PERIODIC REVIEW REPORT
JULY 2019 – DECEMBER 2020

BIANCHI/WEISS GREENHOUSES SITE
EAST PATCHOGUE, NEW YORK 11772

NYSDEC Site No. 152209
Work Assignment No. D00982-04

Prepared for:

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Prepared by:

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

JULY 2021

TRC Project No. 386554

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Executive Summary

Category	Summary/Results
Engineering Control	• Off-Site sump pumps and filters
Institutional Control	• Environmental Notice o The property may be used for Residential, Restricted Residential, Commercial, and Industrial use o All Engineering Controls must be inspected at a frequency and in a manner defined in the Site Management Plan (SMP)
Site Classification	Class 4 Inactive Hazardous Waste Disposal Site (IHWDS)
Site Management Plan	June 2019
Certification/Reporting Period	June 2019 to December 2020
Inspection	**Frequency**
1. Site Inspection 2. Treatment Systems	Annual Annual
Monitoring	**Frequency**
1. Groundwater	Annual
Prior Recommendations	No previous Periodic Review Reports (PRRs) or Site Management Reports (SMRs) have been prepared for the Site.
Site Management Activities	One Site inspection and one groundwater and surface water sampling event were conducted during this reporting period. • 7/22/2020: Site Inspection. • 10/29-10/30/2020: Groundwater and Surface Water Sampling Event.
Significant Findings or Concerns	1. Total chlordane concentrations in groundwater are decreasing over time. 2. Pesticides were not detected in surface water collected from Abets Creek.
Recommendations	1. Perform Site and EC inspections in accordance with the SMP. 2. Collect and analyze groundwater samples from monitoring wells in accordance with the SMP. 3. Reduce groundwater sampling frequency to once every three years. 4. Eliminate surface water sampling. 5. Eliminate annual Groundwater Monitoring Report (GMR).
Cost Evaluation	The total cost of site management activities this reporting period was approximately $15,625. This cost includes TRC engineering (e.g., labor and expense) costs. It should be noted that this total does not include any direct costs incurred by NYSDEC or others.
Green Remediation Metrics	Presented in **Appendix A**.

1.0 Introduction

This Periodic Review Report (PRR) has been prepared for the Bianchi/Weiss Greenhouses Site and covers the period June 2019 through December 2020. The report was prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) Notice to Proceed dated February 27, 2020 for WA No. D009812-04, the NYSDEC-approved Scope of Work dated July 20, 2020 and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (DER-10). A Site summary and applicable remedial program information are presented below.

Site Information			
Site Name:	Bianchi/Weiss Greenhouses Site	**NYSDEC Site No:**	152209
Site Location:	East Patchogue, Suffolk County, NY	**Remedial Program:**	State Superfund Program
Site Type:	None	**Classification:**	4 IHWDS
Parcel Identification(s):	Suffolk County Tax Map: • 0200-979.60-03.00-002.000 • 0200-979.60-03.00-008.000 • 0200-979.60-03.00-009.000 • 0200-979.60-03.00-011.000 • 0200-979.60-03.00-020.001	**Parcel Acreage / EE Acreage:**	13.152
Selected Remedy:	Long-term Groundwater Monitoring, Maintenance of Off-site Sump Pumps and Filters	**Site COC(s):**	• Chlordane
Current Remedial Program Phase:	Post Remedial Action Site Monitoring; Site Management	**Institutional Controls:**	• Environmental Notice ○ Property use restricted to Residential, Restricted Residential, Commercial, and Industrial use ○ SMP (June 2019)
Post-Remediation Monitoring and Sampling Frequency:	Site inspections, groundwater/surface water monitoring, and sump pump and filter systems maintenance to be performed annually	**Engineering Controls:**	• Off-Site sump pump and filter systems
Monitoring Locations:	20 overburden monitoring wells and surface water (Abets Creek)	**Required Reporting:**	• PRR, every three years • GMR, annually

1.1 Site Location, Ownership, and Description

The Site property is located in East Patchogue, Suffolk County, New York, and is identified as Section 979.60 Block 0300 and Lots 002, 008, 009, 011, and 020.001 on the Patchogue Tax Map, hereafter referred to as "the Site". The Site is a 13.152-acre area and is bounded by Hedges Road to the north, private residential properties on South Country Road to the south, Hedges Road and private residential properties to the east, and Orchard Road and private residential properties to the west. The owner of the Site parcels is Henron Development Corporation

(Henron). No buildings are located on-Site. The Site is zoned residential and currently is vacant. Site Location and Site Layout Maps are provided on **Figure 1** and **Figure 2**, respectively.

1.2 Investigation/Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site.

The Site was used as a commercial greenhouse and nursery operation starting in 1929. On-Site structures included a 1.5-story storage building, a 1.5-story brick/frame residential dwelling, a generator building, a single-story horse barn, a frame garage, and six greenhouses. Planting fields were reported to have been located on the eastern and western portions of the site; however, the western portions of the site are presently covered with asphalt or a concrete foundation. Two 275-gallon fuel oil aboveground storage tanks (ASTs), one 1,000-gallon fuel oil AST, and one 20,000-gallon fuel oil underground storage tank (UST) were located on the property. Another UST (capacity and contents unknown) was identified during the Remedial Investigation (RI) in 2009, north of the former generator building.

The Site is currently zoned for residential use but is unoccupied and vacant. It is estimated that the Site was used for greenhouse/nursery operations for at least 70 years. After taking ownership in 2005, Henron demolished all on-Site structures.

The following is a summary of investigations and remedial actions that have been completed at the Site.

- 2005 – A soil investigation consisting of the collection and laboratory analysis of eight surface soil samples [1 to 3 inches below ground surface (bgs)] and four subsurface samples collected at depths of 9 to 12 inches bgs was completed by EnviroScience Consultants, Inc. (EnviroScience). Chlordane, heptachlor, and arsenic were detected at concentrations exceeding United States Environmental Protection Agency (USEPA) soil screening levels; additional subsurface investigation was requested by the Suffolk County Department of Health Services (SCDOH).

- 2006 – An additional subsurface soil investigation was conducted by EnviroScience. Activities included investigation of Site subsurface drainage structures as well as subsurface sampling at four of the surface sample locations previously investigated. Samples contained elevated concentrations of chlordane; subsurface drainage structures also contained lead, copper, and semi-volatile organic compounds (SVOCs).

- 2006 – On-Site and downgradient surface water and groundwater samples were collected by the SCDOH. Chlordane was detected in on-Site groundwater and surface water and in off-Site groundwater up to 3,000 feet south-southwest from the Site.

- 2008 to 2009 – Interim remedial measures (IRM) were completed by EA to remove Site stockpiles and excavate soil from within the on-Site subsurface drainage structures. Excavated material was transported off-Site for disposal. Exposed surface soils were covered with mulch and silt barriers were placed along the perimeter of the Site to mitigate the potential migration of surface soil off-Site.

- 2009 to 2011 – RI completed by EA. The RI included the installation of soil borings and monitoring wells and collection and laboratory analysis of on-Site and off-Site groundwater, surface water, soil, and sediment samples. Chlordane and lead were determined to be the primary Site contaminants of concern (COCs).

- 2011 – Feasibility Study (FS) completed by EA. The FS included an evaluation of remedial alternatives for the Site based on results of RI.

- 2012 – NYSDEC issued a Record of Decision (ROD) selecting a remedy consisting of Excavation and Off-site Disposal to Residential Soil Cleanup Objectives (SCOs), Connection to Public Water, Upgrade Basement Sumps and Groundwater Monitoring.

- 2014 – Sump pump and filter systems were installed by Environmental Assessment & Remediations (EAR) in the residence located at 547 South Country Road, East Patchogue, NY, downgradient of the Site. Operation of the sump and filter systems began on May 8, 2014.

- 2015 to 2016 – Remedial action performed by EnviroTrac, Ltd (EnviroTrac). A total of approximately 46,444 tons of impacted material were removed and transported off-Site for disposal. Generally, soil was excavated to achieve Restricted Residential Use SCOs on-Site and to achieve Unrestricted Use SCOs off-Site. One 5,000-gallon UST was removed and transported off-Site for disposal by AARCO Environmental Corporation (AARCO) under subcontract to EnviroTrac.

A detailed Site history, including the dates and descriptions of significant events, and a Custodial Record, detailing known and available Site reports, are included in **Appendix B.**

1.3 Remaining Contamination

Excavation and off-Site disposal of on-Site soil exceeding Restricted Residential SCOs and off-Site soil exceeding Unrestricted Use SCOs for Site related contaminants of concern is generally complete, but, as described in the SMP, chlordane remains in on-Site and off-Site soil and groundwater at concentrations greater than cleanup goals. As such, Site management activities consisting of annual inspections, ground and surface water monitoring, and sump pump maintenance are ongoing.

1.4 Regulatory Requirements/Remedial Controls

As specified in the ROD, the Remedial Action Objectives (RAOs) for the Site are as follows:

- Soil RAOs for Public Health Protection
  - Prevent ingestion/direct contact with contaminated soil.
  - Prevent inhalation of contaminated dust.

- Soil RAOs for Environmental Protection
  - Prevent migration of contaminants that would result in groundwater contamination.
  - Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

- Groundwater RAOs for Public Health Protection
  - Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
  - Prevent contact with contaminated groundwater.

- Groundwater RAOs for Environmental Protection
  - Remove the source of ground or surface water contamination.
  - Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.

Furthermore, the cleanup goals for the Site include attaining to the extent practicable the following standards, criteria and guidance (SCGs):

- 6 NYCRR Subpart 375-6 Remedial Program SCOs
- NYSDEC "Ambient Water Quality Standards and Guidance Values" (Class GA Values), 6 NYCRR Part 703, Surface Water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code

2.0 Institutional and Engineering Control Plan Compliance

Since remaining contamination exists at the Site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. The IC/EC Plan documented in the SMP describes the procedures for the implementation and management of all IC/ECs at the Site.

2.1 Institutional Controls

A series of ICs is required by the ROD to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination: and (3) limit the use and development of the Site to Residential, Restricted Residential, Commercial, and Industrial uses only. Adherence to Site ICs is required by the Environmental Notice (**Appendix C**) and will be implemented in accordance with the SMP. In accordance with the SMP, compliance with Site ICs is evaluated with respect to the following:

1. The property may be used for Residential, Restricted Residential, Commercial and Industrial uses as defined by Part 375-1.8(g), subject to local zoning laws;
2. All ECs must be operated and maintained as specified in the SMP;
3. All ECs must be inspected at a frequency and in a manner defined in the SMP;
4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or the SCDOH to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from NYSDEC;
5. Groundwater monitoring must be performed as defined in the SMP;
6. Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in the SMP;
7. All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
9. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;
10. Access to the Site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to ensure compliance with the restrictions identified by the Environmental Notice; and
11. Raising of animals for consumption is prohibited

2.2 Engineering Controls

The ECs for the Site include sump pump and filter systems installed in the structure located at 547 South Country Road, East Patchogue, NY, downgradient from the Site. Details regarding the sump pump and filtration systems are included in the SMP. In accordance with the SMP, compliance with Site ECs is evaluated with respect to the following:

1. Periodic inspection of the complete sump pump and filter system.
2. Components of the sump pump and filtration system should be replaced in kind should the system be damaged.

3.0 Monitoring and Sampling Plan Compliance

The SMP was issued to monitor remaining contamination at the Site and to ensure remedy effectiveness by restricting Site use, Site development and soil movement on the property. The table below shows the SMP-specified monitoring and sampling activities for the Site and the dates those activities were completed:

Summary of SMP Site Monitoring and Sampling Plan				
Site Management Activity	**Frequency**	**Location**	**Analytical Method**	**Completion Date(s)**
Site Inspection	Annual	Section 979.60 Block 0300 and Lots 002, 008, 009, 011, and 020.001 on the Patchogue Tax Map (Figure 1)	Not Applicable	7/22/2020
Treatment System Monitoring and Sampling	Annual	547 South Country Rd, East Patchogue, NY 11772	Not Applicable	Not Applicable[1]
Groundwater and Surface Water Sampling	Annual	• TPMW-01 • PDI-PZ-01 • PDI-PZ-02 • MW-33D • MW-33I • MW-33S • MW-41 • WO-07 • WO-08 • WO-09 • WO-10 • WO-19 • WO-26 • WO-27 • WO-28 • WO-30 • WO-31 • PW-01 • PW-01A • PW-02 • SG-03[2]	Chlordane via USEPA Method 608[3]	10/29/2020-10/30/2020
Groundwater Monitoring Report	Annual	Not Applicable	Not Applicable	Not Applicable[4]
PRR	Once every three years	Not Applicable	Not Applicable	July 2021

Notes:
In consultation with NYSDEC groundwater sampling in October 2020 was limited to MW-33S, MW-41, PDI-PZ-01, PDI-PZ-02, TPMW-01, WO-08, WO-19, WO-25, WO-27, and WO-28 in October 2020. MW-33S could not be located.
USEPA – United States Environmental Protection Agency
[1] Inspection of treatment system was not performed during the reporting period.
[2] Sample location SG-03 could not be accessed in October 2020. A surface water sample was collected from location SW-01.
[3] Groundwater and surface water samples were analyzed for Target Compound List (TCL) Pesticides via USEPA Method 8081B.
[4] A Groundwater Monitoring Report was not submitted to the NYSDEC during the reporting period.

3.1 Site Inspection

In July 2020, TRC performed a Site inspection. The Site inspection included an evaluation of the current Site use, Site security, the vegetative cover, site drainage, and the condition of Site monitoring wells.

A summary of the Site inspection is presented below:

Summary of Site Activities and Site Monitoring and Sampling July 2019 through December 2020		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Site and Monitoring Well Network Inspection	A Site inspection was performed on July 22, 2020. All wells in the monitoring well network were located and in good condition, with the exception of MW-33S which could not be located. TRC confirmed adequate Site security, sufficient vegetative cover, and no issues with Site drainage.	Additional investigation must be performed to locate MW-33S.
Groundwater and Surface Water Gauging and Sampling	On October 29, 2020 and October 30, 2020, nine Site wells were gauged and sampled utilizing USEPA low-flow sampling methods. Additionally, one surface water sample was collected from Abets Creek. Samples were submitted to Eurofins/TestAmerica Laboratories for analysis of TCL Pesticides by USEPA Method 8081B.	Additional investigation must be performed to locate MW-33S.

A Site inspection form and photographic log from the July 2020 inspection activities is presented in **Appendix D**.

3.2 Groundwater and Surface Water Monitoring Summary

3.2.1 Groundwater Gauging

On October 29 and 30, 2020, prior to groundwater sample collection, wells were gauged for depth to water (DTW) measurements to evaluate potential groundwater flow direction. The groundwater elevation contours with an interpretation of groundwater flow direction near the Site are presented on **Figure 3**. The groundwater gauging and elevation measurements can be found on **Table 1**. A summary of the hydrogeologic information is presented below:

October 2020 Hydrogeologic Summary			
Number of Gauged Wells	**Hydrogeologic Units**	**Hydrogeologic Strata**	**Monitoring Wells**
9	1	Overburden	MW-41, PDI-PZ-01, PDI-PZ-02, TPMW-01, WO-08, WO-19, WO-25, WO-27, WO-28

Overburden Groundwater Elevation Range
Lowest groundwater elevation: -1.63 feet NAVD88 (WO-25) Highest groundwater elevation: 8.43 feet NAVD88 (MW-41)
Inferred Overburden Groundwater Flow Direction
Southwest

Notes:
NAVD88 – North American Vertical Datum 1988

3.2.2 Groundwater and Surface Water Sampling

TRC collected groundwater samples from nine monitoring wells utilizing standard low-flow sampling techniques on October 29 and 30, 2020. Groundwater sampling logs are presented in **Appendix F**. All nine groundwater samples, in addition to Quality Assurance/Quality Control (QA/QC) samples collected at the frequencies specified in TRC's July 2020 Generic Quality Assurance Project Plan (QAPP) and the Site SMP, were submitted to Eurofins/TestAmerica Laboratories for analysis.

