1	0.076	2.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-38-2	Arsenic	0.72	J	1	0.12	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-39-3	Barium	39.2		1	0.18	10.0	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-41-7	Beryllium	0.068	U	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-43-9	Cadmium	0.26	U	1	0.26	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-70-2	Calcium	28800		1	14.3	500	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-47-3	Chromium	0.54	J	1	0.075	2.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-48-4	Cobalt	0.090	J	1	0.053	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-50-8	Copper	4.18		1	0.49	2.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7439-89-6	Iron	466		1	2.69	50.0	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7439-92-1	Lead 1.0 ~~0.49~~ J U			1	0.019	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7439-95-4	Magnesium	2030		1	3.74	500	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7439-96-5	Manganese	39.3		1	0.073	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7439-97-6	Mercury	0.028	U	1	0.028	0.20	ug/L	08/22/19 15:21	08/23/19 11:02	E245.1
7440-02-0	Nickel	1.11		1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-09-7	Potassium	8720		1	19.9	500	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7782-49-2	Selenium	3.30	U	1	3.30	5.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-22-4	Silver	0.30	U	1	0.30	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-23-5	Sodium	4030		1	28.5	500	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-28-0	Thallium	0.030	U	1	0.030	1.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-62-2	Vanadium	0.48	J	1	0.070	5.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020
7440-66-6	Zinc	27.7	J	1	0.56	2.00	ug/L	08/30/19 09:54	08/30/19 20:16	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW004-08202019-02	SDG No.:	K4463
Lab Sample ID:	K4463-08	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	15.9	J	1	3.67	20.0	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-36-0	Antimony 2.0 ~~1.34~~	~~J~~ U		1	0.076	2.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-38-2	Arsenic	0.70	J	1	0.12	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-39-3	Barium	38.7		1	0.18	10.0	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-41-7	Beryllium	0.080	J	1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-43-9	Cadmium	0.26	U	1	0.26	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-70-2	Calcium	29000		1	14.3	500	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-47-3	Chromium	0.53	J	1	0.075	2.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-48-4	Cobalt	0.11	J	1	0.053	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-50-8	Copper	3.44		1	0.49	2.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7439-89-6	Iron	466		1	2.69	50.0	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7439-92-1	Lead 1.0 ~~0.35~~	~~J~~ U		1	0.019	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7439-95-4	Magnesium	2050		1	3.74	500	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7439-96-5	Manganese	39.7		1	0.073	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7439-97-6	Mercury	0.028	U	1	0.028	0.20	ug/L	08/22/19 15:21	08/23/19 11:18	E245.1
7440-02-0	Nickel	1.10		1	0.068	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-09-7	Potassium	8800		1	19.9	500	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7782-49-2	Selenium	3.30	U	1	3.30	5.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-22-4	Silver	0.30	U	1	0.30	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-23-5	Sodium	4020		1	28.5	500	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-28-0	Thallium 1.0 ~~0.17~~	~~J~~ U		1	0.030	1.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-62-2	Vanadium	0.46	J	1	0.070	5.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020
7440-66-6	Zinc 17.7 ~~11.6~~	U		1	0.56	2.00	ug/L	08/30/19 09:54	08/30/19 21:06	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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CHEMTECH

284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	K4463	**OrderDate:**	8/21/2019 12:33:35 PM
Client:	Weston Solutions, Inc.	**Project:**	RFP 605
Contact:	Smita Sumbaly	**Location:**	H13

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
K4463-01	**P001-FB-082019-01**	**Water**			**08/20/19**			**08/21/19**
			Mercury	245.1		08/22/19	08/23/19	
			Metals ICP-TAL	6020B		08/30/19	08/30/19	
K4463-02	**P001-SW001-082020 19-01**	**Water**			**08/20/19**			**08/21/19**
			Mercury	245.1		08/22/19	08/23/19	
			Metals ICP-TAL	6020B		08/30/19	08/30/19	
K4463-03	**P001-SW002-082020 19-01**	**Water**			**08/20/19**			**08/21/19**
			Mercury	245.1		08/22/19	08/23/19	
			Metals ICP-TAL	6020B		08/30/19	08/30/19	
K4463-04	**P001-SW003-082020 19-01**	**Water**			**08/20/19**			**08/21/19**
			Mercury	245.1		08/22/19	08/23/19	
			Metals ICP-TAL	6020B		08/30/19	08/30/19	
K4463-05	**P001-SW004-082020 19-01**	**Water**			**08/20/19**			**08/21/19**
			Mercury	245.1		08/22/19	08/23/19	
			Metals ICP-TAL	6020B		08/30/19	08/30/19	
K4463-08	**P001-SW004-082020 19-02**	**Water**			**08/20/19**			**08/21/19**
			Mercury	245.1		08/22/19	08/23/19	
			Metals ICP-TAL	6020B		08/30/19	08/30/19	