A summary of the groundwater sampling information and pertinent well details for each well is presented below:

Summary of Groundwater Monitoring and Sampling Activities
October 2020

Well Identification	Monitoring Well Details				2020 Groundwater Sampling Event		
	Northing	Easting	Screen Zone (ft. bgs)	Unit Screened	DTW (ft. TOC)	Analytes	Notes
MW-41	218550.729	1270338.35	30 – 35	Overburden	12.03	TCL Pesticides	
PDI-PZ-01	217909.6150	1269836.6795	6 – 15	Overburden	8.99	TCL Pesticides	
PDI-PZ-02	218126.0136	1269902.2808	6 – 15	Overburden	8.82	TCL Pesticides	
TPMW-01	217971.2521	1269596.5874	5 – 10	Overburden	8.04	TCL Pesticides	
WO-08	217579.246	1269611.877	10 – 15	Overburden	6.11	TCL Pesticides	
WO-19	217311.829	1269384	10 – 15	Overburden	3.87	TCL Pesticides	
WO-25	216870.205	1268802.325	10 – 15	Overburden	11.04	TCL Pesticides	
WO-27	216588.49	1268692.085	40 – 45	Overburden	7.71	TCL Pesticides	
WO-28	216448.529	1268470.565	40 – 45	Overburden	12.96	TCL Pesticides	

Notes:
DTW – Depth to water
ft. bgs – Feet below ground surface
TOC – Top of casing
TCL – Target Compound List

A table with well construction details is included in **Appendix B**.

Additionally, a surface water sample was collected with a telescopic dipper from Abets Creek at the location shown on **Figure 2**.

3.2.3 Groundwater and Surface Water Sample Results

Groundwater analytical data for pesticides are presented in **Table 2**. The Data Usability Summary Reports (DUSR) are presented in **Appendix E**. One or more pesticides were detected at concentrations greater than Class GA Values in groundwater samples collected from five (PDI-PZ-01, PDI-PZ-02, TPMW-01, WO-08, and WO-28) of the nine monitoring wells sampled. Monitoring wells PDI-PZ-01, PDI-PZ-02, and TPMW-01 are located on-Site. WO-08 is located approximately 300 ft downgradient of the Site and is the most impacted well. WO-28 is located approximately 1,800 feet downgradient of the Site.

Detected concentrations greater than Class GA Values are shown on **Figure 4**. Additionally, total chlordane was detected at concentrations greater than the maximum contaminant level (MCL) of 2.0 micrograms per liter (µg/L) in groundwater samples collected from monitoring wells PDI-PZ-01 and WO-08. A summary of the October 2020 groundwater analytical results is presented below:

Exceedance Summary of Laboratory Analytical Results in Groundwater
October 2020

Constituent	Class GA Value[1]	MCL[1]	Concentration Range (µg/L)	Location with Highest Detection	Frequency Exceeding SCG
4,4'-DDT	0.2	NC	ND – 0.22 J	WO-08	1/9
cis-Chlordane	0.05	2.0	ND – 1.7 NJ	WO-08	5/9
Dieldrin	0.004	NC	ND – 0.13 J	WO-08	3/9
trans-Chlordane	0.05	0.05	ND – 0.94	PDI-PZ-01	4/9
Chlordane	0.05	2.0	ND – 2.44	PDI-PZ-01	5/9

Notes:
ND - Not detected.
J – Estimated value.
N – Indicates presumptive evidence of a compound.
[1] The Class GA Value and MCL for total chlordane are shown for cis-Chlordane and trans-Chlordane

Pesticides were not detected in the surface water sample collected from Abets Creek.

4.0 Cost Summary

The total estimated cost of the site management activities for the reporting period (July 2019 through December 2020) is approximately $15,625. Site management activities included a Site inspection, collection and laboratory analysis of groundwater samples from nine monitoring wells for TCL pesticides, and collection and laboratory analysis of one surface water sample from Abets Creek for TCL pesticides. The total includes TRC labor and expenses associated with the project. It should be noted that the total does not include costs incurred by NYSDEC for site management activities performed by others prior to issuance of TRC's WA, laboratory analysis performed by NYSDEC's call-out laboratory, or project support. A summary of TRC's 2020 site management costs is presented below:

Summary of Site Management Costs
June 2019 through December 2020

Cost Item	Amount Expended (June 2019 through December 2020)	Percent of Total Cost
Engineering Support		
TRC	$14,782.15	95%
Expenses		
TRC	$842.44	5%
Total Cost	**$15,624.59**	----

The following provides a review of each cost item:

- Engineering support includes labor costs associated with project management (e.g., WA Package preparation, monthly invoicing, project scheduling and coordination, etc.), Site inspections, groundwater sampling, and reporting (i.e., Site inspection report).
- Expense costs include travel, equipment, and supplies in support of the Site inspection and groundwater sampling activities.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Based on estimated groundwater elevations measured during the October 2020 groundwater sampling event, estimated groundwater flow in the overburden hydrogeologic unit is to the south-southwest. This observation is consistent with historical observations.
- The Site COC, chlordane, was detected at concentrations exceeding the applicable SCG in samples collected from five groundwater monitoring wells. Overall, detections of chlordane were highest on and within close proximity (approximately 300 feet south) to the Site. The highest total chlordane concentration (2.44 µg/L) was detected in WO-08. This data is consistent with historical results and indicates the concentrations of chlordane within the groundwater plume are decreasing.
- Site and groundwater use are consistent with the restrictions set forth in the ROD, the SMP and Environmental Notice. Groundwater monitoring activities were completed in October 2020 for the 2019-2020 certification period. A Site inspection and a Site inspection report were also completed. The ICs operated as intended this reporting period.
- The remedy continued to be protective of human health and the environment this reporting period.

5.2 Recommendations

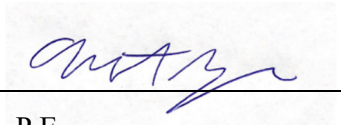
- Annual Site inspections should continue to verify the ICs and ECs are in-place and effective to observe any future development of the Site. Maintenance of the ECs should be performed in accordance with the SMP. One Site inspection report should also be completed following the inspection event.
- Collection and laboratory analysis, for chlordane via USEPA Method 608, of groundwater samples from the entire Site monitoring well network, as described in the SMP, should be performed once every three years. The next groundwater sampling event should be performed in the fourth quarter of 2023.
- Eliminate the Groundwater Monitoring Report. Include results of groundwater sampling in the PRR.
- Water level measurements should be collected from Site monitoring wells sampled during groundwater sampling events.
- Collection and analysis of a surface water sample from Abets Creek should be eliminated unless groundwater monitoring indicates the plume becomes unstable.
- The Certification Period should remain at three years with a PRR frequency of one report every three years. The certification period should begin January 1, 2021 and end December 31st, 2023, with the next reporting period beginning January 1st 2021 and ending December 31st 2023.
- The SMP should be revised to reflect the above changes/modifications if the changes are acceptable to the NYSDEC.

6.0 Certification of Engineering and Institutional Controls

For each institutional or engineering control identified for the Site, I certify that all the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental notice;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program [and generally accepted engineering practices]; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Anthony Raposo, of TRC Engineers, Inc., am certifying as NYSDEC's Designated Site Representative.

Reviewed By: 

Anthony Raposo, P.E.

Qualified Environmental Professional

7.0 Future Site Activities

Based on the recommendations in Section 5, the following site management activities will be completed during the next PRR reporting period (January 2021 to December 2023):

- Site Inspections – Annual (next scheduled: August 2021)
- EC Inspections – Annual (next scheduled: August 2021)
- PRR – Every three years (next scheduled: Q1 2024)

FIGURES

SCALE: 1:2400

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

FEET

QUADRANGLE LOCATION

MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S):
TP, BELLPORT, NY, 7.5 MINUTE DATED 2019,
S, HOWELLS POINT, NY, 7.5 MINUTE DATED 2019,
SW, SAYVILLE, NY, 7.5 MINUTE DATED 2019,
W, PATCHOGUE, NY, 7.5 MINUTE DATED 2019.

MAP OBTAINED THROUGH USE OF TOPOVIEW WITH THE INTERFACE CREATED BY THE NATIONAL GEOLOGIC MAP DATABASE PROJECT (NGMDB), IN SUPPORT OF THE TOPOGRAPHIC MAPPING PROGRAM, MANAGED BY THE USGS NATIONAL GEOSPATIAL PROGRAM (NGP).

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PROJECT:

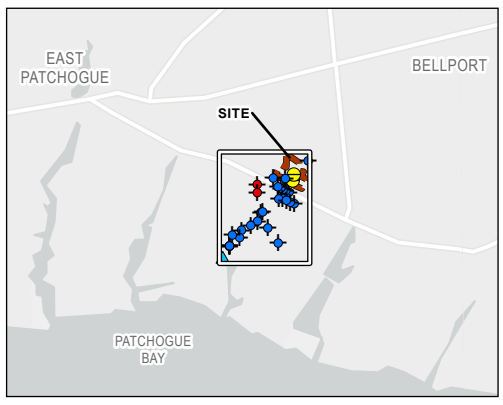
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BIANCHI / WEISS GREENHOUSES - SITE NO. 152209
EAST PATCHOGUE, NEW YORK

TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	S. PEREIRA
APPROVED BY:	D. WARREN
DATE:	MAY 2021
PROJ. NO.:	386554.0000.0000
FILE:	Figure 1 - Site Location Map (BWG).dwg

FIGURE 1



KEY MAP NOT TO SCALE

LEGEND

- GROUNDWATER MONITORING WELL
- PDI PIEZOMETER
- POTABLE WELL
- SURFACE WATER LOCATION
- ROAD
- SITE BOUNDARY

NOTES

1. BASE MAP IMAGERY RETRIEVED FROM ESRI, HERE, GARMIN, AND NYS GIS CLEARINGHOUSE.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. PIEZOMETER, POTABLE WELL, AND GROUNDWATER MONITORING LOCATIONS TAKEN FROM THE NOVEMBER 2016 POST-REMEDIAL ACTION GROUNDWATER SAMPLING WORK PLAN, PREPARED BY EA ENGINEERING, P.C.

N

0 300 600
FEET

SCALE: 1" = 300' (1:3,600)
SHEET SIZE: 11" BY 17"

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PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BIANCHI / WEISS GREENHOUSES - SITE NO. 152209
EAST PATCHOGUE, NEW YORK

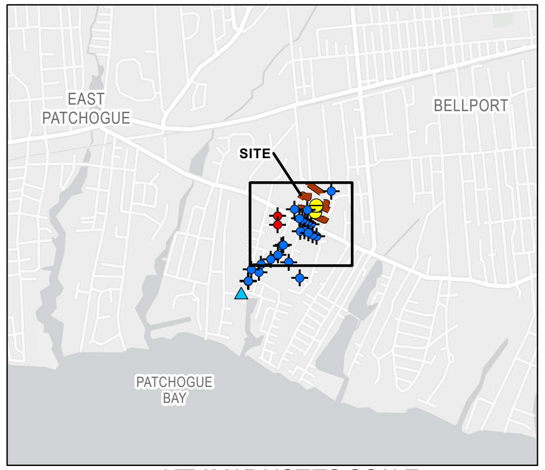
TITLE:

SITE LAYOUT MAP

DRAWN BY:	E. CORDERO
CHECKED BY:	D. WARREN
APPROVED BY:	J. MAGDA
DATE:	MAY 2021
PROJ. NO.:	386554.0000.0000
FILE:	386554-33_BW.APRX

FIGURE 2

TRC - GIS
COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0
PLOT DATE: 5/3/2021, 14:41:43 PM BY LLILL -- LAYOUT: ANSI B(11"X17")
PATH: S:\1-PROJECTS\NYSDEC\386554_SMP_B\33_BIANCHI-WEISS_152209\7-APRX\386554-33_BW.APRX



KEY MAP NOT TO SCALE

LEGEND

- GROUNDWATER MONITORING WELL
- PDI PIEZOMETER
- POTABLE WELL
- GROUNDWATER FLOW
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88)
- 8.00 GROUNDWATER ELEVATION (FT NAVD88)
- SITE BOUNDARY
- ROAD

NOTES

1. BASE MAP IMAGERY RETRIEVED FROM ESRI, HERE, GARMIN, AND NYS GIS CLEARINGHOUSE.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. PIEZOMETER, POTABLE WELL, AND GROUNDWATER MONITORING LOCATIONS TAKEN FROM THE NOVEMBER 2016 POST-REMEDIAL ACTION GROUNDWATER SAMPLING WORK PLAN, PREPARED BY EA ENGINEERING, P.C.
4. GROUNDWATER ELEVATIONS BASED OFF DEPTH TO WATER MEASUREMENTS COLLECTED FROM MW-41, WO-08, WO-19, WO-25, WO-27, AND WO-28 DURING THE GROUNDWATER MONITORING EVENT ON OCTOBER 29 AND OCTOBER 30, 2020.
5. FT NAVD 88 - NORTH AMERICAN VERTICAL DATUM OF 1988 (US FEET).

0 250 500 Feet

SCALE: 1" = 250' (1:3,000)
SHEET SIZE: 11" BY 17"

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BIANCHI / WEISS GREENHOUSES - SITE NO. 152209
EAST PATCHOGUE, NEW YORK

TITLE:
GROUNDWATER SURFACE ELEVATIONS AND FLOW MAP

DRAWN BY:	E. CORDERO	PROJ NO.:	386554.0000.0000
CHECKED BY:	D. WARREN		
APPROVED BY:	J. MAGDA	**FIGURE 3**	
DATE:	MAY 2021		

TRC
1430 Broadway, 10th Floor
New York, NY 10018
Phone: 212.221.7822
www.TRCcompanies.com

FILE NO.: 386554-33_BW.APRX

TRC - GIS

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0

PLOT DATE: 5/3/2021, 15:29:53 PM BY LLILL -- LAYOUT: ANSI B(11"X17")
PATH: S:\1-PROJECTS\NYSDEC\386554_SMP_B\33_BIANCHI-WEISS_152209\7-APRX\386554-33_BW.APRX

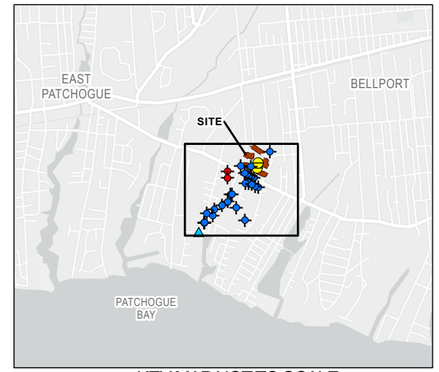
PDI-PZ-02	
SAMPLE DATE	10/30/2020
CIS-CHLORDANE	0.066 J

TPMW-01	
SAMPLE DATE	10/30/2020
CIS-CHLORDANE	0.81
DIELDRIN	0.044 J
TRANS-CHLORDANE	0.60

PDI-PZ-01	
SAMPLE DATE	10/30/2020
CIS-CHLORDANE	1.5 J
TRANS-CHLORDANE	0.94

WO-08	
SAMPLE DATE	10/29/2020
4,4'-DDT	0.22 J
CIS-CHLORDANE	1.7 NJ
DIELDRIN	0.13 J
TRANS-CHLORDANE	0.73

WO-28	
SAMPLE DATE	10/30/2020
CIS-CHLORDANE	0.16 J
DIELDRIN	0.014 J
TRANS-CHLORDANE	0.099



KEY MAP NOT TO SCALE

LEGEND

- GROUNDWATER MONITORING WELL
- PDI PIEZOMETER
- POTABLE WELL
- SURFACE WATER LOCATION
- SITE BOUNDARY
- ROAD

LABORATORY ANALYTICAL RESULTS LEGEND

GROUNDWATER RESULTS ARE IN MICROGRAMS PER LITER (µG/L).
BOLD AND HIGHLIGHTED RESULT EXCEEDS CLASS GA VALUE.

COMPOUND	CLASS GA VALUE (µG/L)
A-CHLORDANE	0.05
CHLORDANE (TOTAL)	0.05
DIELDRIN	0.004
HEPTACHLOR EPOXIDE	0.03
P,P'-DDE	0.2
P,P'-DDT	0.2
Y-CHLORDANE	0.05

NOTES

1. BASE MAP IMAGERY RETRIEVED FROM ESRI, HERE, GARMIN, AND NYS GIS CLEARINGHOUSE.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. PIEZOMETER, POTABLE WELL, AND GROUNDWATER MONITORING LOCATIONS TAKEN FROM THE NOVEMBER 2016 POST-REMEDIAL ACTION GROUNDWATER SAMPLING WORK PLAN, PREPARED BY EA ENGINEERING, P.C.
4. ONLY COMPOUNDS WHICH EXCEED CLASS GA VALUES ARE SHOWN IN DATA BOXES.
5. J: ESTIMATED VALUE/ESTIMATED VALUE BIASED HIGH.
6. µG/L - MICROGRAMS PER LITER.

0 350 700 Feet

SCALE: 1" = 350' (1:4,200)
SHEET SIZE: 11" BY 17"

N

PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BIANCHI / WEISS GREENHOUSES - SITE NO. 152209
EAST PATCHOGUE, NEW YORK

TITLE:

PESTICIDES IN GROUNDWATER – OCTOBER 2020

DRAWN BY:	E. CORDERO	PROJ NO.:	386554.0000.0000
CHECKED BY:	D. WARREN		
APPROVED BY:	J. MAGDA		
DATE:	MAY 2021		

FIGURE 4

TRC
1430 Broadway, 10th Floor
New York, NY 10018
Phone: 212.221.7822
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FILE NO.: 386554-33_BW.APRX

PLOT DATE: 5/19/2021, 08:31:46 AM BY LLILL – LAYOUT: ANSI B(11"X17")
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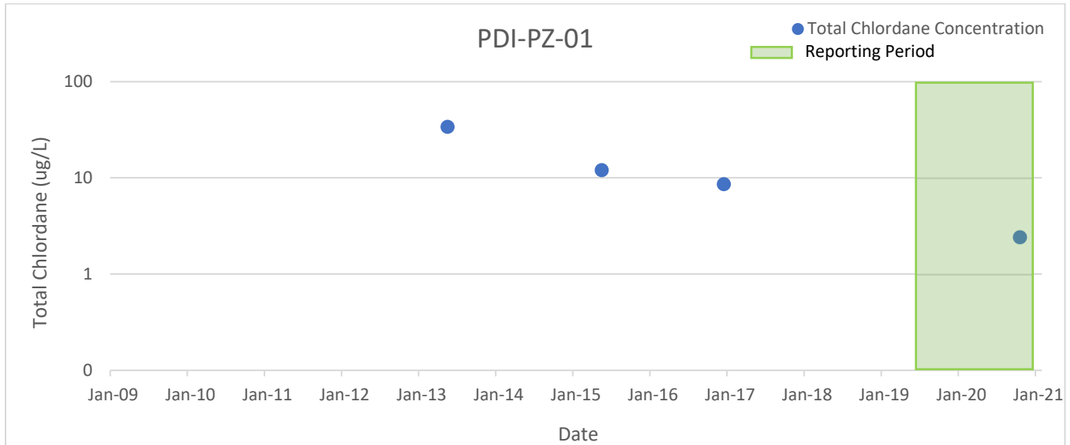
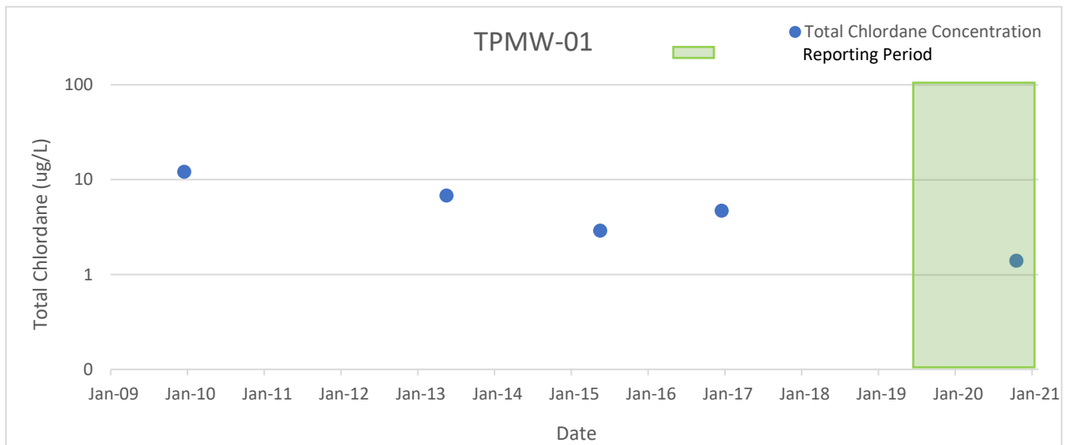
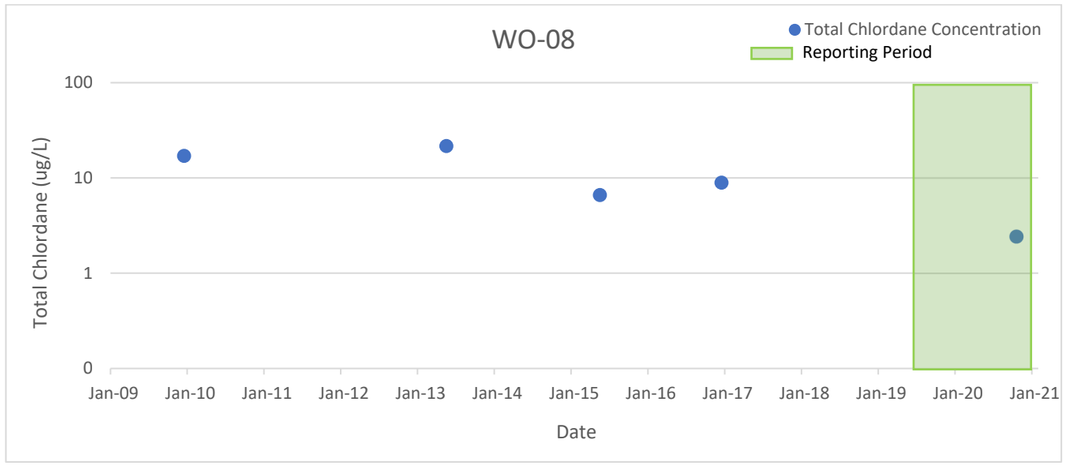
COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0
TRC - GIS

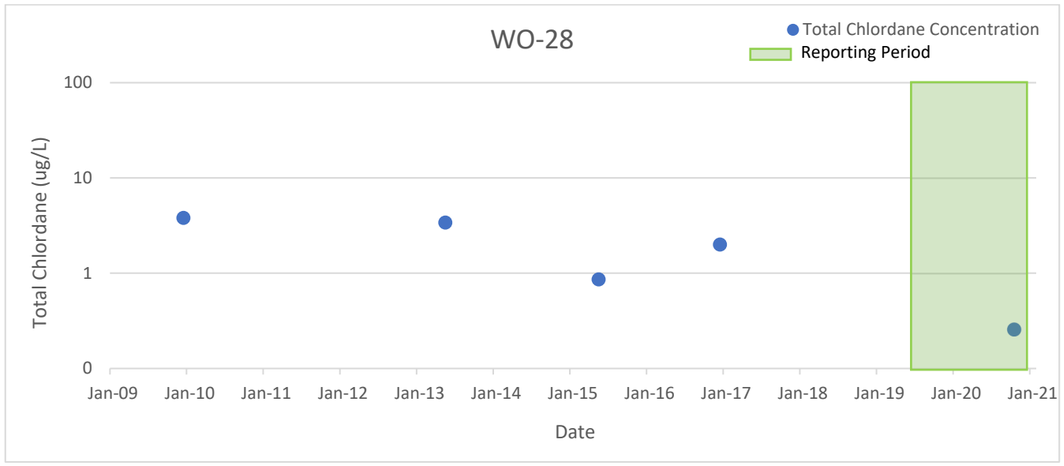
Figure 5

New York State Department of Environmental Conservation
SMP B – Bianchi/Weiss Greenhouses - Site No. 152209
Periodic Review Report
East Patchogue, New York
Total Chlordane in Groundwater Trend Charts









Notes:
µg/L – Micrograms per Liter

TABLES

Table 1
New York State Department of Environmental Conservation
SMP B - Bianchi/Weiss Greenhouses Site - Site No. 152209
East Patchogue, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well ID	Screened Formation	Well Casing Elevation (feet AMSL)	Gauge Date	Depth to Water (feet below TOC)	Depth to Bottom (feet below TOC)	Groundwater Elevation (feet)
MW-41	Overburden	20.46	10/29/2020	12.03	N/A	8.43
PDI-PZ-01	Overburden	N/A	10/30/2020	8.99	17.53	N/A
PDI-PZ-02	Overburden	N/A	10/30/2020	8.82	17.50	N/A
TPMW-01	Overburden	N/A	10/30/2020	8.04	12.54	N/A
WO-08	Overburden	11.88	10/29/2020	6.17	21.11	5.71
WO-19	Overburden	8.93	10/29/2020	3.87	19.62	5.06
WO-25	Overburden	10.08	10/29/2020	11.71	N/A	-1.63
WO-27	Overburden	10.86	10/29/2020	7.71	35.32	3.15
WO-28	Overburden	15.71	10/30/2020	12.96	39.64	2.75

Notes:
ID - Identification
TOC - Top of Casing
N/A - Not Available

Table 2
New York State Department of Environmental Conservation
SMP B - Bianchi/Weiss Greenhouses - Site No. 152209
East Patchogue, New York
Summary of Results of Analysis of Groundwater and Surface Water (October 2020)

					Sample Location:	MW-41		PDI-PZ-01		PDI-PZ-02		SW-01		TPMW-01		WO-08				WO-19		WO-25		WO-27		WO-28	
					Sample Name:	BW-MW-41-WG-20201029		BW-PDI-PZ-01-WG-20201030		BW-PDI-PZ-02-WG-20201030		BW-SW-01-WS-20201030		BW-TPMW-01-WG-20201030		BW-WO-08-WG-20201029		BW-DUP-01-20201029		BW-WO-19-WG-20201029		BW-WO-25-WG-20201029		BW-WO-27-WG-20201029		BW-WO-28-WG-20201030	
					Sample Matrix:	Groundwater		Groundwater		Groundwater		Surface Water		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
					Lab Sample ID:	480-177524-1		480-177524-9		480-177524-10		480-177524-7		480-177524-8		480-177524-2		480-177524-11		480-177524-3		480-177524-4		480-177524-5		480-177524-6	
					Sample Date:	10/29/2020		10/30/2020		10/30/2020		10/30/2020		10/30/2020		10/29/2020		10/29/2020		10/29/2020		10/29/2020		10/29/2020		10/30/2020	
Analysis	Analyte	Unit	Guidance Value*	MCL**														Field Dup									
Pesticides																											
	4,4'-DDD	ug/L	0.3	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	4,4'-DDE	ug/L	0.2	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	4,4'-DDT	ug/L	0.2	NC		0.050	U	**0.16**	**J**	0.050	U	0.050	U	**0.028**	**J**	**0.22**	**J**	**0.12**	**J**	0.050	U	0.050	U	0.050	U	**0.012**	**J**
	Aldrin	ug/L	ND	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	alpha-BHC	ug/L	0.01	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	beta-BHC	ug/L	0.04	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	cis-Chlordane	ug/L	0.05(a)	2(a)		0.050	U	**1.5**	**J**	**0.066**	**J**	0.050	U	**0.81**		**1.7**	**NJ**	**1.3**	**NJ**	0.050	U	0.050	U	0.050	U	**0.16**	**J**
	delta-BHC	ug/L	0.04	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Dieldrin	ug/L	0.004	NC		0.050	U	0.25	U	0.050	U	0.050	U	**0.044**	**J**	**0.13**	**J**	0.25	U	0.050	U	0.050	U	0.050	U	**0.014**	**J**
	Endosulfan I	ug/L	NC	NC		0.050	U	0.25	U	0.050	U	0.050	U	**0.057**	**J**	0.25	U	**0.14**	**J**	0.050	U	0.050	U	**0.026**	**J**	**0.033**	**J**
	Endosulfan II	ug/L	NC	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Endosulfan sulfate	ug/L	NC	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Endrin	ug/L	ND	2		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Endrin aldehyde	ug/L	5	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Endrin ketone	ug/L	5	NC		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	gamma-BHC (Lindane)	ug/L	0.05	0.2		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	trans-Chlordane	ug/L	0.05(a)	2(a)		0.050	U	**0.94**		**0.038**	**J**	0.050	U	**0.60**		**0.73**		**0.64**		0.050	U	0.050	U	**0.030**	**J**	**0.099**	
	Total Chlordane	ug/L	0.05(a)	2(a)		0.050	U	**2.44**		**0.104**	**J**	0.050	U	**1.41**		**2.43**		**1.94**		0.050	U	0.050	U	**0.030**	**J**	**0.259**	
	Heptachlor	ug/L	0.04	0.4		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Heptachlor epoxide	ug/L	0.03	0.2		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	0.25	U	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Methoxychlor	ug/L	35	40		0.050	U	0.25	U	0.050	U	0.050	U	0.050	U	**0.17**	**J**	0.25	U	0.050	U	0.050	U	0.050	U	0.050	U
	Toxaphene	ug/L	0.06	3		0.50	U	2.5	U	0.50	U	0.50	U	0.50	U	2.5	U	2.5	U	0.50	U	0.50	U	0.50	U	0.500	U

Notes:

ug/L - micrograms per liter.

J - Estimated value.

N - Indicates presumptive evidence of a compound.

NC - No NYSDEC standards exist for this analyte.

ND - A non-detectable result by the approved analytical method specified in section 700.3 of the NYCRR Water Quality Regulations.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type exceed the Class GA Value.

Values shown in bold and shaded type exceed the MCL.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the April 2000 Addendum.

** - NYSDEC Maximum Contaminant Level (MCL), effective August 26, 2020.

(a) - Used standard for Chlordane.

APPENDIX A

Form A
Summary of Green Remediation Metrics

Site Name: Bianchi/Weiss Greenhouses Site Code: 152209 Operable Unit: N/A
Address: Orchard Road City: East Patchogue
State: NY Zip: 11772 County: Suffolk

Reporting Period
Contract Period From: To:
Reporting Period From: 1/1/2020 To: 12/31/2020 Is this a Final Report? Yes ☐ No ☐

Contact Information
Preparer's Name: Daniel Warren Phone No.: 917-232-9837
Preparer's Affiliation: TRC Engineers, Inc. Company Code:

Waste Generation: Quantify the management of waste generated on-site.