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19 16:15
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-FB-082019-01	SDG No.:	K4463
Lab Sample ID:	K4463-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	U	1	0.0024	0.0050	mg/L	08/22/19 11:15	08/22/19 16:59	9012B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
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N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19 11:40
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW001-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	U	1	0.0024	0.0050	mg/L	08/22/19 11:15	08/22/19 16:59	9012B

Comments:

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N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19 11:45
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW002-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	U	1	0.0024	0.0050	mg/L	08/22/19 11:15	08/22/19 16:59	9012B

Comments:

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19 11:35
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW003-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	U	1	0.0024	0.0050	mg/L	08/22/19 11:15	08/22/19 16:59	9012B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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H = Sample Analysis Out Of Hold Time

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B = Analyte Found in Associated Method Blank
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OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19 11:30
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW004-08202019-01	SDG No.:	K4463
Lab Sample ID:	K4463-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	U	1	0.0024	0.0050	mg/L	08/22/19 11:15	08/22/19 16:59	9012B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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H = Sample Analysis Out Of Hold Time

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Weston Solutions, Inc.	Date Collected:	08/20/19 12:00
Project:	RFP 605	Date Received:	08/21/19
Client Sample ID:	P001-SW004-08202019-02	SDG No.:	K4463
Lab Sample ID:	K4463-08	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.0024	U	1	0.0024	0.0050	mg/L	08/22/19 11:15	08/22/19 17:06	9012B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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CHEMTECH

284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	K4463	**OrderDate:**	8/21/2019 12:33:35 PM
Client:	Weston Solutions, Inc.	**Project:**	RFP 605
Contact:	Smita Sumbaly	**Location:**	H13

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
K4463-01	**P001-FB-082019-01**	**WATER**			**08/20/19 16:15**			**08/21/19**
			Cyanide	9012B		08/22/19	08/22/19 16:59	
K4463-02	**P001-SW001-082020 19-01**	**WATER**			**08/20/19 11:40**			**08/21/19**
			Cyanide	9012B		08/22/19	08/22/19 16:59	
K4463-03	**P001-SW002-082020 19-01**	**WATER**			**08/20/19 11:45**			**08/21/19**
			Cyanide	9012B		08/22/19	08/22/19 16:59	
K4463-04	**P001-SW003-082020 19-01**	**WATER**			**08/20/19 11:35**			**08/21/19**
			Cyanide	9012B		08/22/19	08/22/19 16:59	
K4463-05	**P001-SW004-082020 19-01**	**WATER**			**08/20/19 11:30**			**08/21/19**
			Cyanide	9012B		08/22/19	08/22/19 16:59	
K4463-08	**P001-SW004-082020 19-02**	**WATER**			**08/20/19 12:00**			**08/21/19**
			Cyanide	9012B		08/22/19	08/22/19 17:06	

SHIPPING DOCUMENTS

K4463

USEPA
DateShipped: 8/21/2019
CarrierName: Hand-Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
RFA#685 ~~Site #: A27U~~ SQ
Contact Name: Sean Quinn
Contact Phone: 732-425-1175

No: 2-082019-130945-0009
Cooler #: 1
Lab: Chemtech Consulting Group
Lab Phone: (908) 789-8900

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-FB-082019-01	P001-SW004	Herbicides	Surface Water	8/20/2019	16:15	1	1 liter amber	<6 C	
	P001-FB-082019-01	P001-SW004	TAL Metals + Hg	Surface Water	8/20/2019	16:15	1	1 L poly	HNO3 pH<2	
	P001-FB-082019-01	P001-SW004	Cyanide	Surface Water	8/20/2019	16:15	1	1 L poly	NaOH pH>12	
	P001-SW001-08202019-01	P001-SW001	Herbicides	Surface Water	8/20/2019	11:40	1	1 liter amber	<6 C	
	P001-SW001-08202019-01	P001-SW001	TAL Metals + Hg	Surface Water	8/20/2019	11:40	1	1 L poly	HNO3 pH<2	
	P001-SW001-08202019-01	P001-SW001	Cyanide	Surface Water	8/20/2019	11:40	1	1 L poly	NaOH pH>12	
	P001-SW002-08202019-01	P001-SW002	Herbicides	Surface Water	8/20/2019	11:45	1	1 liter amber	<6 C	
	P001-SW002-08202019-01	P001-SW002	TAL Metals + Hg	Surface Water	8/20/2019	11:45	1	1 L poly	HNO3 pH<2	
	P001-SW002-08202019-01	P001-SW002	Cyanide	Surface Water	8/20/2019	11:45	1	1 L poly	NaOH pH>12	
	P001-SW003-08202019-01	P001-SW003	Herbicides	Surface Water	8/20/2019	11:35	1	1 liter amber	<6 C	