	Current Reporting Period (Tons)	Total to Date (Tons)
Total waste generated on-site		
• Remedy generated waste	0	0
• Contractor generated waste	0	0
Of that total amount, provide quantity:	0	0
• Transported off-site to landfills	0	0
• Transported off-site to other disposal facilities	0	0
• Transported off-site for recycling/reuse	0	0
• Reused on-site	0	0

Provide a description of any implemented waste reduction programs appropriate for this project in the space provided on Page 3.

Energy Usage: Quantify the amount of energy used on-site and portion of that voluntarily derived from renewable energy sources.

	Current Reporting Period (KWh)	Total to Date (KWh)
Total electricity usage	Not available	Not available
Of that total amount, provide quantity:		
• Derived from renewable source (i.e. solar, wind)	Not available	Not available

Provide a description in the space provided on Page 3 of all reported energy usage reduction programs appropriate to this project, including usage of electricity derived from renewable sources.

Emissions: Quantify the distance traveled for delivery of supplies and removal of waste.

	Current Reporting Period (Miles)	Total to Date (Miles)
Off-site mobile fuel combustion	250	250

Provide a description in the space provided on Page 3 of practices such as use of local vendors within 150 miles of the site and on-site stationary fuel usage reduction programs.

Quantify the number of hours that diesel and other equipment with the potential to emit hazardous air pollutants (HAPs) or greenhouse gas (GHG) emissions was operated on-site.

	Current Reporting Period (Hours)	Total to Date (Hours)
On-site diesel excavation/construction equipment usage	0	0
Other on-site processes potentially generating emissions	0	0

Provide a description in the space provided on Page 3 of the type of excavation/construction equipment used, rating, emission control devices used and other means to reduce emissions, such as use of biodiesel. Also, include a description of other onsite processes that may result in emissions of HAPs or GHG emissions and any emission control devices that are utilized to reduce emissions.

Water Usage: Quantify the volume of water used on-site from difference sources

	Current Reporting Period (Gallons)	Total to Date (Gallons)
Total quantity of water used on-site	0	0
Of that total amount, provide the quantity obtained from:		
• Public potable water supply usage	0	0
• Surface water usage	0	0
• On-site groundwater usage	0	0
• Reclaimed water usage	0	0
• Collected or diverted storm water usage	0	0

Provide a description in the space provided on Page 3 of any reported water usage reduction programs appropriate for this project.

Land and Ecosystem: Provide a description of the amount of land and/or ecosystems disturbed construction and the area of land and/or ecosystems restored to a natural condition.

	Current Reporting Period (Acres)	Total to Date (Acres)
Land Disturbed	Not applicable	Not applicable
Land Restored	Not applicable	Not applicable

Provide a description of the amount of land and/or ecosystems remediated.

	Current Reporting Period (Acres)	Total to Date (Acres)
Total area of land impacted by contamination	64	64
Of the total acres provide the:		
Area of Land Remediated	55	55

Other: *Provide a description in the space provided on page 3 of any other green remediation practices performed during the project.*

Description of green remediation programs reported above (Attach additional sheet if needed)
Waste Generation: Not applicable.
Energy Usage: Not applicable.
Emissions: Not applicable.
Water Usage: Not applicable.
Land and Ecosystem: Not applicable.
Other:

CERTIFICATION BY CONTRACTOR
I, Daniel Warren (**Name**) do hereby certify that I am Project Manager (**Title**) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including the last day of the period covered by this application. 5/25/2021 — **Date** Daniel Warren — **Contractor**

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APPENDIX B

SITE HISTORY

BIANCHI/WEISS GREENHOUSES SITE (NYSDEC SITE NO. 152209)

Date	Description
2005	A soil investigation consisting of the collection and laboratory analysis of eight surface soil samples [1 to 3 inches below ground surface (bgs)] and four subsurface samples collected at depths of 9 to 12 inches bgs was completed by EnviroScience Consultants, Inc. (EnviroScience). Chlordane, heptachlor, and arsenic were detected at concentrations exceeding United States Environmental Protection Agency (USEPA) soil screening levels; additional subsurface investigation was requested by the Suffolk County Department of Health Services (SCDOH).
2006	An additional subsurface soil investigation was conducted by EnviroScience. Activities included investigation of Site subsurface drainage structures as well as subsurface sampling at four of the surface sample locations previously investigated. Samples contained elevated concentrations of chlordane; subsurface drainage structures also contained lead, copper, and semi-volatiles organic compounds (SVOCs).
2006	On-Site and downgradient surface water and groundwater samples were collected by the SCDOH. Chlordane was detected in on-Site groundwater and surface water and off-Site groundwater as far as 3,000 ft south-southwest from the Site.
2008-2009	Interim remedial measures (IRM) were completed by EA to remove Site stockpiles and excavate soil from within the on-Site subsurface drainage structures. Removed material was transported off-Site for disposal. Exposed surface soils were covered with mulch and silt barriers were placed along the perimeter of the Site to mitigate the potential off-Site migration off Site surface soil.
2009-2011	RI completed by EA. The RI included the installation of soil borings and monitoring wells and collection and laboratory analysis on-Site and off-Site groundwater, surface water, soil, and sediment samples. Chlordane and lead were determined to be the primary Site contaminants of concern (COCs).
2011	Feasibility Study (FS) completed by EA. The FS included an evaluation of remedial alternatives for the Site based on results of RI.
2012	NYSDEC issued a Record of Decision (ROD) selecting a remedy consisting of Excavation and Off-site Disposal to Residential Soil Cleanup Objectives (SCOs), Connection to Public Water, Upgrade Basement Sumps and Groundwater Monitoring.
2014	Sump pump and filter systems were installed by Environmental Assessment & Remediations (EAR) in the residence located at 547 South Country Road, East Patchogue, NY, downgradient of the Site. Operation of the sump and filter systems began on May 8, 2014.
2015 to 2016	Remedial action performed by EnviroTrac, Ltd. A total of approximately 46,444 tons of impacted material were removed and transported off-Site for disposal. Generally,

soil was excavated on-Site to achieve Restricted Residential Use SCOs and off-Site to achieve Unrestricted Use SCOs. One 5,000-gallon UST was removed and transported off-Site for disposal by AARCO Environmental Corporation (AARCO).

CUSTODIAL RECORD

PERTINENT SITE DOCUMENTS

BIANCHI/WEISS GREENHOUSES SITE (NYSDEC SITE NO. 152209)

"Soil Investigation Report," EnviroScience, 2005.

"Subsurface Investigation Report," EnviroScience, 2006.

"Surface Water and Groundwater Sampling Results," Suffolk County Department of Health Services, 2006.

"Final Interim Remedial Measures Summary Report Bianchi/Weiss Greenhouses Site (1-52-209) East Patchogue, Suffolk County, New York," EnviroScience, 2009.

"Remedial Investigation Report Bianchi/Weiss Greenhouses Site (152209) East Patchogue, Suffolk County, New York," EnviroScience, 2011.

"Feasibility Study Bianchi/Weiss Greenhouses Site (152209) East Patchogue, Suffolk County, New York," EnviroScience, 2011.

"Record of Decision Bianchi/Weiss Greenhouses State Superfund Project East Patchogue, Suffolk County Site No. 152209," New York State Department of Environmental Conservation, 2012.

"Bianchi/Weiss Greenhouses Site, Suffolk County, East Patchogue, New York Site Management Plan," EnviroScience, 2019.

New York State Department of Environmental Conservation
Bianchi/Weiss Greenhouses Site (Site No. 152209) - East Patchogue, NY
Monitoring Well Construction Summary

Well ID	Installation Date	Well Dia. (inches)	Well Material	Total Depth (feet bgs)	Screened Formation	*Screen*			*Elevation (feet AMSL)*				*Location*	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Casing Top	Ground Surface	Screen		Northing	Easting
											Top	Bottom		
MW-41	5/20/2009	2	PVC	35	Overburden	30.00	35.00	5.00	20.46	20.59	-9.41	-14.41	218550.729	1270338.35
PDI-PZ-01	7/1/2016	1	PVC	17.5	Overburden	6.00	15.00	9.00	15.67	13.22	7.22	-1.78	217909.6150	1269836.6795
PDI-PZ-02	7/1/2016	1	PVC	17.5	Overburden	6.00	15.00	9.00	16.00	13.70	7.70	-1.30	218126.0136	1269902.2808
TPMW-01	7/1/2016	1	PVC	12.5	Overburden	5.00	10.00	5.00	14.59	12.20	7.20	2.20	217971.2521	1269596.5874
WO-08	5/3/2006	2	PVC	20	Overburden	10.00	15.00	5.00	11.88	12.11	2.11	-2.89	217579.246	1269611.877
WO-19	6/8/2006	2	PVC	20	Overburden	10.00	15.00	5.00	8.93	9.10	-0.90	-5.90	217311.829	1269384
WO-25	7/24/2006	1	PVC	15	Overburden	10.00	15.00	5.00	10.08	N/A	0.08	-4.92	216870.205	1268802.325
WO-27	7/24/2006	1	PVC	40	Overburden	40.00	45.00	5.00	10.86	11.17	-18.83	-23.83	216558.49	1268692.085
WO-28	9/19/2016	1	PVC	45	Overburden	40.00	45.00	5.00	15.71	15.87	-19.13	-24.13	216448.529	1268470.565

Notes

AMSL : above mean sea level
feet bgs : feet below ground surface
PVC : polyvinyl chloride
N/A : Not Available

APPENDIX C

ENVIRONMENTAL NOTICE

THIS ENVIRONMENTAL NOTICE is made the 7th day of August 2018, by the New York State Department of Environmental Conservation (Department), having an office for the transaction of business at 625 Broadway, Albany, New York 12233.

WHEREAS, a parcel of real property identified as Bianchi/Weiss Greenhouses (Site152209), located on Orchard Road, East Patchogue in the Town of Brookhaven, County of Suffolk, State of New York, which is part of lands conveyed by Weiss, Russell/Weiss, Kirk/Weiss, Wayne to Henron Development Corporation by deed dated November 2, 2005 and recorded in the Suffolk County Clerk's Office on December 2, 2005 in Book 12423 of Deeds at Page 385 and being more particularly described in Appendix "A", attached to this noticed and made a part hereof, and hereinafter referred to as " the Property" is part of the Department's State Superfund Program; and

WHEREAS, the Department approved a cleanup to address contamination disposed at the Property and such cleanup was conditioned upon certain limitations.

NOW, THEREFORE, the Department provides notice that:

FIRST, the Property subject to this Environmental Notice is as shown on a map attached to this Notice as Appendix "B" and made a part hereof.

SECOND, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results or may result in a significantly increased threat of harm or damage at any site as a result of exposure to soils. A violation of this provision is a violation of 6 NYCRR 375-1.11(b)(2).

THIRD, no person shall disturb, remove, or otherwise interfere with the installation, use, operations, and maintenance of engineering controls required for the Remedy, including but not limited to those engineering controls described in the SMP and listed below, unless in each instance they first obtain a written waiver of such prohibition from the Department or Relevant Agency.

FOURTH, the remedy was designed to be protective for the following uses: **Residential as described in 6 NYCRR Part 375-1.8(g)(2)(i), Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)** Therefore, any use for purposes other than Residential without the express written waiver of such prohibition by the Relevant Agency may result in a significantly increased threat of harm or damage at any site.

FIFTH, no person shall use the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency; the prohibition of raising livestock or producing animal products for human consumption; and the prohibition of installation of a basement beneath on-site structures. Inappropriate actions may result in a significantly increased threat of harm or damage at the site;

SIXTH, it is a violation of 6 NYCRR 375-1.11(b) to use the Property in a manner inconsistent with this environmental notice;

SEVENTH, monitoring and periodic reporting to assess the performance and effectiveness of the remedy must be performed as defined in the SMP. The Department or Relevant Agency shall be permitted access to the site to confirm compliance with the SMP. Site owners shall participate in periodic reporting to confirm that site controls are unchanged from the previous certification or changed with Department or Relevant Agency approval.

IN WITNESS WHEREOF, the undersigned, acting by and though the Department of Environmental Conservation as Designee of the Commissioner, has executed this instrument the day written below.

By: _____
Michael J. Ryan, P.E,
Director, Division of
Environmental
Remediation

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 7th day of August, in the year 2018, before me, the undersigned, personally appeared Michael Ryan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2022

APPENDIX "A" PROPERTY DESCRIPTION

All that certain plot, piece or parcel of land, situate, lying and being at East Patchogue, in the Town of Brookhaven, County of Suffolk and State of New York, being more particularly bounded and described as follows:

Beginning at a point on the southeasterly side of Orchard Road distant 258.00 feet northeasterly from the corner formed by the intersection of the southeasterly side of Orchard Road with the northeasterly side of South Country Road;

Thence from said point of beginning North 24° 21' 03" East along the southeasterly side of Orchard Road a distance of 431.58 feet to land now or formerly of John Christie;

Thence along the land now or formerly of John Christie the following five (5) courses and distances:

1. South 59° 09' 57" East a distance of 29.34 feet to a point; thence
2. South 58° 44' 47" East a distance of 121.45 feet to a point; thence
3. South 58° 34' 17" East a distance of 17.29 feet to a point; thence
4. South 58° 48' 07" East a distance of 68.75 feet to a point; thence
5. North 26° 20' 23" East a distance of 5.27 feet to a point on the easterly boundary of lands now or formerly of John Christie;

Thence North 2° 06' 23" East along the land now or formerly of John Christie and then along land now or formerly of Sandra Zylowski and then along land now or formerly of George Zylowski a distance of 448.48 feet to the southwesterly side of Old Orchard Road;

Thence South 54° 25' 07" East along the southwesterly side of Old Orchard Road a distance of 500.31 feet to land now or formerly of Doreen Drapal;

Thence South 4° 33' 17" East along land now or formerly of Doreen Drapal and then along land now or formerly of Kerry Young a distance of 287.26 feet;

Thence South 75° 23' 27" East still along land now or formerly of Kerry Young and then along land now or formerly of Michael Jorgensen a distance of 118.54 feet to land now or formerly of Rose & Robert O. Gruber;

Thence along the land now or formerly of Rose & Robert O. Gruber the following two (2) courses and distances;

1. South 23° 01' 08" West a distance of 155.90 feet to a point; thence
2. South 63° 27' 17" East a distance of 200.00 feet to the westerly side of a Right of Way known as Hedges Road;

Thence South 26° 29' 33" West along the westerly side of said Right of Way a distance of 343.00 feet to land now or formerly of Julio Claudio;

Thence North 67° 17' 57" West along the land now or formerly of Julio Claudio a distance of 145.87 feet to land now or formerly of Gregory C. Garner & Nicole M. Novellano;

Thence North 67° 12' 47" West along the land now or formerly of Gregory C. Garner & Nicole M. Novellano and then along land now or formerly of then Peter Ross & Patricia Cleland a distance of 99.21 feet to a point a point on the northerly boundary of lands now or formerly of Peter Ross & Patricia Cleland;

Thence North 67° 22' 17" West still along the land now or formerly of Peter Ross & Patricia Cleland a distance of 172.99 feet to land now or formerly of Shimante Devlin;

Thence along the land now or formerly of Shimante Devlin the following four (4) courses and distances;

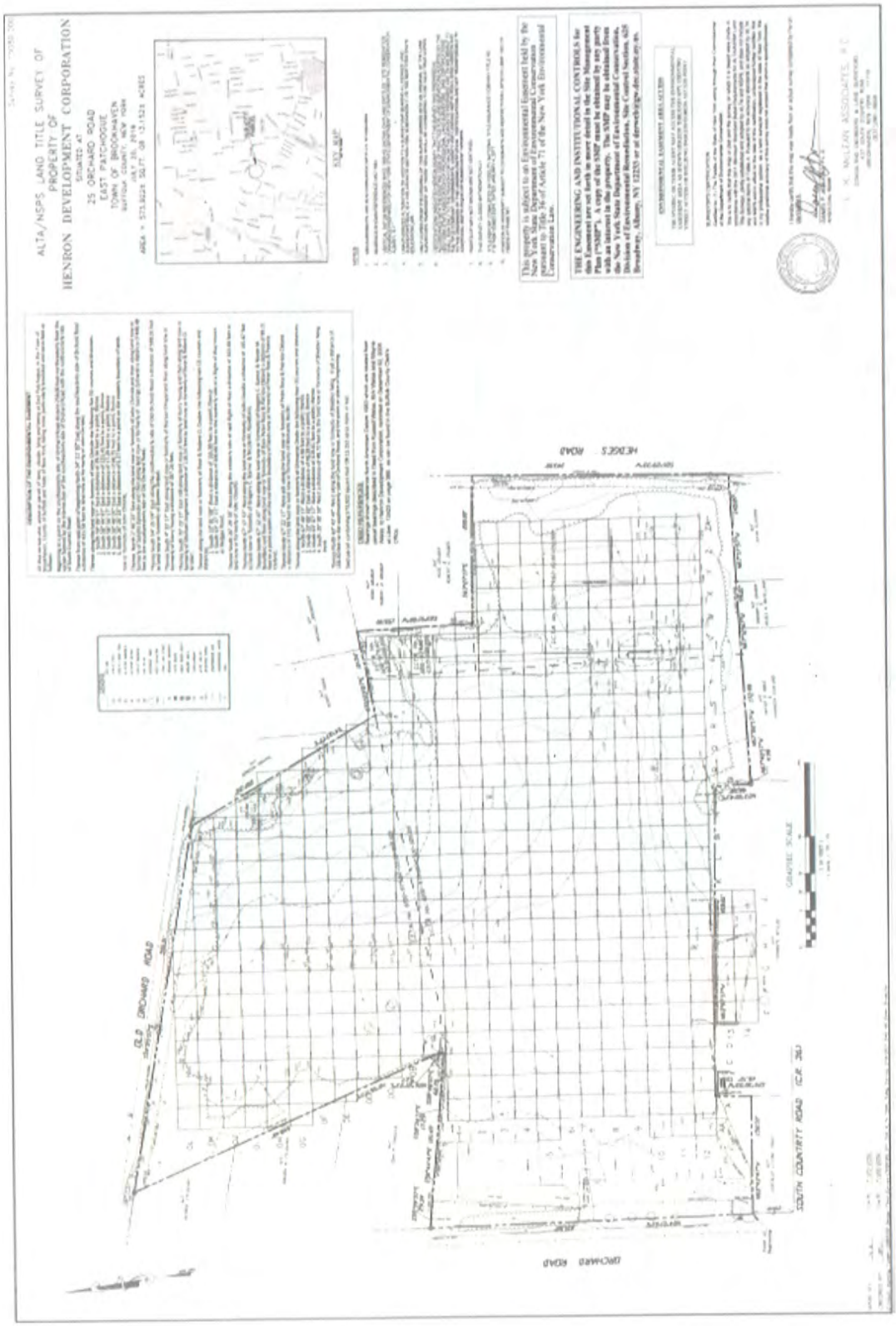
1. North 67° 40' 17" West a distance of 4.98 feet to a point; thence
2. North 23° 00' 43" East a distance of 48.58 feet to a point; thence
3. North 63° 07' 17" West a distance of 419.61 feet to a point; thence
4. South 25° 30' 53" West a distance of 48.72 feet to the land now or formerly of Shiebler living trust;

Thence North 63° 43' 47" West along the land now or formerly of Shiebler living trust a distance of 158.50 feet to the southeasterly side of Orchard Road, and the point or place of beginning.

Said parcel containing 573,922 square feet OR 13.152 acres more or less.

Suffolk County Tax Map numbers (District-Section-Block-Lot)
0200-979.60-03.00-002.000
0200-979.60-03.00-008.000
0200-979.60-03.00-009.000
0200-979.60-03.00-011.000
0200-979.60-03.00-020.001

APPENDIX "B" SITE MAP




N
STEPHANO RD
HEDGES AVE
HEDGES RD
ERVING AVE
ORCHARD RD
SITE
ORCHARD RD S
S COUNTRY RD
DRIVEWAY

APPENDIX D

SITE-WIDE INSPECTION **Day:** Wednesday **Date:** 7/22/2020

NYSDEC		Temperature: (F)	84 F	(am)	86 F	(pm)
Site Owner: Herron **Current Site Use:** Vacant		Wind Direction/Speed:	SE 9 mph	(am)	SSE 10 mph	(pm)
BIANCHI/WEISS GREENHOUSES SITE **NYSDEC Site # 152209**		Weather:	(am) Cloudy (pm) Cloudy			
East Patchogue, New York		Arrive at site	1200	PM ~~(am)~~		
		Leave site:	5:00	(pm)		

Site Security

Evidence of vandalism (fence, gate, wells):

None, site secure

Evidence of digging:

None, site cover in good condition

General site condition (fence, gate, wells, vegetative cover):

Site in good condition; fence + gate keeping site secure, all inspected wells in good condition, and vegetative cover maturing. Asphalt and structure foundations covering site where vegetation does not.

Additional Comments:

None.

Vegetative Cover

Evidence of vegetation mortality:

None. Vegetation is young but healthy. Site coverage approximately 90% or greater.

Evidence of erosion/dust:

None. Soil is stable.

Additional Comments:

None.

Site Drainage

Evidence of ponding within retention area:

None, area dry.

Evidence of site runoff:

None, surface is level with adequate vegetation cover.

SITE-WIDE INSPECTION **Day:** Wednesday **Date:** 7/22/2020

Additional Comments:

None.

Site Monitoring Wells

Are there any new cracks in the concrete collars of the site related MWs?

No significant cracks or damage noted in any of the inspected monitoring wells.

Are monitoring wells locked?

No.

Do monitoring wells have caps?

Yes

Are the private wells operational?

Private wells not inspected

APPENDIX E

Data Usability Summary Report

Site: SMP B Bianchi-Weiss Greenhouses
Laboratory: Eurofins TestAmerica, Buffalo – Amherst, NY
SDG No.: 480-177524-1
Parameter: Organochlorine Pesticides
Data Reviewer: Amy Bass/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: January 15, 2021

Samples Reviewed and Evaluation Summary

10 Groundwater: BW-MW-41-WG-20201029, BW-WO-08-WG-20201029, BW-WO-19-WG-20201029, BW-WO-25-WG-20201029, BW-WO-27-WG-20201029, BW-WO-28-WG-20201030, BW-TPMW-01-WG-20201030, BW-PDI-PZ-01-WG-20201030, BW-PDI-PZ-02-WG-20201030, BW-DUP-01-20201029[1]

[1]Field Duplicate of BW-WO-08-WG-20201029

1 Surface Water: BW-SW-01-WS-20201030

The above-listed groundwater and surface water samples were collected on October 29 and 30, 2020 and were analyzed for the following parameter:

- Organochlorine pesticides by SW-846 Method 8081B

The data validation was performed in accordance with *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-017-002),* January 2017, modified for the SW-846 methodology utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
* • GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Initial and Continuing Calibrations
* • Blanks
- Surrogate Recoveries
* • Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
* • Internal Standards
* • Laboratory Control Sample (LCS) Results
* • Field Duplicate Results
- Sample Results and Reported Quantitation Limits (QLs)
- Target Compound Identification

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive result for methoxychlor in sample BW-WO-08-WG-20201029 was qualified as estimated (J) due to a continuing calibration nonconformance. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

- The positive results for heptachlor epoxide in sample BW-PDI-PZ-01-WG-20201030, heptachlor epoxide, 4,4'-DDE, and endosulfan I in sample BW-WO-08-WG-20201029, and dieldrin, heptachlor epoxide, and 4,4'-DDE in sample BW-DUP-01-20201029 were qualified as nondetect (U) due to high dual column variability when results were below the QL. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

- The positive results for cis-chlordane in samples BW-WO-08-WG-20201029 and BW-DUP-01-20201029 were qualified as presumptively present and estimated (NJ) due to significantly high dual column variability. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability

- The positive results for cis-chlordane in samples BW-WO-28-WG-20201030, BW-PDI-PZ-02-WG-20201030, and BW-PDI-PZ-01-WG-20201030 and endosulfan I in sample BW-TPMW-01-WG-20201030 were qualified as estimated (J) due to dual column variability. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with the following exception.

- The laboratory did not report the results for the initial calibration verification (ICV) analyses for all parameters. The run logs noted that ICV analyses were performed after each calibration sequence, but the ICV results were not provided. Since the ICV analyses are not used to qualify sample data, no further action was required.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met.

GC/ECD Instrument Performance Checks

All criteria were met for the DDT/endrin breakdown checks.

Initial and Continuing Calibrations

All correlation coefficients were within the method acceptance criteria in the initial calibrations associated with the samples in this data set. The following table summarizes the percent drifts or percent differences (%Ds) that did not meet the acceptance criteria in the continuing calibration (CC) standards, the associated samples, and the resulting validation actions.

CC	Compound	Column 1 %D**	Column 2 %D**	Associated Samples	Validation Action
11/05/20 @10:43 HP6890-25	Methoxychlor	-	-20.2	BW-WO-08-WG-20201029, BW-PDI-PZ-01-WG-20201030	The positive result for methoxychlor in sample BW-WO-08-WG-20201029 was qualified as estimated (J) based on the CC nonconformance. Qualification was not required in sample BW-PDI-PZ-01-WG-20201030 since methoxychlor was nondetect and the %D on column 1 met criteria.
11/05/20 @11:22 HP6890-25	Toxaphene Peak 1	-	36.0		Qualification was not required since toxaphene was nondetect in the associated samples and the %Ds on column 1 met criteria.
	Toxaphene Peak 2	-	34.7		
	Toxaphene Peak 3	-	21.9		
11/05/20 @08:46 HP6890-5	Endosulfan sulfate	34.5	-	BW-MW-41-WG-20201029, BW-WO-19-WG-20201029, BW-WO-25-WG-20201029, BW-WO-27-WG-20201029, BW-WO-28-WG-20201030, BW-SW-01-WS-20201030, BW-TPMW-01-WG-20201030, BW-PDI-PZ-02-WG-20201030	Qualification was not required since these pesticides were nondetect in the associated samples and the %Ds on column 2 met criteria.
	Endrin ketone	36.8	-		
11/05/20 @09:25 HP6890-5	Toxaphene Peak 4	23.1	-		
	Toxaphene Peak 5	23.1	-		
11/06/20 @08:32 HP6890-5	Endosulfan sulfate	36.5	-	BW-DUP-01-20201029	Qualification was not required since these pesticides were nondetect in the associated sample and the %Ds on column 2 met criteria.
	Endrin ketone	33.7	-		
11/06/20 @09:11 HP6890-5	Toxaphene Peak 5	20.9	-		

-: Met criteria: Absolute value of %D ≤ 20%
**Column 1 = RTX-CLPI; Column 2 = RTX-CLPII

Blanks

Target analytes were not detected in the associated laboratory method blank.

Surrogate Recoveries

The following table lists the surrogate percent recoveries (%Rs) that did not meet the acceptance criteria, the associated samples, and the resulting validation actions.

Sample ID	Dilution	Surrogate	Column 1 %R**	Column 2 %R**	Validation Action
BW-PDI-PZ-01-WG-20201030	5-fold	TCX	123	-	Qualification was not required on this basis since the positive results for 4,4'-DDT, cis-chlordane, trans-chlordane, and heptachlor epoxide in sample BW-PDI-PZ-01-WG-20201030 were reported from column 2, and the surrogate %Rs on column 2 met criteria.
TCX: Tetrachloro-m-xylene; %R QC Limits = 44-120% -: Met criteria **Column 1 = RTX-CLPI; Column 2 = RTX-CLPII					

MS/MSD Results

MS/MSD analyses were performed on sample BW-MW-41-WG-20201029. The %Rs and relative percent differences (RPDs) met the laboratory acceptance criteria.

It should be noted that toxaphene was not included as a spiked analyte for the MS/MSD analyses. No validation action was required on this basis.

Internal Standards

All internal standards met the method acceptance criteria.

LCS Results

The LCS %Rs were within the laboratory acceptance limits for the reported LCS sample relevant to the preparation batch associated with all samples of this sample set.

It should be noted that toxaphene was not included as a spiked analyte for the LCS analysis. No validation action was required on this basis.

Field Duplicate Results

One field duplicate pair was submitted with this sample set: BW-WO-08-WG-20201029 and BW-DUP-01-20201029. The RPD acceptance limit for field duplicates in aqueous media is ≤30%. The RPD is not applicable for comparison of results <5× the QL; instead, comparison is based on the absolute difference (AbsD) between the results, which must be ≤QL for aqueous samples. The following table summarizes the reported results and RPDs (and AbsDs, where applicable) for the detected analytes in the field duplicate pair and the validation actions when criteria were exceeded. The AbsD was not calculable (NC) for three analytes due to a nondetect result in one of the two samples, but criteria were met since the positive results were <5× the QL.

Analyte	QL (µg/L)	BW-WO-08-WG-20201029 (µg/L)	BW-DUP-01-20201029 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Actions
cis-Chlordane	0.25	1.7	1.3	RPD=27	Qualification was not required since criteria were met.
4,4-DDT	0.25	0.22 J	0.12 J	AbsD=0.10	
Dieldrin	0.25	0.13 J	ND (0.25 U)	NC; criteria met	
Endosulfan I	0.25	ND (0.25 U)	0.14 J	NC; criteria met	
trans-Chlordane	0.25	0.73	0.64	AbsD=0.09	

Analyte	QL (µg/L)	BW-WO-08-WG-20201029 (µg/L)	BW-DUP-01-20201029 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Actions
Methoxychlor	0.25	0.17 J	ND (0.25 U)	NC; criteria met	

Sample Results and Reported QLs

Select results were reported below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples. Sample calculations were spot-checked; there were no errors noted.

The following table summarizes the dilutions performed for the sample analyses; QLs were elevated accordingly by the laboratory.

Sample ID	Dilution	Reason for Dilution
BW-WO-08-WG-20201029	5-fold	Samples were diluted due to the concentrations of target analytes which would have exceeded the calibration range if not diluted.
BW-PDI-PZ-01-WG-20201030	5-fold	
BW-DUP-01-20201029	5-fold	

The laboratory reported the lower pesticide result from the dual column analysis with the exception of the results summarized in the following table. During validation, these results were changed on the Form I to reflect the lower results from the dual column analysis.