Special Instructions: Analyze for Herbicides and TAL Metals + Hg and CN, TAT= 21 days preliminary, 42 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Sean.Quinn@westonsolutions.com

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Analytes	Sean Quinn START V	8/21/19 12:18	Steve Lin CHEMTECH	8/21/19 R=25	5.7°C, 2.9°C
					IR-Gun-1
					C.F Temp Blank Present SK 8/21/19

SK 8/21/19

K4463

USEPA
DateShipped: 8/21/2019
CarrierName: Hand-Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
RPM# 603 — ~~Site #: A27U~~ SQ
Contact Name: Sean Quinn
Contact Phone: 732-425-1175

No: 2-082019-130945-0009
Cooler #: 1
Lab: Chemtech Consulting Group
Lab Phone: (908) 789-8900

Lab #	Sample #	Location	Analyses	Matrix	Sample Date	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-SW003-08202019-01	P001-SW003	TAL Metals + Hg	Surface Water	8/20/2019	11:35	1	1 L poly	HNO3 pH<2	
	P001-SW003-08202019-01	P001-SW003	Cyanide	Surface Water	8/20/2019	11:35	1	1 L poly	NaOH pH>12	
	P001-SW004-08202019-01	P001-SW004	Herbicides	Surface Water	8/20/2019	11:30	3	1 liter amber	<6 C	
	P001-SW004-08202019-01	P001-SW004	TAL Metals + Hg	Surface Water	8/20/2019	11:30	3	1 L poly	HNO3 pH<2	
	P001-SW004-08202019-01	P001-SW004	Cyanide	Surface Water	8/20/2019	11:30	3	1 L poly	NaOH pH>12	
	P001-SW004-08202019-02	P001-SW004	Herbicides	Surface Water	8/20/2019	12:00	1	1 liter amber	<6 C	
	P001-SW004-08202019-02	P001-SW004	TAL Metals + Hg	Surface Water	8/20/2019	12:00	1	1 L poly	HNO3 pH<2	
	P001-SW004-08202019-02	P001-SW004	Cyanide	Surface Water	8/20/2019	12:00	1	1 L poly	NaOH pH>12	

Special Instructions: Analyze for Herbicides and TAL Metals + Hg and CN, TAT= 21 days preliminary, 42 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Sean.Quinn@westonsolutions.com

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
8 Samples / Aluminum	Sean Quinn START	8/21/19 12:16	Steven Lin CHEMTECH	8/21/19 12:25	5.7°C, 2.9°C
					IR Gun-1,
					Temp Blank present

SK 8/21/19

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	EP-W-14-030
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Florida	E87935
Maine	2012025
Maryland	296
New Hampshire	255413
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-13-00380
Texas	T104704488-13-5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory
2890 Woodbridge Avenue
Edison , New Jersey 08837
732-906-6886 Phone
732-906-6165 Fax

October 02, 2019

Smita Sumbaly
Weston Solutions Inc.
205 Campus Drive
Edison, NJ 08837

RE: Former Covidien Plant - 1908032

Enclosed are the results of analyses for samples received by the laboratory on 08/21/2019. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 1908032 and contact the laboratory.

Sincerely,

John R. Bourbon
Chief, DESA/LB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

Project Narrative:

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

Condition Comments

None

Comment(s):

PFAS Analysis:

The Laboratory processes a "Method Blank" (MB) quality control sample for each batch of samples. The MB sample is trace pure water that goes through the entire analytical process and is treated the same as the environmental samples in the batch. In this way, a laboratory we can identify any contamination that is introduced during the analytical process. The Laboratory's MB sample had a detection for PFHxS of 1.9 ng/L. The remaining 17 PFAS compounds were not detected in the Laboratory's MB sample.