Sample ID	Analyte	Reported Result (µg/L)	Lower Result (µg/L)
BW-WO-08-WG-20201029	4,4'-DDT	0.25	0.22 J
	cis-Chlordane	3.9	1.7
	Dieldrin	0.15 J	0.13 J
	Endosulfan I	0.17 J	0.084 J
	trans-Chlordane	0.91	0.73
	Heptachlor epoxide	0.45	0.23 J
	Methoxychlor	0.23 J	0.17 J
BW-WO-27-WG-20201029	trans-Chlordane	0.032 J	0.030 J
BW-WO-28-WG-20201030	Endosulfan I	0.044 J	0.033 J
BW-TPMW-01-WG-20201030	4,4'-DDT	0.029 J	0.028 J
	trans-Chlordane	0.61	0.60
BW-PDI-PZ-01-WG-20201030	4,4'-DDT	0.20 J	0.16 J
	cis-Chlordane	2.7	1.5
	trans-Chlordane	1.0	0.94
BW-DUP-01-20201029	4,4'-DDE	0.29	0.14 J
	Dieldrin	0.19 J	0.11 J

Target Compound Identification

The dual column RPDs were within the acceptance limits (≤ 40%), except for the results listed in the following table.

Sample ID	Analyte	Dual Column RPD (%)	Validation Action
BW-WO-08-WG-20201029	Heptachlor epoxide	65.8	The positive results for these pesticides in sample BW-WO-08-WG-20201029 were qualified as nondetect (U) at the QL since the results were below the QL and the RPD was >40.
	4,4'-DDE	49.5	
	Endosulfan I	68.3	
	cis-Chlordane	76.9	The positive result for cis-chlordane in sample BW-WO-08-WG-20201029 was qualified as tentatively identified (NJ).
BW-WO-28-WG-20201030	cis-Chlordane	42.6	The positive result for cis-chlordane in sample BW-WO-28-WG-20201030 was qualified as estimated (J).
BW-TPMW-01-WG-20201030	Endosulfan I	48.0	The positive result for endosulfan I in BW-TPMW-01-WG-20201030 was qualified as estimated (J).
BW-PDI-PZ-02-WG-20201030	cis-Chlordane	47.8	The positive result for cis-chlordane in sample BW-PDI-PZ-02-WG-20201030 was qualified as estimated (J).
BW-PDI-PZ-01-WG-20201030	Heptachlor epoxide	104.2	The positive result for heptachlor epoxide in sample BW-PDI-PZ-01-WG-20201030 was qualified as nondetect at the QL since the result was below the QL and the RPD was >40.
	cis-Chlordane	55.7	The positive result for cis-chlordane in sample BW-PDI-PZ-01-WG-20201030 was qualified as estimated (J).
BW-DUP-01-20201029	Dieldrin	48.6	The positive results for these pesticides in sample BW-DUP-01-20201029 were qualified as nondetect (U) at the QL since the results were below the QL and the RPD was >40.
	Heptachlor epoxide	50.4	
	4,4'-DDE	70.5	
	cis-Chlordane	83.3	The positive result for cis-chlordane in sample BW-DUP-01-20201029 was qualified as tentatively identified (NJ).

QUALIFIED FORM 1s

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-MW-41-WG-20201029 Lab Sample ID: 480-177524-1

Matrix: Water Lab File ID: 5_39043.D

Analysis Method: 8081B Date Collected: 10/29/2020 09:15

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 11:22

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	ND		0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	ND		0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	ND		0.050	0.0098
959-98-8	Endosulfan I	ND		0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	ND		0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	56		20-120
877-09-8	Tetrachloro-m-xylene	72		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-08-WG-20201029 Lab Sample ID: 480-177524-2

Matrix: Water Lab File ID: 25_40-240.D

Analysis Method: 8081B Date Collected: 10/29/2020 10:10

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 15:17

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: RTX-CLPI ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557543 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.25	0.046
72-55-9	4,4'-DDE	0.25 ~~0.12~~	~~J~~ U	0.25	0.058
50-29-3	4,4'-DDT	0.22 ~~0.25~~	J	0.25	0.055
309-00-2	Aldrin	ND		0.25	0.041
319-84-6	alpha-BHC	ND		0.25	0.039
5103-71-9	cis-Chlordane	1.7 ~~3.9~~	NJ	0.25	0.074
319-85-7	beta-BHC	ND		0.25	0.12
319-86-8	delta-BHC	ND		0.25	0.050
60-57-1	Dieldrin	0.13 0.15	J J	0.25	0.049
959-98-8	Endosulfan I	0.25 ~~0.17~~	~~J~~ U	0.25	0.055
33213-65-9	Endosulfan II	ND		0.25	0.060
1031-07-8	Endosulfan sulfate	ND	~~*~~	0.25	0.079
72-20-8	Endrin	ND		0.25	0.069
7421-93-4	Endrin aldehyde	ND		0.25	0.082
53494-70-5	Endrin ketone	ND	~~*~~	0.25	0.060
58-89-9	gamma-BHC (Lindane)	ND		0.25	0.040
5103-74-2	trans-Chlordane	0.73 ~~0.91~~		0.25	0.055
76-44-8	Heptachlor	ND		0.25	0.043
1024-57-3	Heptachlor epoxide	0.25 ~~0.45~~	U	0.25	0.037
72-43-5	Methoxychlor	0.17 ~~0.23~~	~~J~~ J	0.25	0.071
8001-35-2	Toxaphene	ND		2.5	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	69		20-120
877-09-8	Tetrachloro-m-xylene	120		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-19-WG-20201029 Lab Sample ID: 480-177524-3

Matrix: Water Lab File ID: 5_39045.D

Analysis Method: 8081B Date Collected: 10/29/2020 11:10

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 12:01

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	ND		0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	ND		0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	ND		0.050	0.0098
959-98-8	Endosulfan I	ND		0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	ND		0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	27		20-120
877-09-8	Tetrachloro-m-xylene	78		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-25-WG-20201029 Lab Sample ID: 480-177524-4

Matrix: Water Lab File ID: 5_39046.D

Analysis Method: 8081B Date Collected: 10/29/2020 12:05

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 12:20

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	ND		0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	ND		0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	ND		0.050	0.0098
959-98-8	Endosulfan I	ND		0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	ND		0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	41		20-120
877-09-8	Tetrachloro-m-xylene	78		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-27-WG-20201029 Lab Sample ID: 480-177524-5

Matrix: Water Lab File ID: 5_39047.D

Analysis Method: 8081B Date Collected: 10/29/2020 13:00

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 12:40

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	ND		0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	ND		0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	ND		0.050	0.0098
959-98-8	Endosulfan I	0.026	J	0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	0.030 0.032	J J	0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	41		20-120
877-09-8	Tetrachloro-m-xylene	85		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-28-WG-20201030 Lab Sample ID: 480-177524-6

Matrix: Water Lab File ID: 5_39048.D

Analysis Method: 8081B Date Collected: 10/30/2020 08:55

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 12:59

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	0.012	J	0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	0.16	J	0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	0.014	J	0.050	0.0098
959-98-8	Endosulfan I	0.033 ~~0.044~~	~~J~~ J	0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	0.099		0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	75		20-120
877-09-8	Tetrachloro-m-xylene	83		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-SW-01-WS-20201030 | Lab Sample ID: 480-177524-7

Matrix: Water | Lab File ID: 5_39049.D

Analysis Method: 8081B | Date Collected: 10/30/2020 09:55

Extraction Method: 3510C | Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) | Date Analyzed: 11/05/2020 13:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	ND		0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	ND		0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	ND		0.050	0.0098
959-98-8	Endosulfan I	ND		0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	ND		0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	47		20-120
877-09-8	Tetrachloro-m-xylene	84		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-TPMW-01-WG-20201030 Lab Sample ID: 480-177524-8

Matrix: Water Lab File ID: 5_39050.D

Analysis Method: 8081B Date Collected: 10/30/2020 10:40

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 13:38

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	0.028 ~~0.029~~	J ~~J~~	0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	0.81		0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	0.044	J	0.050	0.0098
959-98-8	Endosulfan I	0.057	J	0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	0.60 ~~0.61~~		0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	35		20-120
877-09-8	Tetrachloro-m-xylene	85		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-PDI-PZ-01-WG-20201030 Lab Sample ID: 480-177524-9

Matrix: Water Lab File ID: 25_40-241.D

Analysis Method: 8081B Date Collected: 10/30/2020 11:30

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 15:37

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: RTX-CLPI ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557543 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.25	0.046
72-55-9	4,4'-DDE	ND		0.25	0.058
50-29-3	4,4'-DDT	0.16 ~~0.20~~	~~J~~ J	0.25	0.055
309-00-2	Aldrin	ND		0.25	0.041
319-84-6	alpha-BHC	ND		0.25	0.039
5103-71-9	cis-Chlordane	1.5 ~~2.7~~	J	0.25	0.074
319-85-7	beta-BHC	ND		0.25	0.12
319-86-8	delta-BHC	ND		0.25	0.050
60-57-1	Dieldrin	ND		0.25	0.049
959-98-8	Endosulfan I	ND		0.25	0.055
33213-65-9	Endosulfan II	ND		0.25	0.060
1031-07-8	Endosulfan sulfate	ND	~~*~~	0.25	0.079
72-20-8	Endrin	ND		0.25	0.069
7421-93-4	Endrin aldehyde	ND		0.25	0.082
53494-70-5	Endrin ketone	ND	~~*~~	0.25	0.060
58-89-9	gamma-BHC (Lindane)	ND		0.25	0.040
5103-74-2	trans-Chlordane	0.94 ~~1.0~~		0.25	0.055
76-44-8	Heptachlor	ND		0.25	0.043
1024-57-3	Heptachlor epoxide	0.25 ~~0.19~~	~~J~~ U	0.25	0.037
72-43-5	Methoxychlor	ND		0.25	0.071
8001-35-2	Toxaphene	ND		2.5	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	78		20-120
877-09-8	Tetrachloro-m-xylene	123	X	44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-PDI-PZ-02-WG-20201030 Lab Sample ID: 480-177524-10

Matrix: Water Lab File ID: 5_39052.D

Analysis Method: 8081B Date Collected: 10/30/2020 12:20

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/05/2020 14:17

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.050	0.0092
72-55-9	4,4'-DDE	ND		0.050	0.012
50-29-3	4,4'-DDT	ND		0.050	0.011
309-00-2	Aldrin	ND		0.050	0.0081
319-84-6	alpha-BHC	ND		0.050	0.0077
5103-71-9	cis-Chlordane	0.066	J	0.050	0.015
319-85-7	beta-BHC	ND		0.050	0.025
319-86-8	delta-BHC	ND		0.050	0.010
60-57-1	Dieldrin	ND		0.050	0.0098
959-98-8	Endosulfan I	ND		0.050	0.011
33213-65-9	Endosulfan II	ND		0.050	0.012
1031-07-8	Endosulfan sulfate	ND		0.050	0.016
72-20-8	Endrin	ND		0.050	0.014
7421-93-4	Endrin aldehyde	ND		0.050	0.016
53494-70-5	Endrin ketone	ND		0.050	0.012
58-89-9	gamma-BHC (Lindane)	ND		0.050	0.0080
5103-74-2	trans-Chlordane	0.038	J	0.050	0.011
76-44-8	Heptachlor	ND		0.050	0.0085
1024-57-3	Heptachlor epoxide	ND		0.050	0.0074
72-43-5	Methoxychlor	ND		0.050	0.014
8001-35-2	Toxaphene	ND		0.50	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	55		20-120
877-09-8	Tetrachloro-m-xylene	76		44-120

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-DUP-01-20201029 Lab Sample ID: 480-177524-11

Matrix: Water Lab File ID: 5_39069.D

Analysis Method: 8081B Date Collected: 10/29/2020 00:00

Extraction Method: 3510C Date Extracted: 11/04/2020 15:23

Sample wt/vol: 250(mL) Date Analyzed: 11/06/2020 09:50

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 557731 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		0.25	0.046
72-55-9	4,4'-DDE	0.25 ~~0.29~~	U	0.25	0.058
50-29-3	4,4'-DDT	0.12	J	0.25	0.055
309-00-2	Aldrin	ND		0.25	0.041
319-84-6	alpha-BHC	ND		0.25	0.039
5103-71-9	cis-Chlordane	1.3	NJ	0.25	0.074
319-85-7	beta-BHC	ND		0.25	0.12
319-86-8	delta-BHC	ND		0.25	0.050
60-57-1	Dieldrin	0.25 ~~0.19~~	~~J~~ U	0.25	0.049
959-98-8	Endosulfan I	0.14	J	0.25	0.055
33213-65-9	Endosulfan II	ND		0.25	0.060
1031-07-8	Endosulfan sulfate	ND		0.25	0.079
72-20-8	Endrin	ND		0.25	0.069
7421-93-4	Endrin aldehyde	ND		0.25	0.082
53494-70-5	Endrin ketone	ND		0.25	0.060
58-89-9	gamma-BHC (Lindane)	ND		0.25	0.040
5103-74-2	trans-Chlordane	0.64		0.25	0.055
76-44-8	Heptachlor	ND		0.25	0.043
1024-57-3	Heptachlor epoxide	0.25 ~~0.23~~	~~J~~ U	0.25	0.037
72-43-5	Methoxychlor	ND		0.25	0.071
8001-35-2	Toxaphene	ND		2.5	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	62		20-120
877-09-8	Tetrachloro-m-xylene	99		44-120

QC NONCONFORMANCE DOCUMENTATION

FORM VII

PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Lab Sample ID: CCVIS 480-557543/6 Calibration Date: 11/05/2020 10:43

Instrument ID: HP6890-25 Calib Start Date: 09/17/2020 10:03

GC Column: RTX-CLPII ID: 0.53(mm) Calib End Date: 09/17/2020 11:22

Lab File ID: 25_40-226.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Lin1		2.226		0.0460	0.0500	-7.9	20.0
gamma-BHC (Lindane)	Lin1		2.032		0.0483	0.0500	-3.4	20.0
beta-BHC	Lin1		0.8485		0.0498	0.0500	-0.3	20.0
delta-BHC	Lin1		1.751		0.0466	0.0500	-6.8	20.0
Heptachlor	Lin1		2.053		0.0525	0.0500	5.1	20.0
Aldrin	Lin1		1.931		0.0518	0.0500	3.7	20.0
Heptachlor epoxide	Lin1		1.644		0.0517	0.0500	3.4	20.0
trans-Chlordane	Lin1		1.764		0.0527	0.0500	5.3	20.0
cis-Chlordane	Lin1		1.652		0.0514	0.0500	2.8	20.0
Endosulfan I	Lin1		1.488		0.0511	0.0500	2.1	20.0
4,4'-DDE	Lin1		1.668		0.0507	0.0500	1.3	20.0
Dieldrin	Lin1		1.680		0.0508	0.0500	1.6	20.0
Endrin	Lin1		1.555		0.0503	0.0500	0.6	20.0
4,4'-DDD	Lin1		1.241		0.0487	0.0500	-2.7	20.0
Endosulfan II	Lin1		1.306		0.0492	0.0500	-1.6	20.0
4,4'-DDT	Lin1		0.9160		0.0425	0.0500	-15.1	20.0
Endrin aldehyde	Lin1		1.077		0.0476	0.0500	-4.9	20.0
Endosulfan sulfate	Lin1		1.252		0.0491	0.0500	-1.8	20.0
Methoxychlor	Lin1		0.3674		0.0399	0.0500	-20.2*	20.0
Endrin ketone	Lin1		1.328		0.0476	0.0500	-4.8	20.0
Tetrachloro-m-xylene	Lin1		1.171		0.0442	0.0500	-11.5	20.0
DCB Decachlorobiphenyl	Lin1		1.266		0.0478	0.0500	-4.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Lab Sample ID: CCV 480-557543/8 Calibration Date: 11/05/2020 11:22