Due to the result identified in the Laboratory's MB sample, all PFHxS results that are within 10X the result found in the MB sample were qualified with a "K". This qualifier was assigned to indicate that the results are biased high due to contribution of the contamination stemming from the analytical process. Those qualified PFHxS results that are at or near the level found in the Laboratory's MB are most impacted/influenced by the contamination while those that are significantly above the level found in the Laboratory's MB are much less impacted/influenced, i.e., the higher the result is above the level found in the blank, the less the impact/influence of the contamination stemming from the Laboratory's MB on that result.

Data Qualifier(s):

U- The analyte was not detected at or above the Reporting Limit.
J- The identification of the analyte is acceptable; the reported value is an estimate.
K- The identification of the analyte is acceptable; the reported value may be biased high.

L- The identification of the analyte is acceptable; the reported value may be biased low.
NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

Reporting Limit(s):

The Laboratory was able to achieve the appropriate limit for each analyte requested.

SUMMARY REPORT FOR SAMPLES

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
P001-FB-082019-01	1908032-01	Aqueous	08/20/2019 16:15	08/21/2019 14:45
P001-SW001-08202019-01	1908032-02	Aqueous	08/20/2019 11:40	08/21/2019 14:45
P001-SW002-08202019-01	1908032-03	Aqueous	08/20/2019 11:45	08/21/2019 14:45
P001-SW003-08202019-01	1908032-04	Aqueous	08/20/2019 11:35	08/21/2019 14:45
P001-SW004-08202019-01	1908032-05	Aqueous	08/20/2019 11:30	08/21/2019 14:45
P001-SW004-08202019-02	1908032-06	Aqueous	08/20/2019 12:00	08/21/2019 14:45

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

SUMMARY REPORT FOR METHODS

Analysis	Method	Certification	Matrix
Perfluorinated alkyl acids (PFAAs)	EPA 537 SOP C-135 Rev 1.0		Aqueous

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: P001-FB-082019-01				Sample ID: 1908032-01	
PFAAS, LCMS-MS					
11Cl-PF3OUdS	---	U	3.53	ng/L	
9Cl-PF3ONS	---	U	3.53	ng/L	
GENX	---	U	3.53	ng/L	
ADONA	---	U	3.53	ng/L	
NEtFOSAA	---	U	3.53	ng/L	
NMeFOSAA	---	U	3.53	ng/L	
PFBS	---	U	3.53	ng/L	
PFDA	---	U	3.53	ng/L	
PFDoA	---	U	3.53	ng/L	
PFHpA	---	U	3.53	ng/L	
PFHxA	---	U	3.53	ng/L	
PFHxS	---	U	3.53	ng/L	
PFNA	---	U	3.53	ng/L	
PFOA	---	U	3.53	ng/L	
PFOS	---	U	3.53	ng/L	
PFTeDA	---	U	3.53	ng/L	
PFTrDA	---	U	3.53	ng/L	
PFUdA	---	U	3.53	ng/L	
Field ID: P001-SW001-08202019-01				Sample ID: 1908032-02	
PFAAS, LCMS-MS					
11Cl-PF3OUdS	---	U L	3.51	ng/L	
9Cl-PF3ONS	---	U	3.51	ng/L	
GENX	---	U L	3.51	ng/L	
ADONA	---	U	3.51	ng/L	
NEtFOSAA	---	U L	3.51	ng/L	
NMeFOSAA	---	U L	3.51	ng/L	
PFBS	32.9		3.51	ng/L	
PFDA	---	U L	3.51	ng/L	

NOTE: The results recorded in this report relate only to the samples as received on the date and at the time noted

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: P001-SW001-08202019-01				Sample ID: 1908032-02	
PFAAS, LCMS-MS					
PFDoA	---	U L	3.51	ng/L	
PFHpA	---	U L	3.51	ng/L	
PFHxA	---	U L	3.51	ng/L	
PFHxS	5.52	K	3.51	ng/L	
PFNA	---	U L	3.51	ng/L	
PFOA	---	U L	3.51	ng/L	
PFOS	9.88		3.51	ng/L	
PFTeDA	---	U L	3.51	ng/L	
PFTrDA	5.25	L	3.51	ng/L	
PFUdA	---	U L	3.51	ng/L	
Field ID: P001-SW002-08202019-01				Sample ID: 1908032-03	
PFAAS, LCMS-MS					
11Cl-PF3OUdS	---	U	3.57	ng/L	
9Cl-PF3ONS	---	U	3.57	ng/L	
GENX	---	U	3.57	ng/L	
ADONA	---	U	3.57	ng/L	
NEtFOSAA	15.5		3.57	ng/L	
NMeFOSAA	5.50		3.57	ng/L	
PFBS	---	U	3.57	ng/L	
PFDA	---	U	3.57	ng/L	
PFDoA	---	U	3.57	ng/L	
PFHpA	---	U	3.57	ng/L	
PFHxA	---	U	3.57	ng/L	
PFHxS	48.8		3.57	ng/L	
PFNA	---	U	3.57	ng/L	
PFOA	22.9		3.57	ng/L	
PFOS	255		35.7	ng/L	