Instrument ID: HP6890-25 Calib Start Date: 07/17/2020 15:29

GC Column: RTX-CLPII ID: 0.53(mm) Calib End Date: 07/17/2020 16:47

Lab File ID: 25_40-228.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin1		0.0328		0.680	0.500	36.0*	20.0
Toxaphene Peak 2	Lin1		0.0440		0.673	0.500	34.7*	20.0
Toxaphene Peak 3	Lin1		0.0790		0.609	0.500	21.9*	20.0
Toxaphene Peak 4	Lin1		0.0465		0.574	0.500	14.9	20.0
Toxaphene Peak 5	Lin1		0.0353		0.533	0.500	6.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Lab Sample ID: CCVIS 480-557516/6 Calibration Date: 11/05/2020 08:46

Instrument ID: HP6890-5 Calib Start Date: 08/17/2020 15:27

GC Column: RTX-CLPI ID: 0.53(mm) Calib End Date: 08/17/2020 16:45

Lab File ID: 5_39035.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Lin1		1.804		0.0506	0.0500	1.3	20.0
gamma-BHC (Lindane)	Lin1		1.568		0.0507	0.0500	1.3	20.0
beta-BHC	Lin1		0.5963		0.0505	0.0500	1.1	20.0
delta-BHC	Lin1		1.561		0.0500	0.0500	0.0	20.0
Heptachlor	Lin1		1.430		0.0510	0.0500	2.0	20.0
Aldrin	Lin1		1.348		0.0507	0.0500	1.5	20.0
Heptachlor epoxide	Lin1		1.056		0.0450	0.0500	-9.9	20.0
trans-Chlordane	Lin1		1.155		0.0447	0.0500	-10.6	20.0
cis-Chlordane	Lin1		1.069		0.0435	0.0500	-12.9	20.0
4,4'-DDE	Lin1		1.055		0.0435	0.0500	-13.0	20.0
Endosulfan I	Lin1		0.9170		0.0425	0.0500	-15.1	20.0
Dieldrin	Lin1		0.995		0.0412	0.0500	-17.6	20.0
Endrin	Lin1		0.9560		0.0443	0.0500	-11.4	20.0
4,4'-DDD	Lin1		0.8216		0.0445	0.0500	-11.0	20.0
Endosulfan II	Lin1		0.8090		0.0464	0.0500	-7.2	20.0
4,4'-DDT	Lin1		0.8394		0.0475	0.0500	-5.1	20.0
Endrin aldehyde	Lin1		0.7686		0.0557	0.0500	11.4	20.0
Methoxychlor	Lin1		0.4177		0.0551	0.0500	10.2	20.0
Endosulfan sulfate	Lin1		1.000		0.0673	0.0500	34.5*	20.0
Endrin ketone	Lin1		1.178		0.0684	0.0500	36.8*	20.0
Tetrachloro-m-xylene	Lin1		0.8213		0.0457	0.0500	-8.6	20.0
DCB Decachlorobiphenyl	Lin1		0.9343		0.0551	0.0500	10.1	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Lab Sample ID: CCV 480-557516/8 Calibration Date: 11/05/2020 09:25

Instrument ID: HP6890-5 Calib Start Date: 08/17/2020 19:21

GC Column: RTX-CLPI ID: 0.53(mm) Calib End Date: 08/17/2020 20:39

Lab File ID: 5_39037.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin1		0.0420		0.475	0.500	-5.0	20.0
Toxaphene Peak 2	Lin1		0.0642		0.547	0.500	9.4	20.0
Toxaphene Peak 3	Lin1		0.0345		0.575	0.500	15.0	20.0
Toxaphene Peak 4	Lin1		0.0402		0.616	0.500	23.1*	20.0
Toxaphene Peak 5	Lin1		0.0370		0.615	0.500	23.1*	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Lab Sample ID: CCVIS 480-557731/5 Calibration Date: 11/06/2020 08:32

Instrument ID: HP6890-5 Calib Start Date: 08/17/2020 15:27

GC Column: RTX-CLPI ID: 0.53(mm) Calib End Date: 08/17/2020 16:45

Lab File ID: 5_39065.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Lin1		1.810		0.0508	0.0500	1.6	20.0
gamma-BHC (Lindane)	Lin1		1.573		0.0508	0.0500	1.6	20.0
beta-BHC	Lin1		0.5971		0.0506	0.0500	1.2	20.0
delta-BHC	Lin1		1.522		0.0488	0.0500	-2.4	20.0
Heptachlor	Lin1		1.419		0.0506	0.0500	1.3	20.0
Aldrin	Lin1		1.359		0.0512	0.0500	2.3	20.0
Heptachlor epoxide	Lin1		1.054		0.0450	0.0500	-10.0	20.0
trans-Chlordane	Lin1		1.149		0.0445	0.0500	-11.1	20.0
cis-Chlordane	Lin1		1.070		0.0436	0.0500	-12.9	20.0
4,4'-DDE	Lin1		1.062		0.0438	0.0500	-12.4	20.0
Endosulfan I	Lin1		0.8923		0.0413	0.0500	-17.4	20.0
Dieldrin	Lin1		0.9787		0.0405	0.0500	-19.0	20.0
Endrin	Lin1		0.9529		0.0441	0.0500	-11.7	20.0
4,4'-DDD	Lin1		0.8412		0.0455	0.0500	-9.0	20.0
Endosulfan II	Lin1		0.7941		0.0456	0.0500	-8.8	20.0
4,4'-DDT	Lin1		0.8000		0.0453	0.0500	-9.4	20.0
Endrin aldehyde	Lin1		0.7691		0.0557	0.0500	11.5	20.0
Methoxychlor	Lin1		0.3981		0.0526	0.0500	5.1	20.0
Endosulfan sulfate	Lin1		1.015		0.0682	0.0500	36.5*	20.0
Endrin ketone	Lin1		1.151		0.0669	0.0500	33.7*	20.0
Tetrachloro-m-xylene	Lin1		0.7865		0.0438	0.0500	-12.4	20.0
DCB Decachlorobiphenyl	Lin1		0.9432		0.0556	0.0500	11.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Lab Sample ID: CCV 480-557731/7 Calibration Date: 11/06/2020 09:11

Instrument ID: HP6890-5 Calib Start Date: 08/17/2020 19:21

GC Column: RTX-CLPI ID: 0.53(mm) Calib End Date: 08/17/2020 20:39

Lab File ID: 5_39067.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin1		0.0414		0.468	0.500	-6.4	20.0
Toxaphene Peak 2	Lin1		0.0571		0.490	0.500	-2.0	20.0
Toxaphene Peak 3	Lin1		0.0341		0.568	0.500	13.7	20.0
Toxaphene Peak 4	Lin1		0.0386		0.592	0.500	18.4	20.0
Toxaphene Peak 5	Lin1		0.0364		0.604	0.500	20.9*	20.0

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCBP1 #	DCBP2 #
BW-MW-41-WG-20201029	480-177524-1	81	72	55	56
BW-WO-08-WG-20201029	480-177524-2	120	94	69	47
BW-WO-19-WG-20201029	480-177524-3	89	78	26	27
BW-WO-25-WG-20201029	480-177524-4	83	78	42	41
BW-WO-27-WG-20201029	480-177524-5	96	85	43	41
BW-WO-28-WG-20201030	480-177524-6	84	83	75	75
BW-SW-01-WS-20201030	480-177524-7	96	84	49	47
BW-TPMW-01-WG-20201030	480-177524-8	90	85	33	35
BW-PDI-PZ-01-WG-20201030	480-177524-9	123 X	94	78	56
BW-PDI-PZ-02-WG-20201030	480-177524-10	84	76	54	55
BW-DUP-01-20201029	480-177524-11	90	99	58	62
	MB 480-557426/1-A	87	85	68	62
	LCS 480-557426/2-A	82	80	46	48
BW-MW-41-WG-20201029 MS	480-177524-1 MS	97	82	62	65
BW-MW-41-WG-20201029 MSD	480-177524-1 MSD	90	80	59	60

	QC LIMITS
TCX = Tetrachloro-m-xylene	44-120
DCBP = DCB Decachlorobiphenyl	20-120

Column to be used to flag recovery values

FORM II 8081B

FORM X

IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-08-WG-20201029 Lab Sample ID: 480-177524-2

Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25

Date Analyzed (1): 11/05/2020 15:17 Date Analyzed (2): 11/05/2020 15:17

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Heptachlor epoxide	1		4.30	4.26	4.32	0.45	*	65.8
	2		5.14	5.09	5.15	0.23		
trans-Chlordane	1		4.42	4.39	4.45	0.91	*	21.2
	2		5.31	5.29	5.35	0.73		
cis-Chlordane	1		4.54	4.52	4.58	3.9	*	76.9
	2		5.47	5.44	5.50	1.7		
4,4'-DDE	1		4.63	4.60	4.66	0.12		49.5
	2		5.61	5.60	5.66	0.20		
Endosulfan I	1		4.71	4.65	4.71	0.17	*	68.3
	2		5.51	5.51	5.57	0.084		
Dieldrin	1		4.95	4.90	4.96	0.15	*	13.7
	2		5.80	5.79	5.85	0.13		
4,4'-DDT	1		5.53	5.50	5.56	0.25	*	14.2
	2		6.57	6.53	6.59	0.22		
Methoxychlor	1		6.06	6.00	6.06	0.23	*	29.5
	2		7.27	7.22	7.28	0.17		

*The laboratory reported the higher of the two values; result was revised to the lower value (circled) on Form I.

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-27-WG-20201029 Lab Sample ID: 480-177524-5

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 11/05/2020 12:40 Date Analyzed (2): 11/05/2020 12:40

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
trans-Chlordane	1		4.53	4.50	4.56	0.030		5.8
	2		5.31	5.28	5.34	0.032	*	
Endosulfan I	1		4.81	4.77	4.83	0.034		28.2
	2		5.52	5.50	5.56	0.026		

*The laboratory reported the higher of the two values; result was revised to the lower value (circled) on Form I.

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-WO-28-WG-20201030 Lab Sample ID: 480-177524-6

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 11/05/2020 12:59 Date Analyzed (2): 11/05/2020 12:59

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
trans-Chlordane	1		4.53	4.50	4.56	0.10		3.0
	2		5.31	5.28	5.34	0.099		
cis-Chlordane	1		4.66	4.64	4.70	0.25		42.6
	2		5.47	5.44	5.50	0.16		
Endosulfan I	1		4.81	4.77	4.83	0.033		27.7
	2		5.52	5.50	5.56	0.044	*	
Dieldrin	1		5.06	5.02	5.08	0.015		1.9
	2		5.81	5.80	5.86	0.014		
4,4'-DDT	1		5.65	5.62	5.68	0.018		38.8
	2		6.59	6.55	6.61	0.012		

*The laboratory reported the higher of the two values; result was revised to the lower value (circled) on Form I.

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-TPMW-01-WG-20201030 Lab Sample ID: 480-177524-8

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 11/05/2020 13:38 Date Analyzed (2): 11/05/2020 13:38

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
trans-Chlordane	1		4.53	4.50	4.56	0.60		2.9
	2		5.31	5.28	5.34	0.61	*	
cis-Chlordane	1		4.66	4.64	4.70	1.1		31.1
	2		5.47	5.44	5.50	0.81		
Endosulfan I	1		4.81	4.77	4.83	0.093		48.0
	2		5.52	5.50	5.56	0.057		
Dieldrin	1		5.07	5.02	5.08	0.060		30.3
	2		5.81	5.80	5.86	0.044		
4,4'-DDT	1		5.65	5.62	5.68	0.028		1.2
	2		6.59	6.55	6.61	0.029	*	

*The laboratory reported the higher of the two values; result was revised to the lower value (circled) on Form I.

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-PDI-PZ-01-WG-20201030 Lab Sample ID: 480-177524-9

Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25

Date Analyzed (1): 11/05/2020 15:37 Date Analyzed (2): 11/05/2020 15:37

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Heptachlor epoxide	1		4.30	4.26	4.32	0.19	**	104.2
	2		5.14	5.09	5.15	0.060		
trans-Chlordane	1		4.42	4.39	4.45	1.0	*	7.1
	2		5.31	5.29	5.35	0.94		
cis-Chlordane	1		4.55	4.52	4.58	2.7	*	55.7
	2		5.47	5.44	5.50	1.5		
4,4'-DDT	1		5.52	5.50	5.56	0.20	*	26.1
	2		6.53	6.53	6.59	0.16		

*The laboratory reported the higher of the two values; result was revised to the lower value (circled) on Form I.

**The result was revised to non-detect at the higher value due to the dual column RPD>101%.

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-PDI-PZ-02-WG-20201030 Lab Sample ID: 480-177524-10

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 11/05/2020 14:17 Date Analyzed (2): 11/05/2020 14:17

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
trans-Chlordane	1		4.53	4.50	4.56	0.042		10.4
	2		5.31	5.28	5.34	0.038		
cis-Chlordane	1		4.66	4.64	4.70	0.11		47.8
	2		5.47	5.44	5.50	0.066		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-177524-1

SDG No.:

Client Sample ID: BW-DUP-01-20201029 Lab Sample ID: 480-177524-11

Instrument ID (1): HP6890-5 Instrument ID (2): HP6890-5

Date Analyzed (1): 11/06/2020 09:50 Date Analyzed (2): 11/06/2020 09:50

GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Heptachlor epoxide	1		4.42	4.38	4.44	0.38		50.4
	2		5.14	5.08	5.14	0.23		
trans-Chlordane	1		4.53	4.50	4.56	0.73		13.8
	2		5.31	5.28	5.34	0.64		
cis-Chlordane	1		4.66	4.64	4.70	3.1		83.3
	2		5.47	5.44	5.50	1.3		
4,4'-DDE	1		4.75	4.72	4.78	0.14		70.5
	2		5.62	5.61	5.67	0.29	*	
Endosulfan I	1		4.83	4.78	4.84	0.15		8.7
	2		5.52	5.50	5.56	0.14		
Dieldrin	1		5.07	5.02	5.08	0.11		48.6
	2		5.81	5.80	5.86	0.19	*	
4,4'-DDT	1		5.66	5.62	5.68	0.13		7.1
	2		6.60	6.55	6.61	0.12		

*The laboratory reported the higher of the two values; result was revised to the lower value (circled) on Form I.

APPENDIX F

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/29/2020, 0835	1 of 1

TRC Personnel: SP & JM

Well Identification No.: MW-41

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER

	1 inch
X	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL

X		
PVC	SS	

PID SCREENING (ppmV)

Background	N/M
Well Mouth	N/M

Well Depth (ft.):	
Depth to Water (ft):	12.03
Depth of pump intake (ft.)	
Height of water column (ft.):	-12.03
Volume of Water in Well (gal):	-1.961
Total Gallons Purged:	

[Vol. = $r^2h(0.163)$]

Reference Point:

X	top of riser		historic
	top of casing		measured
	bgs		notch
			north side
			high point
			pen mark

	.041 gal/ft (1 in.)
X	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.): N/A

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	0835	0840	0845	0850	0855	0900	0905	0910		
Temp. (C.) - (±10%)	14.68	14.42	14.50	14.49	14.38	14.41	14.40	14.40		
Conduct.(mS/cm) - (±3%)	0.383	0.372	0.359	0.360	0.361	0.363	0.363	0.364		
DO (mg/L) - (± 10%)	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
pH (Std.Units) - (± 0.1)	5.98	5.85	5.71	5.65	5.64	5.66	5.68	5.66		
ORP (millivolts) - (± 10)	217	210	221	223	223	223	222	223		
Turb. (NTU) - (± 10%)	140	77.1	12.2	9.1	1.5	1.1	0.8	0.0		
Flow (ml/min)	100	100	100	100	100	100	100	100		
Depth to water (ft)	12.03	12.02	12.02	12.01	12.01	12.00	12.00	12.01		
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	0915	BW-MW-41-WG-20201029

Remarks: MS/MSD collected at this location.