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: P001-SW002-08202019-01				Sample ID: 1908032-03	
PFAAS, LCMS-MS					
PFTeDA	---	U	3.57	ng/L	
PFTrDA	---	U	3.57	ng/L	
PFUdA	---	U	3.57	ng/L	
Field ID: P001-SW003-08202019-01				Sample ID: 1908032-04	
PFAAS, LCMS-MS					
11Cl-PF3OUdS	---	U	3.46	ng/L	
9Cl-PF3ONS	---	U	3.46	ng/L	
GENX	---	U	3.46	ng/L	
ADONA	---	U	3.46	ng/L	
NEtFOSAA	---	U L	3.46	ng/L	
NMeFOSAA	---	U L	3.46	ng/L	
PFBS	---	U	3.46	ng/L	
PFDA	---	U	3.46	ng/L	
PFDoA	---	U	3.46	ng/L	
PFHpA	---	U	3.46	ng/L	
PFHxA	---	U	3.46	ng/L	
PFHxS	---	U	3.46	ng/L	
PFNA	---	U	3.46	ng/L	
PFOA	---	U	3.46	ng/L	
PFOS	3.46		3.46	ng/L	
PFTeDA	---	U	3.46	ng/L	
PFTrDA	---	U	3.46	ng/L	
PFUdA	---	U	3.46	ng/L	
Field ID: P001-SW004-08202019-01				Sample ID: 1908032-05	
PFAAS, LCMS-MS					
11Cl-PF3OUdS	---	U	3.52	ng/L	
9Cl-PF3ONS	---	U	3.52	ng/L	

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: P001-SW004-08202019-01				Sample ID: 1908032-05	
PFAAS, LCMS-MS					
GENX	---	U	3.52	ng/L	
ADONA	---	U	3.52	ng/L	
NEtFOSAA	---	U L	3.52	ng/L	
NMeFOSAA	---	U L	3.52	ng/L	
PFBS	---	U	3.52	ng/L	
PFDA	---	U	3.52	ng/L	
PFDoA	---	U L	3.52	ng/L	
PFHpA	4.57		3.52	ng/L	
PFHxA	5.38		3.52	ng/L	
PFHxS	4.56	K	3.52	ng/L	
PFNA	---	U	3.52	ng/L	
PFOA	28.7	K	3.52	ng/L	
PFOS	34.5	K	3.52	ng/L	
PFTeDA	---	U L	3.52	ng/L	
PFTrDA	---	U L	3.52	ng/L	
PFUdA	---	U L	3.52	ng/L	
Field ID: P001-SW004-08202019-02				Sample ID: 1908032-06	
PFAAS, LCMS-MS					
11Cl-PF3OUdS	---	U	3.50	ng/L	
9Cl-PF3ONS	---	U	3.50	ng/L	
GENX	---	U	3.50	ng/L	
ADONA	---	U	3.50	ng/L	
NEtFOSAA	---	U L	3.50	ng/L	
NMeFOSAA	---	U L	3.50	ng/L	
PFBS	---	U	3.50	ng/L	
PFDA	---	U	3.50	ng/L	
PFDoA	---	U	3.50	ng/L	

Final Report

Project: Former Covidien Plant - 1908032

Project Number: 1908032

Analyte	Result	Qualifier	Reporting Limit	Units	Date and Time of Analysis*
Field ID: P001-SW004-08202019-02				Sample ID: 1908032-06	
PFAAS, LCMS-MS					
PFHpA	4.93		3.50	ng/L	
PFHxA	3.80		3.50	ng/L	
PFHxS	4.10	K	3.50	ng/L	
PFNA	---	U	3.50	ng/L	
PFOA	29.3		3.50	ng/L	
PFOS	38.0		3.50	ng/L	
PFTeDA	---	U	3.50	ng/L	
PFTrDA	---	U	3.50	ng/L	
PFUdA	---	U	3.50	ng/L	