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/30/2020, 1045	1 of 1

TRC Personnel: SP & JM

Well Identification No.: PDI-PZ-01

WELL INTEGRITY	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER	
	1 inch
X	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL: X PVC; SS

PID SCREENING (ppmV)	
Background	N/M
Well Mouth	N/M

Well Depth (ft.):	17.53
Depth to Water (ft):	8.99
Depth of pump intake (ft.)	
Height of water column (ft.):	8.54
Volume of Water in Well (gal):	1.392
Total Gallons Purged:	

[Vol. = $r^2h(0.163)$]

Reference Point:			
X	top of riser		historic
	top of casing		measured
	bgs		notch
			north side
			high point
			pen mark

X	.041 gal/ft (1 in.)
	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.):	N/A
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	1045	1050	1055	1100	1105	1110	1115	1120	1125	
Temp. (C.) - (±10%)	14.65	14.71	14.61	14.83	14.85	14.85	14.85	14.85	14.85	
Conduct.(mS/cm) - (±3%)	0.247	0.241	0.227	0.214	0.212	0.210	0.210	0.212	0.212	
DO (mg/L) - (± 10%)	1.87	1.19	1.40	1.51	1.45	1.44	1.44	1.44	1.44	
pH (Std.Units) - (± 0.1)	5.84	5.57	5.57	5.63	5.65	5.61	5.60	5.61	5.61	
ORP (millivolts) - (± 10)	232	233	230	225	222	220	220	220	220	
Turb. (NTU) - (± 10%)	138	76.4	55.3	38.5	30.1	18.5	9.5	3.6	3.2	
Flow (ml/min)	100	100	100	100	100	100	100	100	100	
Depth to water (ft)	8.99	8.97	8.95	8.95	8.95	8.94	8.94	8.94	8.92	
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1130	BW-PDI-PZ-01-WG-20201030

Remarks:

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/30/2020, 1140	1 of 1

TRC Personnel: SP & JM

Well Identification No.: PDI-PZ-02

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/M

WELL DIAMETER

	1 inch
X	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL

X		
PVC	SS	

PID SCREENING (ppmV)

Background	N/M
Well Mouth	N/M

Well Depth (ft.):	17.50
Depth to Water (ft):	8.82
Depth of pump intake (ft.)	
Height of water column (ft.):	8.68
Volume of Water in Well (gal):	1.4148
Total Gallons Purged:	
[Vol. = $r^2h(0.163)$]	

Reference Point:

X	top of riser	historic
	top of casing	measured
	bgs	notch
		north side
		high point
		pen mark

X	.041 gal/ft (1 in.)
	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.): N/A

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	1140	1145	1150	1155	1200	1205	1210	1215		
Temp. (C.) - (±10%)	13.41	13.55	13.63	13.60	13.66	13.61	13.60	13.61		
Conduct.(mS/cm) - (±3%)	0.154	0.152	0.149	0.149	0.147	0.146	0.146	0.146		
DO (mg/L) - (± 10%)	2.26	1.98	1.94	1.92	1.88	1.86	1.85	1.85		
pH (Std.Units) - (± 0.1)	5.75	5.98	5.83	5.80	5.81	5.80	5.80	5.80		
ORP (millivolts) - (± 10)	223	210	213	215	214	214	213	213		
Turb. (NTU) - (± 10%)	23.6	14.5	3.0	2.7	2.2	1.9	1.9	1.5		
Flow (ml/min)	100	100	100	100	100	100	100	100		
Depth to water (ft)	8.82	8.80	8.98	8.97	8.96	8.96	8.95	8.95		
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1220	BW-PDI-PZ-02-WG-20201030

Remarks:

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/30/2020, 0950	1 of 1

TRC Personnel: SP & JM

Well Identification No.: TPMW-01

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/M

WELL DIAMETER

	1 inch
X	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL

X		
PVC	SS	

PID SCREENING (ppmV)

Background	N/M
Well Mouth	N/M

Well Depth (ft.):	12.54
Depth to Water (ft):	8.04
Depth of pump intake (ft.)	
Height of water column (ft.):	4.5
Volume of Water in Well (gal):	0.7335
Total Gallons Purged:	

[Vol. = $r^2h(0.163)$]

Reference Point:

X	top of riser	historic
	top of casing	measured
	bgs	notch
		north side
		high point
		pen mark

X	.041 gal/ft (1 in.)
	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.):	N/A
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	0950	0955	1000	1005	1010	1015	1020	1025	1030	1035
Temp. (C.) - (±10%)	15.74	15.81	15.83	15.77	15.74	15.71	15.70	15.70	15.70	15.70
Conduct.(mS/cm) - (±3%)	0.195	0.185	0.174	0.172	0.170	0.170	0.169	0.170	0.169	0.169
DO (mg/L) - (± 10%)	8.12	5.36	4.06	3.69	3.63	3.59	3.56	3.55	3.54	3.53
pH (Std.Units) - (± 0.1)	6.29	6.53	6.23	6.04	6.03	6.02	6.06	6.07	6.07	6.07
ORP (millivolts) - (± 10)	209	209	217	224	226	222	220	219	220	220
Turb. (NTU) - (± 10%)	770	103	71.5	41.9	33.4	25.0	17.1	12.0	9.0	7.3
Flow (ml/min)	100	100	100	100	100	100	100	100	100	100
Depth to water (ft)	8.04	8.00	7.98	7.98	7.97	7.96	7.96	7.97		
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1040	BW-TPMW-01-WG-20201030

Remarks:

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/29/2020, 0930	1 of 1

TRC Personnel: SP & JM

Well Identification No.: WO-08

WELL INTEGRITY	YES	NO
Protect. Casing Secure		X
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER	
1 inch	
2 inch	X
4 inch	
6 inch	
inch	

WELL MATERIAL: X PVC | SS

PID SCREENING (ppmV)	
Background	N/M
Well Mouth	N/M

Well Depth (ft.):	21.11
Depth to Water (ft):	6.17
Depth of pump intake (ft.)	
Height of water column (ft.):	14.94
Volume of Water in Well (gal):	2.4352
Total Gallons Purged:	

[Vol. = $r^2h(0.163)$]

Reference Point:		
X	top of riser	historic
	top of casing	measured
	bgs	notch
		north side
		high point
		pen mark

	.041 gal/ft (1 in.)
X	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.): N/A

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	0930	0935	0940	0945	0950	0955	1000	1005		
Temp. (C.) - (±10%)	15.39	15.91	15.98	16.01	15.99	16.01	16.00	16.01		
Conduct.(mS/cm) - (±3%)	0.207	0.170	0.147	0.144	0.142	0.142	0.142	0.142		
DO (mg/L) - (± 10%)	0.72	1.07	1.16	1.19	1.19	1.20	1.19	1.20		
pH (Std.Units) - (± 0.1)	6.18	6.65	6.54	6.44	6.44	6.42	6.40	6.40		
ORP (millivolts) - (± 10)	133	104	119	123	124	124	125	125		
Turb. (NTU) - (± 10%)	110	55.4	12.6	1.8	0.0	0.0	0.0	0.00		
Flow (ml/min)	100	100	100	100	100	100	100	100		
Depth to water (ft)	6.17	6.15	6.14	6.14	6.13	6.13	6.13	6.13		
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1010	BW-WO-08-WG-20201029

Remarks: Duplicate collected at this location.

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/29/2020, 1020	1 of 1

TRC Personnel: SP & JM

Well Identification No.: WO-19

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER

	1 inch
X	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL

X		
PVC	SS	

PID SCREENING (ppmV)

Background	N/M
Well Mouth	N/M

Well Depth (ft.):	19.62
Depth to Water (ft):	3.87

Reference Point:

X	top of riser	historic
	top of casing	measured
	bgs	notch
		north side
		high point
		pen mark

Depth of pump intake (ft.)

Height of water column (ft.):	15.75

	.041 gal/ft (1 in.)
X	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Volume of Water in Well (gal):	2.5673
Total Gallons Purged:	
[Vol. = $r^2h(0.163)$]	

Depth to NAPL (ft.):	N/A
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	1020	1025	1030	1035	1040	1045	1050	1055	1100	1105
Temp. (C.) - (±10%)	15.42	15.56	14.98	14.52	14.16	14.15	14.14	14.14	14.13	14.14
Conduct.(mS/cm) - (±3%)	0.101	0.090	0.060	0.049	0.036	0.035	0.032	0.032	0.032	0.032
DO (mg/L) - (± 10%)	1.93	2.39	7.23	7.22	7.51	7.50	7.49	7.48	7.49	7.50
pH (Std.Units) - (± 0.1)	6.65	6.46	6.30	6.66	6.65	6.67	6.65	6.67	6.66	6.66
ORP (millivolts) - (± 10)	146	140	155	145	155	150	150	149	148	148
Turb. (NTU) - (± 10%)	227	218	201	164	117	73.0	26.0	11.0	11.0	10.0
Flow (ml/min)	100	100	100	100	100	100	100	100	100	100
Depth to water (ft)	3.85	3.83	3.82	3.82	3.82	3.82	3.80	3.80	3.81	
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1110	BW-WO-19-WG-20201029

Remarks:

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/29/2020, 1125	1 of 1

TRC Personnel: SP & JM

Well Identification No.: WO-25

WELL INTEGRITY	YES	NO
Protect. Casing Secure		X
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER	
X	1 inch
	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL: X PVC | SS

PID SCREENING (ppmV)	
Background	N/M
Well Mouth	N/M

Well Depth (ft.):	
Depth to Water (ft):	11.71
Depth of pump intake (ft.)	
Height of water column (ft.):	-11.71
Volume of Water in Well (gal):	-1.909
Total Gallons Purged:	

[Vol. = $r^2h(0.163)$]

Reference Point:			
X	top of riser		historic
	top of casing		measured
	bgs		notch
			north side
			high point
			pen mark

X	.041 gal/ft (1 in.)
	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.):	N/A
Thickness of NAPL (ft.):	

FIELD WATER QUALITY MEASUREMENTS

Time	1125	1130	1135	1140	1145	1150	1155	1200		
Temp. (C.) - (±10%)	13.46	15.65	15.95	16.06	16.13	15.97	15.96	15.97		
Conduct.(mS/cm) - (±3%)	0.001	0.147	0.126	0.141	0.140	0.141	0.141	0.141		
DO (mg/L) - (± 10%)	11.66	3.93	9.81	9.68	9.59	9.58	9.56	9.58		
pH (Std.Units) - (± 0.1)	6.68	5.60	5.77	5.85	5.88	5.88	5.89	5.89		
ORP (millivolts) - (± 10)	151	201	189	186	184	170	170	171		
Turb. (NTU) - (± 10%)	274	34.8	0.0	0.3	0.0	0.0	0.0	0.0		
Flow (ml/min)	100	100	100	100	100	100	100	100		
Depth to water (ft)	11.71	11.68	11.67	11.66	11.66	11.66	11.65	11.64		
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1205	BW-WO-25-WG-20201029

Remarks:

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/29/2020, 1225	1 of 1

TRC Personnel: SP & JM

Well Identification No.: WO-27

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	X	
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER

	1 inch
X	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL

X		
PVC	SS	

PID SCREENING (ppmV)

Background	N/M
Well Mouth	N/M

Well Depth (ft.):	35.32
Depth to Water (ft):	7.71

Reference Point:

X	top of riser		historic
	top of casing		measured
	bgs		notch
			north side
			high point
			pen mark

Depth of pump intake (ft.)

	.041 gal/ft (1 in.)
X	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Height of water column (ft.): 27.61

Volume of Water in Well (gal): 4.5004

Total Gallons Purged:

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.): N/A

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	1225	1230	1235	1240	1245	1250	1255			
Temp. (C.) - (±10%)	13.87	13.50	13.39	13.38	13.37	13.35	13.34			
Conduct.(mS/cm) - (±3%)	0.069	0.125	0.194	0.200	0.202	0.201	0.202			
DO (mg/L) - (± 10%)	0.04	0.25	0.24	0.24	0.24	0.24	0.24			
pH (Std.Units) - (± 0.1)	6.22	6.16	6.34	6.38	6.35	6.35	6.35			
ORP (millivolts) - (± 10)	119	81	71	76	74	73	73			
Turb. (NTU) - (± 10%)	65.7	6.2	0.0	0.0	0.0	0.0	0.0			
Flow (ml/min)	100	100	100	100	100	100	100			
Depth to water (ft)	7.71	7.69	7.69	7.69	7.68	7.68	7.67			
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	1300	BW-WO-27-WG-20201029

Remarks:

Groundwater Sampling Data Record Form

Project	Project No.	Date/Time	Sheet
Bianchi/Weiss Greenhouses	386554, Task 33	10/30/2020, 0820	1 of 1

TRC Personnel: SP & JM

Well Identification No.: WO-28

WELL INTEGRITY

	YES	NO
Protect. Casing Secure		X
Concrete Collar Intact	X	
PVC Stick-up Intact	X	
Well Cap Present	X	
Security Lock Present		X

Protective Casing Stick-up (from Ground): N/A

WELL DIAMETER

X	1 inch
	2 inch
	4 inch
	6 inch
	inch

WELL MATERIAL

X		
PVC	SS	

PID SCREENING (ppmV)

Background	N/M
Well Mouth	N/M

Well Depth (ft.):	39.64
Depth to Water (ft):	12.96
Depth of pump intake (ft.)	
Height of water column (ft.):	26.68
Volume of Water in Well (gal):	4.3488
Total Gallons Purged:	

[Vol. = $r^2h(0.163)$]

Reference Point:

X	top of riser		historic
	top of casing		measured
	bgs		notch
			north side
			high point
			pen mark

X	.041 gal/ft (1 in.)
	.163 gal/ft (2 in.)
	.653 gal/ft (4 in.)
	1.5 gal/ft (6 in.)
	___ gal/ft (__in.)

Depth to NAPL (ft.): N/A

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

Time	0820	0825	0830	0835	0840	0845	0850			
Temp. (C.) - (±10%)	11.27	11.44	11.47	11.49	11.48	11.48				
Conduct.(mS/cm) - (±3%)	0.211	0.209	0.210	0.210	0.210	0.210	0.210			
DO (mg/L) - (± 10%)	2.22	1.08	1.03	0.93	0.91	0.90	0.90			
pH (Std.Units) - (± 0.1)	5.86	5.58	5.53	5.56	5.57	5.56	5.56			
ORP (millivolts) - (± 10)	233	246	245	238	242	242	244			
Turb. (NTU) - (± 10%)	75.3	5.7	3.4	0.3	0.0	0.0	0.0			
Flow (ml/min)	100	100	100	100	100	100	100			
Depth to water (ft)	12.96	12.93	12.93	12.93	12.92	12.92	12.91			
Comments										

FIELD WATER QUALITY MEASUREMENTS

Time RESTARTED										
Temp. (C.) - (±10%)										
Conduct.(mS/cm) - (±3%)										
DO (mg/L) - (± 10%)										
pH (Std.Units) - (± 0.1)										
ORP (millivolts) - (± 10)										
Turb. (NTU) - (± 10%)										
Flow (ml/min)										
Depth to water (ft)										
Comments										

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	X	X	Peristaltic Pump: AO2293
Submersible Pump			OIP: 23890
Bladder Pump			HORIBA (Handset/Sensor): 19475/21168
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
TCL Pesticides (USEPA Method 8081B)	N	None	2 x 250 ml Amber Glass	0855	BW-WO-28-WG-20201030

Remarks: